APPENDIX A

Specific Plans

WATERMARK
DEL MAR

SPECIFIC PLAN

Community Response Alternative
38-Unit Plan

DRAFT
September 2017

WATERMARK DEL MAR
SPECIFIC PLAN

COMMUNITY RESPONSE ALTERNATIVE
38-UNIT PLAN

DRAFT
September 2017

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CHAPTER 1 - INTRODUCTION

This Watermark Del Mar Specific Plan (WDMSP) addresses the requirements for development of multifamily residential condominium homes with an affordable housing component at the 2.37-acre property south of the intersection of Jimmy Durante Boulevard and San Dieguito Drive. The property is presently designated for commercial uses. However, the City of Del Mar's adopted and certified Housing Element (2013-2021) establishes goals and programs which identify this property for a new residential land use designation, at a density of 20 to 25 units per acre. This Specific Plan describes the legislative actions necessary to create the regulatory framework to assign a new Community Plan designation, Zoning Map and LCP designation along with accompanying regulatory development standards and design guidelines for residential multifamily development of the property.

1.1 Specific Plan Location and Boundaries

The property within the Watermark Del Mar Specific Plan (the "Site") is located in the northern portion of the City of Del Mar, south of the intersection of Jimmy Durante Boulevard and San Dieguito Drive. It is located approximately 0.76 miles west of Interstate 5 and 0.32 miles east of Camino Del Mar. The Site consists of two adjacent parcels of land that are identified as Assessor's Parcel Numbers (APNs) 299-100-47 and 299-100-48 that total approximately 103,282 square feet (2.37 acres). The Site location is illustrated on Exhibits 1-1 and 1-2.

1.2 Authority and Requirements

California Government Code Section 65450 *et seq*. grants local planning agencies the authority to prepare Specific Plans for any area covered by a General Plan, as a tool for the implementation of the General Plan (known as the "Community Plan" in the City of Del Mar). A Specific Plan can effectively establish a link between implementing policies of the General Plan and an individual development proposal in a defined area.

The Specific Plan process was selected to regulate development of this property in order to provide customized regulations that will accommodate residential housing at this Site to implement the Housing Element while establishing certainty for the community regarding the development parameters, limitations for the planned use, and specific public benefits. The exceptional public benefits that will be provided through implementation of the Specific Plan provisions, and that allow for balancing of General Plan policies are outlined in the Specific Plan. (Refer to Chapter 4.)

The WDMSP has been prepared in accordance with State Specific Plan requirements under the authority of Government Code Sections 65450-65457 and consistent with the State guidelines for the preparation of Specific Plans. This Specific Plan contains sections required under Section 65451 of the Government code that address the following:

Exhibit 1-1 Regional Map

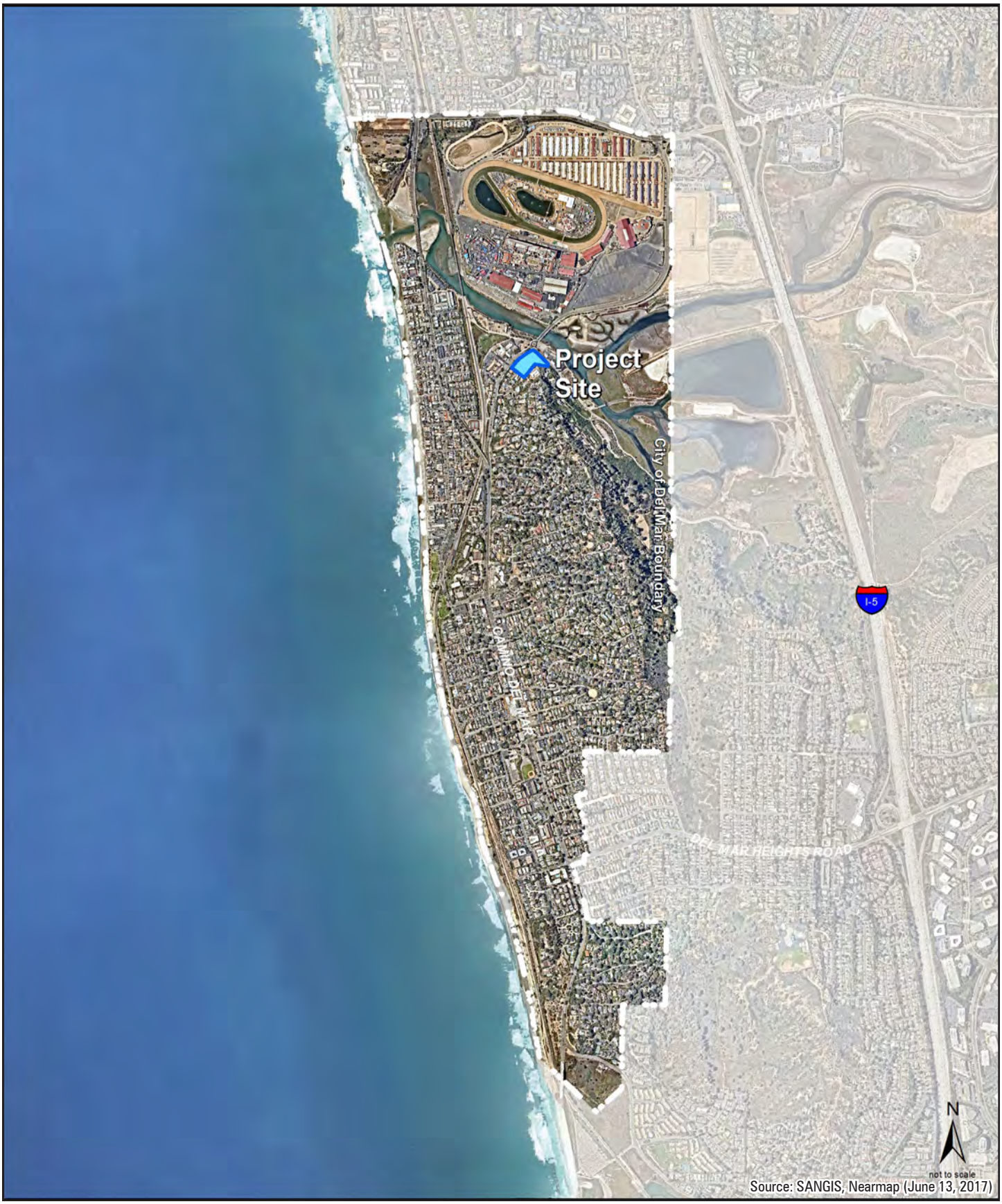


Exhibit 1-2 Vicinity Map

1. The distribution, location and extent of the use of land within the area covered by the plan. (Refer to Chapters 2 and 3.)

2. The proposed distribution, location, extent, and intensity of major components of infrastructure (transportation, sewage, water, drainage, solid waste disposal, energy and other essential facilities) proposed to be located within the area covered by the Plan and needed to support the land uses described in the Plan. (Refer to Chapter 3.)

3. The standards and criteria by which development will proceed, and standards for the conservation, development and utilization of natural resources, where applicable. (Refer to Chapters 5 and 6.)

4. Implementation measures including regulations, programs, public works projects, and financing measures. (Refer to Chapter 7.)

5. A statement of the relationship of the Specific Plan to the General Plan. (Refer to Chapter 8.)

1.3 Purpose and Intent of the Specific Plan

The Watermark Del Mar Specific Plan is intended to create a regulatory framework to govern the development of the subject property with high-quality multifamily residential uses in a manner that implements the goals of the Community Plan.

The Del Mar Community Plan (the City's General Plan under California law) is comprised of the following five elements: 1) Environmental Management; 2) Transportation; 3) Recreation; 4) Community Development; and 5) Housing. The background information and policy direction presented in one Community Plan element is also reflected in others, assuring continued internal consistency among elements of the Community Plan. Since the original adoption of the Community Plan in 1976, there have been several updates, the most recent of which is the Housing Element portion.

State law mandates that a housing element be included as part of the General Plan, and also requires regular updates in accordance with statutory deadlines. Del Mar's current update of the Housing Element was approved by the City and certified by the State in 2013, and covers the period of January 1, 2013 through April 30, 2021. The Housing Element update built upon other Community Plan elements and is considered to be consistent with the goals and policies set forth in other elements of that document.

The overriding objective of the WDMSP is to implement the Housing Element. The need for additional housing, including affordable housing, within Del Mar is explicitly stated in the adopted and certified Housing Element (2013-2020). Yet because the City is virtually built-out, only a limited amount of land remains for future residential development. The City also places high value on protection of natural resources, environmental protection for the cliffs, canyons, and wetlands, which presents further constraints on the location of new development and opportunities for providing housing. Due to the combination of historic land use patterns, high land and housing

costs, scarcity of vacant land, and environmental constraints, the City of Del Mar is faced with limited opportunities for the provision of new and affordable housing.

With these sometimes competing restrictions, the City through its Housing Element recognizes that balancing varied public policies is crucial to accomplish housing goals. To ensure that Del Mar can accommodate its fair share of housing needs, it is necessary to provide appropriate zoning and density standards and establish appropriate development regulations which facilitate the reasonable achievement of such standards.

The WDMSP incorporates legislative changes including a Community Plan (General Plan) Amendment; Rezone; and Local Coastal Program Amendment in order to fulfill the objectives for this site to be developed with residential uses at a multifamily density to implement policy goals of the City of Del Mar Community Plan Housing Element 2013-2021. The Specific Plan addresses Housing Element goals along with consideration for the physical site constraints including drainage and flood protection, while providing for visually attractive landscaping, architecture, and site amenities to address community compatibility.

The Watermark Del Mar Specific Plan document provides a description of proposed land use and infrastructure requirements and describes guidelines and standards for implementation of the site development. As a regulatory document, the WDMSP creates new zoning for the Site that will regulate the permitted uses, density, height, and other aspects of site development. The site area will be assigned a land use designation and will be designated on the City's zoning map as Watermark Del Mar Specific Plan (WDMSP). Section 5 of this Specific Plan includes the development regulations that will govern the subject property, and Section 6 includes the design standards that will assure the quality and character envisioned for the Site.

1.4 Specific Plan Process Overview

The City of Del Mar authorized the preparation of a Specific Plan for Watermark along with a defined process in July 2014, and recently (July 2017) adopted a new policy regarding processing of Specific Plans, to formalize the community outreach, legislative and discretionary actions required for, and during, the processing of all Specific Plan applications. The Watermark Specific Plan is compliant with the original process approved by the City Council, and will implement selected portions of the new process given the "in-progress" state of the Specific Plan.

A. Community Outreach

The Specific Plan process provides opportunities for the involvement of citizens, public agencies, public utilities, civic education, and other community groups. For this Specific Plan both formal and informal methods of outreach and participation have been provided, including the Citizens' Participation Program (CPP) as required by the Del Mar Municipal Code (DMMC). Details regarding the outreach process are included in Appendix B, and a discussion of input from those meetings is provided in Chapter 2.

B. California Environmental Quality Act (CEQA) Compliance

The legislative and discretionary actions associated with the project are subject to environmental review pursuant to the California Environmental Quality Act (CEQA). An Environmental Impact Report is being prepared for the Specific Plan project to evaluate potential impacts and identify any necessary mitigation measures. The CRA is addressed as a project option in the EIR. The Draft EIR will be circulated for public review and comment, with a Planning Commission public workshop for input during the review period. A Final EIR including responses to comments will then be prepared. The Final EIR will need to be certified by the City prior to approval of the Specific Plan.

C. Concurrent Process for Adoption of the Specific Plan Legislative Actions and Discretionary Permits

The Watermark Del Mar Specific Plan (WDMSP) shall not be effective unless and until it is adopted by an Ordinance of the City Council. The Specific Plan is not subject to Measure B requirements for a public vote since it is not located within the City's Downtown Commercial Area (Central Commercial Zoning District).

Approval of the Specific Plan would not alone authorize the project to be built. In addition to the legislative changes, the developer is required to obtain development permits applicable to the Site. These permits would be processed through the Design Review Board and Planning Commission for review and recommendation under the Specific Plan Policy for Concurrent Processing. The necessary entitlement actions include:

- Design Review Permit
- Land Conservation Permit
- Floodplain Development Permit
- Lot Line Adjustment to merge the existing two legal lots
- Tentative and Final Subdivision Maps for Condominium purposes
- Coastal Development Permit
- Building Permits
- Tree Removal Permit
- Other development permits as required by the City of Del Mar

The Conditional Use Permit review required for this development site under the provisions of the Lagoon Overlay, Bluff/Slope/Canyon Overlay, and Coastal Development Ordinance would be satisfied through the review and approval of the WDMSP and associated environmental documentation/mitigation measures.

The following summarizes the general steps in the review and approval processes for the WDMSP and the discretionary Development Permit Applications. This section is informative only and is not intended to supersede any applicable provisions of the WDMSP or the Del Mar Municipal Code (DMMC).

1. **Design Review Board (DRB)**
   The Design Review Board shall review and make a recommendation to the City Council on:

   a. The Watermark Del Mar Specific Plan.

   b. The conceptual design plans and preliminary grading plans for Watermark Del Mar.

2. **Planning Commission**
   The Planning Commission shall review and make a recommendation to the City Council on:

   a. The Watermark Del Mar Specific Plan.

   b. The associated Community Plan Amendment to apply the WDMSP designation to the Del Mar Community Plan Land Use Map.

   c. The associated Rezone to create a new Watermark Del Mar Specific Plan (WDMSP) Zone to be designated on the Zoning Map.

   d. The associated Local Coastal Plan Amendment (LCPA) which shall consist of assignment of a new land use map designation for the areas within the Watermark Del Mar Specific Plan from the current LCP designation of: North Commercial (NC) Zone to: Watermark Del Mar Specific Plan.

   e. The adequacy of the Environmental Impact Report (EIR) prepared for the WDMSP and any associated California Environmental Quality Act (CEQA) documents.

3. **City Council**
   The City Council shall take final action on:

   a. An ordinance to approve the Watermark Del Mar Specific Plan and specify that the provisions of the WDMSP replace those of the North Commercial Zone, as they currently apply to the plan area of the Watermark Del Mar Specific Plan.

   b. A resolution amending the Community Plan to assign the Watermark Del Mar Specific Plan designation to land use exhibits, as noted above.

   c. Certification of the Final Environmental Impact Report for the Watermark Del Mar Specific Plan, along with any associated California Environmental Quality Act documents.

   d. A resolution to approve, and submit for California Coastal Commission certification, the Local Coastal Program Amendment (LCPA) for the Land Use Plan and Implementing Ordinance

components of the Del Mar Local Coastal Program. The City Council resolution approving the LCPAs shall specify that the LCPA and the Watermark Del Mar Specific Plan shall not be effective unless and until certified by the California Coastal Commission.

e. A resolution to approve discretionary permits for the Watermark Del Mar project.

4. Coastal Commission

The Specific Plan was prepared in conformance with the goals and policies of the Local Coastal Program for the City of Del Mar. An amendment of the Local Coastal Program, including land use designations and implementing regulations to reflect the Specific Plan designation (WDMSP) for the property, is subject to review and certification by the California Coastal Commission, following approval by the City Council as outlined above.

D. Development Agreement

A development agreement will be prepared to memorialize and vest the rights and public benefits embodied in the Specific Plan after its approval.

1.5 Relationship of the Specific Plan to the Del Mar Community Plan (General Plan)

The City of Del Mar Community Plan Housing Element 2013-2021 ("Housing Element") was adopted by City Council on May 20, 2013 and certified by the California Department of Housing and Community Development on June 6, 2013. The Housing Element indicates the City will pursue amendment to its land use policies and regulations in order to accommodate affordable housing opportunities. Specific measures include land use re-designations and modifications of zoning standards to accommodate higher density residential development. Implementation Program 4 addresses the Watermark property as follows:

> *Pursuant to Government Code Sections 65583.2(h) and (i), within 12 months of City Council adoption of the 2013-2021 Housing Element, the City will assign a new land use designation to two adjacent vacant parcels, roughly 2.3 acres in size in the NC Zone, to allow, by right, residential development of the properties at a density of 20-25 du/ac with such density allowance to include a requirement for a percentage of the residential units to be available, long-term, at affordable rates, either through dedication to a non-profit housing advocacy organization or through deed restrictions for no less than the minimum duration required under state housing law applicable to affordable dwelling units.*

This Specific Plan has been prepared as an alternative process to the City applying a new land use designation to the parcels directly. It is intended to provide the implementation mechanism for the legislative actions necessary to make the land use changes to achieve this residential designation and density in place of the current North Commercial land use designation.

Under this Specific Plan, the maximum density would be 16.1 units per acre, which is below the specified range of 20-25 units per acre. A key goal for the 20-25 target density range is to accommodate new residential units and ultimately deliver affordable units to the marketplace, and the Specific Plan would produce 38 residential units at a density of 16.1 dwelling units per acre, including 6 affordable housing units at this site. This would help implement the City of Del Mar Community Plan Housing Element, with design features responsive to community input.

The WDMSP implements the goals and policies of the Del Mar Community Plan as summarized below, with details provided in Chapter 8.

1. Provide for a housing density that can enable development of affordable housing units to provide opportunities for underserved segments of the community.

2. Enhance Del Mar's character in a way that provides for new multi-family use that blends with the community's overall village-like character.

3. Enhance this gateway entry to Del Mar with improved streetscape design and landscape.

4. Preserve sensitive areas on the property, with permanent open space protection for natural resources including the onsite marsh and area of sandstone bluff.

5. Provide development and design requirements for protection from flooding hazards.

6. Maintain or enhance water quality associated with the San Dieguito Lagoon with stormwater design measures.

7. Ensure energy efficiency and water conservation, including landscaping.

1.6 Relationship of the Specific Plan to the Coastal Act and the Del Mar Local Coastal Program

The Watermark Del Mar Specific Plan will require an LCP amendment, therefore approval by the Coastal Commission. Upon approval, the WDMSP will serve as an approved LCP amendment to facilitate protection and conservation of open space, and enable and regulate development of housing to meet statewide and city goals within the Specific Plan area.

This Specific Plan amends only the portions of the LCP that are specifically applicable to the WDMSP area. The portions of the LCP that are not amended herein remain in full force and effect as to the Specific Plan area. In addition, all other policies, provisions, and requirements shall remain in full force and effect as they apply to other property in Del Mar not situated within the boundary of the Specific Plan area.

The WDMSP is consistent with and implements the applicable Coastal Act and Del Mar LCP Land Use Plan policies and requirements for the Specific Plan area. A detailed

consistency review for the LCP Amendment is provided in Appendix A with a summary below.

Coastal Act

This WDMSP implements the goals of the Coastal Act, because it

1. Takes into account the social and economic needs of the people of the state providing for a variety of public benefits associated with affordable housing in a community with limited opportunities to meet such demand.

2. Makes provisions to protect, maintain, enhance and restore the overall quality of the coastal zone environment and resources, including undisturbed coastal bluffs and Coastal Brackish Marsh, a wetland habitat area on-site.

3. Supports the provision of new affordable housing opportunities for persons of low and moderate income in the coastal zone by providing for the construction of affordable housing at this site, which also implements other state requirements for housing in accordance with the City of Del Mar's adopted Housing Element (Section 30007)

4. Does not interfere with coastal-dependent uses, nor with any existing or potential public access to the sea, and is located near public sidewalks and trail opportunities in the immediate project area.

5. Establishes regulations for flood hazard avoidance to minimize risks to life and property considering potential for future sea level rise.

Del Mar Local Coastal Program

The WDMSP implements provisions and policies of the Del Mar Local Coastal Program (LCP) as summarized below, with details for each policy provided in Appendix A.

1. Establish standards for a higher density residential use to meet housing element goals and comply with flood hazard protections, while maintaining the character of low intensity development, including maximum two-story and 26-foot height buildings.

2. Provide design guidelines to further regulate the appearance of the multi-family structures. They include a specification that the buildings adjacent to streets have the character of separate structures as found throughout the community, and prohibit a single, large, monolithic building.

3. Preserve both the undisturbed bluffs and wetland area in open space

4. Limit the development footprint of the residential structures to the areas of the site that have been previously graded and disturbed.

5. Provide regulations to implement protection for all habitable spaces, which must be at or above the Base Flood Elevation.

6. Provide landscape regulations for non-invasive, primarily drought-tolerant plant materials, along with appropriate irrigation that will control runoff and avoid erosion.

7. Install all onsite utility line service extensions for the site development underground, with a program to underground existing overhead utility lines along the project frontage in collaboration with the City and SDG&E.

1.7 Relationship of the Specific Plan to the Del Mar Municipal Code

The Watermark Del Mar Specific Plan will conform to and implement the Del Mar Community Plan, as amended herein. It is a legislative document including a new set of zoning standards for the property that, in concert with other remaining portions of the Municipal Code, will be applied to new project development. Where there is a conflict between the provisions of this Specific Plan and other sections of the Del Mar Municipal Code, the provisions of the Watermark Del Mar Specific Plan shall prevail.

1.8 Regulatory Effect

Under California law, Specific Plans may be adopted either by ordinance or by resolution. This option allows local jurisdictions to determine if a Specific Plan is intended as a policy statement (if adopted by resolution) or a regulatory document having the effect of law (if adopted by ordinance). The City of Del Mar intends this Specific Plan to have regulatory effect, therefore this Specific Plan shall be adopted by ordinance. Once adopted, in the event of conflicts between the provisions and definitions of this Specific Plan and those of any other laws or ordinances of the City of Del Mar, the provisions and definitions of this Specific Plan shall prevail over such other provisions of said laws and ordinances.

1.9 Construction of Language

As used in this Specific Plan, the terms "shall" means mandatory or required; "should" means recommended or desired; and "may" means optional. Where stated, numerical metrics take precedence over graphic metrics.

1.10 Severability

If any term, provision, or condition of this Specific Plan is determined invalid, void, or unenforceable, the remainder of this Specific Plan shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform, taking into consideration the purposes of this Specific Plan.

CHAPTER 2 - PLANNING CONSIDERATIONS

This chapter provides a brief overview of the existing setting of the Watermark Del Mar Specific Plan area, including the existing land use, physical conditions and site constraints, as well as a summary of input from the community regarding design and compatibility preferences.

2.1 Regulatory Setting

Del Mar Community Plan

The Del Mar Community Plan designates the Site presently for Commercial Services use in the North Commercial land use category. The stated intent is to allow commercial and professional activities that provide a service to the community. More recently, the Community Plan Housing Element 2013-2021 identified the Site to be redesignated for residential development at a density that accommodates affordable housing units with modifications of zoning standards to accommodate the higher density residential development.

This Specific Plan has been prepared as an alternative process to the City applying a new land use designation to the parcels directly. It provides the implementation mechanism for the legislative actions necessary to make the land use changes to achieve this residential designation and density in place of the current North Commercial land use designation. The land use designation of the Site would be changed to WDMSP upon approval of this Specific Plan as detailed in Chapter 3.

Del Mar Municipal Code (DMMC) – Zoning

The Site is currently in the North Commercial (NC) Zone, which is consistent with the existing land use designation. The NC Zone regulations are contained in DMMC Section 30.24. This zone will be changed as part of this Specific Plan to WDMSP as detailed in Chapter 5.

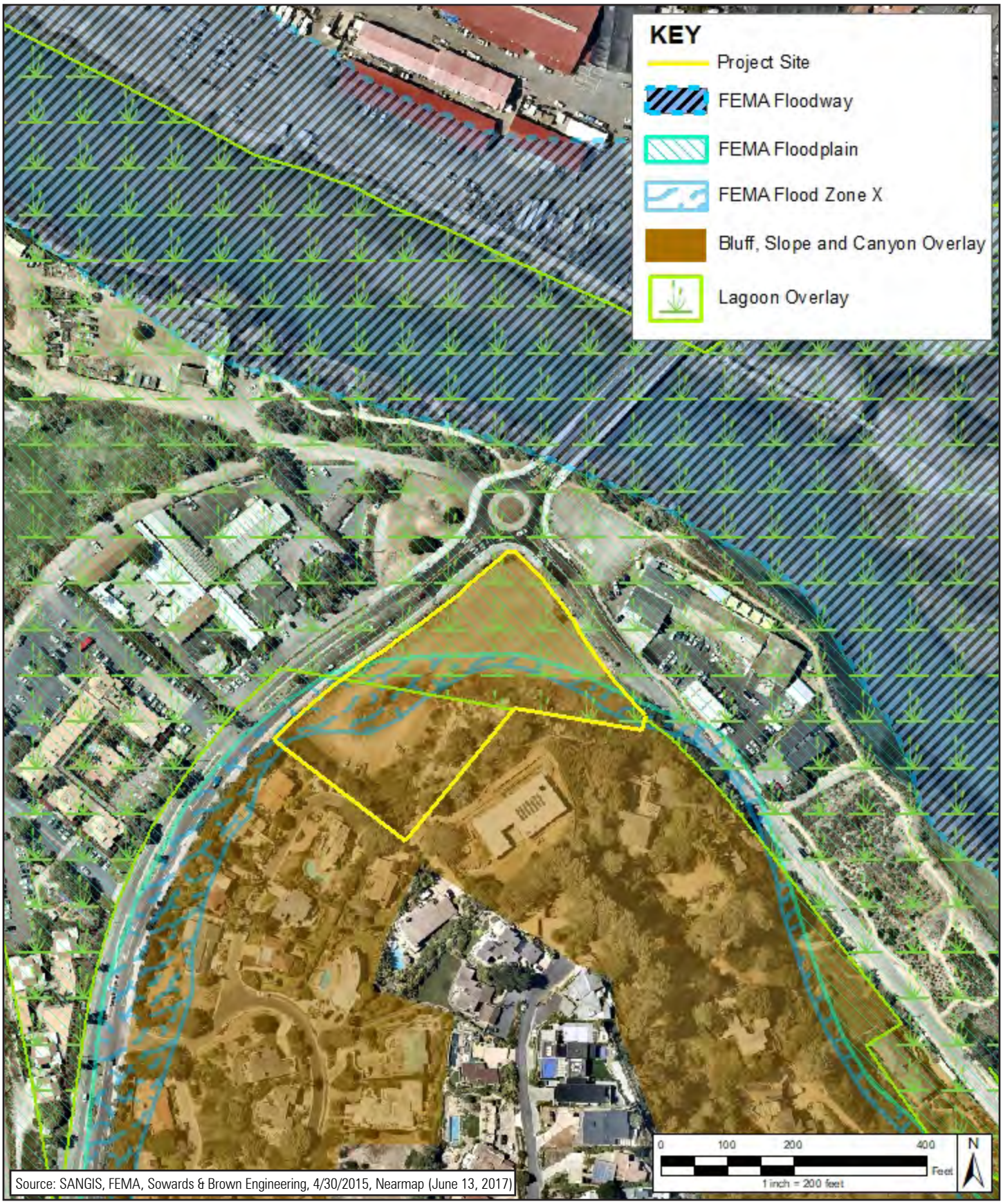
Del Mar Municipal Code (DMMC) – Zoning Overlays

There are three overlay zone designations applicable to some or all of the property including the Bluff, Slope and Canyon Overlay, Floodplain Overlay, and Lagoon Overlay. (Refer to Exhibit 2-1 for specific boundaries.)

APN	BSC	Lagoon	Floodplain
299-100-47	Yes	No	Yes *
299-100-48	Yes	Yes	Yes

** This parcel is not shown on the map of the Floodplain Overlay Zone on the zoning map or LCP map, but portions of the property fall within floodplain areas per the most recent FIRM map, and therefore are subject to compliance with the overlay zone policies and a Floodplain Development Permit is required.*

Exhibit 2-1 Existing Zoning Overlays



Local Coastal Plan

The Local Coastal Program Land Use Plan for the City of Del Mar designates the Site consistent with the Community Plan designation. It is located within a commercially designated area adjacent to Jimmy Durante Boulevard (North Commercial-NC). The NC Zone regulations and the three overlay zone designations as described above, (including the Bluff, Slope and Canyon Overlay, Floodplain Overlay, and Lagoon Overlay) are part of the Local Coastal Plan implementing regulations.

The Land Use Plan and Implementing Ordinances were certified by the Coastal Commission, and the City has authority for the processing of Coastal Development Permits for most projects within Del Mar. The Coastal Commission retains authority for processing coastal development permits for projects in areas known as "original jurisdiction" and for amendments to the Local Coastal Plan. The Site is not located within original jurisdiction area, but this Specific Plan will require an LCP amendment, therefore approval by the Coastal Commission. Upon approval of the amendment, the City of Del Mar would have permit authority on subsequent development permits, including the Coastal Development Permit (CDP). The site is located within the Coastal Commission Appeals Zone, and the City's final action on the CDP would be appealable to the Coastal Commission.

Existing Riverview FEIR and Discretionary Approvals

The Site was the subject of the Riverview Office Project Final Environmental Impact Report (2008 - State Clearinghouse Number 2005061143), and two current discretionary permit approvals in place associated with the Riverview Office Project (Design Review Board Permit DRB-08-28 and associated Land Conservation Permit LC-08-13). The Riverview Office Project included two, two-story commercial office buildings totaling 23,293 square feet, with 83 parking spaces on the Site. That approved project included grading, hardscaping, and landscaping within 200 feet of the San Dieguito Lagoon, and incorporated a buffer from the onsite wetland of 50 feet, with concurrence of the Department of Fish & Game (now CDFW). A recorded Development Agreement extending the expiration dates of the Riverview DRB and LC Permits is in place pending action on all required approvals for the Watermark Project, including this Specific Plan.

2.2 Site History and Current Property Use

The Site is currently vacant, and there is no evidence of previous structures or other permanent improvements on-site. However, based on aerial photographs, prior to 1959 the Site was subject to leveling and grading along the northern and western portions of the property near San Dieguito Drive and Jimmy Durante Boulevard. Significant grading, including cuts of up to 15 to 20 feet occurred between 1959 and 1979 along the southern and southeastern portions of the Site. The areas of the Site affected by previous excavation and grading are shown on Exhibit 2-2.

The Site is not paved, but is used seasonally, as it has been for several years, as a paid lot for overflow parking during the summer fair and racetrack events at the Del Mar Fairgrounds. Parking is located on the level portions of the Site, including the graded

Exhibit 2-2 Previously Disturbed/Graded Areas

Key

Current Property Line

N

No scale.

Sources and Notes: Both Jimmy Durante Blvd. and San Dieguito Drive, including the bridge, have been realigned since this 1973 photo. The current property boundary reflected on this exhibit was obtained by georeferencing the historical imagery (San Diego County, 1973, Flight 31, photograph 29) to current imagery (Nearmap aerial photo imagery flown June 13, 2017) and civil engineering CAD drawings with site boundary and topography (Sowards and Brown Engineering, rev. June 22, 2017) using three control points on building structures that have remained in place and first order polynomial transformation. The spatial relationship between the historical imagery and property line is accurate within these calibration parameters.

plateau area. This seasonal parking will continue as an interim use until the property is developed. The parking area markings onsite are visible on Exhibit 2-3.

2.3 Surrounding Land Uses

The Site is bounded by streets on two sides, with single family residential properties adjacent to the internal (non-street) boundaries. Other notable land uses in the project area include the San Dieguito River, located north-northeast of the Site beyond properties on the opposite side of San Dieguito Drive, the Del Mar Fairgrounds property further north, and the railroad tracks to the west, beyond commercially developed properties along Jimmy Durante Boulevard. (Refer to Exhibit 1-2.)

Diagonally across the intersection of Jimmy Durante Boulevard and San Dieguito Drive (northwest corner) is a linear park with an improved trail segment adjacent to the San Dieguito River known as Riverpath Del Mar. The property at the southwest corner is currently vacant. The property at the northeast corner has historically been used for vehicle parking and as a recycling yard and has recently been improved as a trailhead parking area to serve three nearby public access trails. Improvements include installation of two solar-powered parking machines and demarcation of 36 parking spaces on the existing decomposed granite surface.

Developed properties across San Dieguito Drive include varied business uses including Del Mar Blue Print, Del Mar Automotive a brewery/restaurant, and a chiropractic office. Developed properties across Jimmy Durante Boulevard include retail and office businesses.

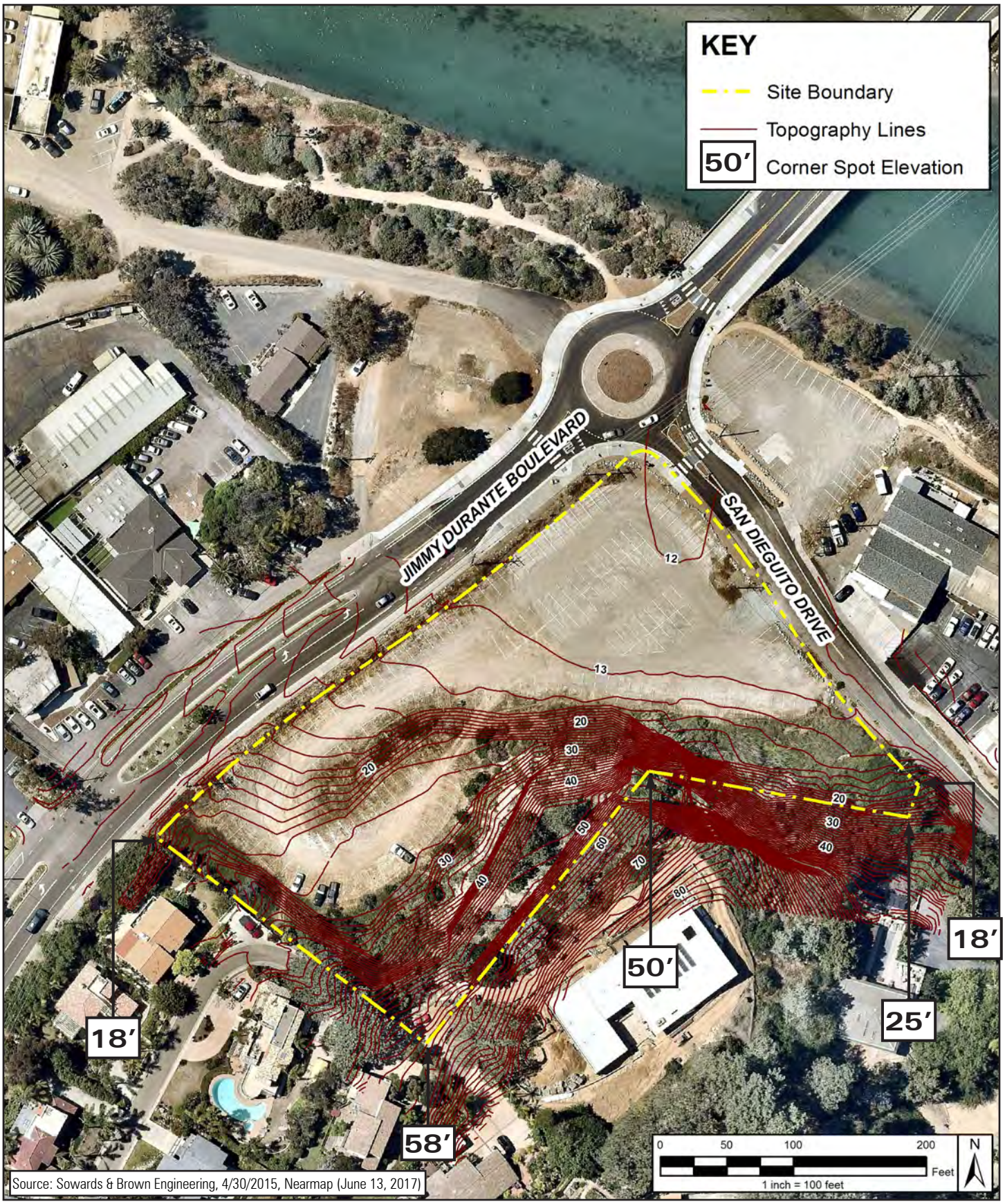
There are five residential properties that directly adjoin the Site within a larger existing area of single-family homes to the southwest, and atop the bluff to the south and southeast.

2.4 Physical Conditions and Resources

A. Topography

The WDMSP Site is located along the lower portions of a much larger bluff/ridge formation that extends offsite. The topographic relief of the Site, as shown on Exhibit 2-3, slopes generally downward from south to the north, toward the San Dieguito River. On-site elevations range from approximately 12 feet above mean sea level (MSL) near the northern corner of the Site to 60 feet above MSL in the southern portion of the Site. Onsite, there are relatively level areas along the adjacent streets at elevations from 12-18 feet above MSL. A level plateau area is located in the south central portion of the Site at an elevation of approximately 25 feet above MSL. The previously graded slopes that ascend to the southern and eastern perimeters of the Site provide a transition to offsite areas. The overall hillside slope continues off-site with single family homes terraced into the hillside/ridge landform that extends up to an elevation of approximately 300 feet above MSL.

Exhibit 2-3 Site Topography



Source: Sowards & Brown Engineering, 4/30/2015, Nearmap (June 13, 2017)

While much of the WDMSP property has been previously graded as shown on Exhibit 2-2, the remaining areas of natural topography onsite include an undisturbed sandstone bluff formation in the northeastern portion of the site near San Dieguito Drive. There is a small area of wetland marsh vegetation (4,750 square feet) at the toe of this bluff area (Exhibit 2-4). Both the portion of undisturbed bluffs on the Site and the wetland area will be outside any site grading, and designated by the Specific Plan to be preserved in open space. The development footprint of the residential structures will be limited to the areas of the site that have been previously graded and disturbed.

B. Soils/Geology

The WDMSP Site is underlain by Quaternary-age alluvium, talus deposits, old paralic deposits, and Tertiary-age sediments of the Torrey Sandstone and Delmar Formations. A thin and irregular veneer of man-placed artificial fill, generally a silty sand material, also mantles portions of the Site.

From a geologic and geotechnical perspective, the Site would be suitable for construction of a multifamily residential use as planned for the WDMSP property, if specific geotechnical recommendations are followed to address the existing geotechnical conditions at the Site. Such recommendations are required to be provided in conjunction with detailed grading plans for a project design in accordance with City of Del Mar engineering standards.

General techniques to address future development of the Site would likely include remedial grading including complete removal of talus and man-placed fill soils, removal and re-compaction of other near surface soils, ground improvement techniques (such as stone columns), and/or special foundation design (i.e. driven piles, auger-cast piles, or structural mat foundations), and dewatering during site construction or grading.

Some degree of ground shaking due to seismic activity along one of the regional active faults should be expected over the design life of the proposed project. However, construction in accordance with the requirements of the most recent edition of the California Building Code and the local governmental agencies should provide a level of life safety suitable for the type of development proposed.

C. Hydrology and Drainage

The WDMSP Site is located within the watershed of the San Dieguito River, and is at the downstream end of the San Dieguito Lagoon, which is tidally influenced. Portions of the site are within a Special Flood Hazard area as shown on FEMA's most recent Flood Insurance Rate Map, with a Base Flood Elevation of 18 feet AMSL. The flood zone areas are shown on Exhibit 2-1. The Site drains via overland flow across the graded, unpaved, urban lot generally toward the north and west, to the curb and gutter located in the adjacent San Dieguito Drive north of the Site. Flows are then intercepted by an existing curb inlet located at the intersection of San Dieguito Drive and Jimmy Durante Boulevard. The curb inlet conveys runoff to an existing storm drain outlet through an 18" RCP until directly discharging to the

San Dieguito River via outfall (City of Del Mar Storm Drain DHB 410) just south of Jimmy Duarte Boulevard Bridge.

Based on hydrological studies of the Site relative to its location within the watershed, it has been calculated that the 100-year peak flow from runoff associated with Site development can be safely discharged without flooding risk, and therefore, project development is exempt from peak flow detention requirements for 100-year storm flows. All stormwater runoff generated by Site development will be required to have water quality treatment in accordance with all San Diego Regional Water Quality Control Board's (SDRWQCB) and the City of Del Mar's Storm Water Management requirements.

D. Biological Resources

The WDMSP Site is undeveloped, but a majority of the Site is disturbed and used seasonally as a parking lot for the Del Mar Fairgrounds. The remainder of the Site is occupied by several different habitat types. (Refer to Exhibit 2-4.)

These include Non-Native Vegetation in the southwestern section of the Site, Southern Coastal Bluff Scrub in the southeastern corner of the property, and Disturbed Southern Coastal Bluff Scrub along the southern edge of the Site. Within this habitat are two sensitive plant species Del Mar Mesa Sand Aster (Corethrogyne filaginifolia var. linifolia), and Torrey Pine (Pinus torreyana). There is a small area (4,750 square feet) of Coastal Brackish Marsh, a wetland habitat, in the eastern part of the property that is isolated from the nearby San Dieguito lagoon. This area contains a sensitive plant species, Southwestern Spiny Rush (Juncus acutus var. leopoldii). The WDMSP implements the regulatory provisions of the Lagoon Overlay Zone, requiring this wetland to be avoided, protected in place, and buffered from future development by a 50-foot wetland buffer.

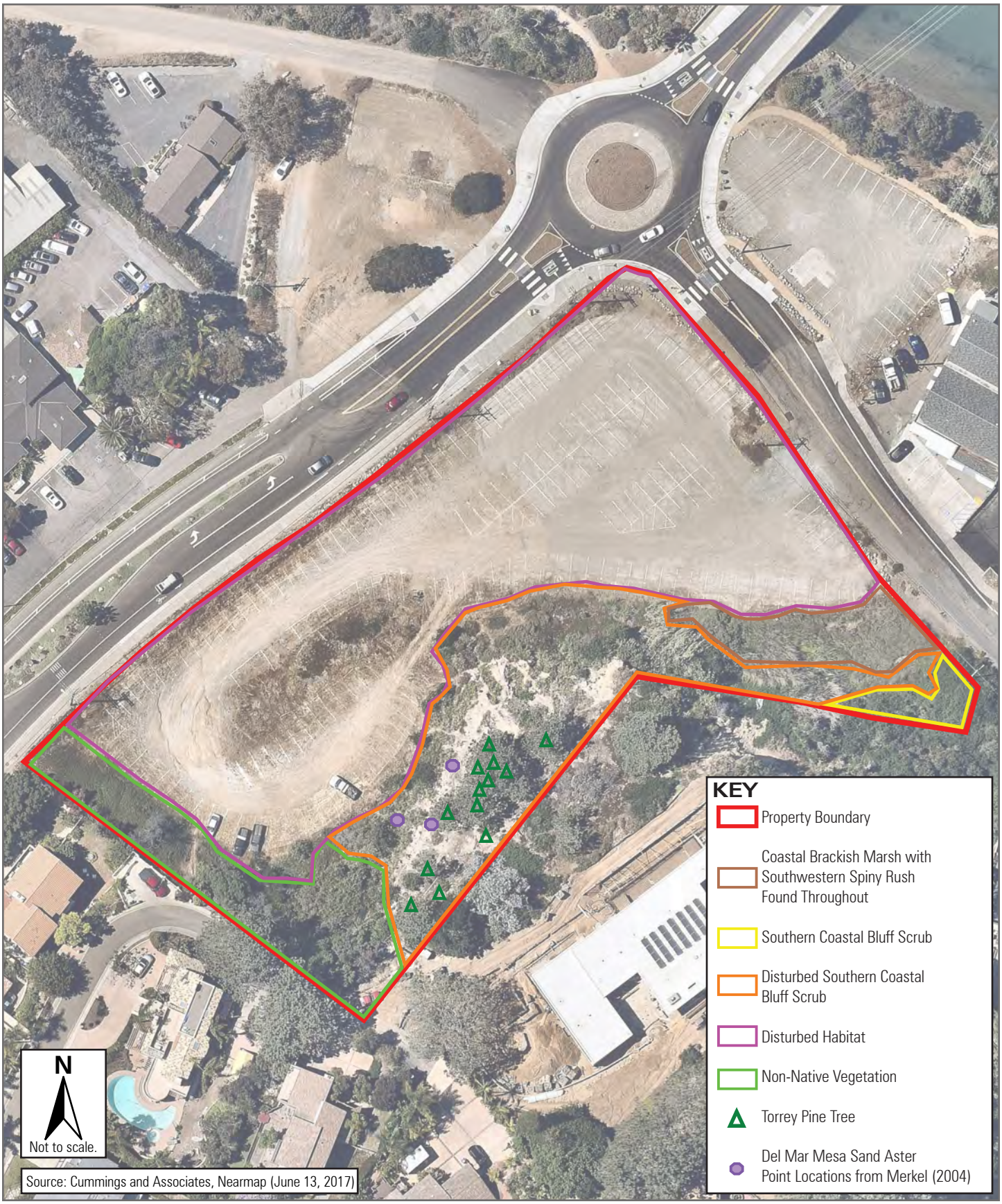
E. Cultural Resources

Based on archaeological review there are no known archaeological resources present on the property. However, there is potential for previously unknown archaeological resources to be discovered on site during excavation activities of the construction phase and monitoring during Site grading will be required.

2.5 Community Compatibility Input

Discretionary permits are being processed under the City of Del Mar's Concurrent Process along with the Specific Plan and other legislative actions. Project design concepts were presented in conjunction with the Specific Plan during plan preparation. The applicant conducted a number of community workshops for input on the proposed plans as part of the City Council-approved process for the project review that included input from the Design Review Board (DRB) and Planning Commission (PC) as well as additional community outreach. The comments provided in those meetings identified some key design concerns, which are summarized below. Some of the suggested modifications resulted in the alternative design identified as the Community Response Alternative (CRA). The development and design standards associated with this CRA plan

Exhibit 2-4 Vegetation and Sensitive Resources



are provided in Chapters 5 and 6 of this Specific Plan. The current project details are included in Appendix C.

A. Community Input Summary

Topic	Comments/Concerns
Density	▪ Too dense and too many units ▪ Housing Element density of 20-25 du/ac is too high. Maximum density should be no more than 17.5 du/ac, the current maximum density of the Community Plan
Streetscape/Bulk & Mass	▪ More separation needed between buildings ▪ More variation of setback along Jimmy Durante Boulevard ▪ Massing along Jimmy Durante Boulevard is too close to street - pull back retaining walls and add plantings in the setback
Underground Utilities	▪ Existing overhead transmission lines and poles along the project frontage should be put underground.
Interface with Existing Single Family Residential/Heather Lane	▪ Need larger building setback from property line ▪ Provide landscape buffer and prohibit pedestrian access to Heather Lane from Site ▪ Locate pool/active recreation areas away from existing homes ▪ Noise concerns from cars, garage sounds, roof decks, outdoor patios and balconies ▪ Lighting concerns from car headlights, residential windows, outdoor lighting
Parking	▪ Need more parking than standard due to lack of on street parking in the area, especially for guests
Flooding/Sea Level Rise	▪ Need to protect structures from flooding damage
Landscape	▪ Use drought-tolerant landscaping within the project ▪ Consider impacts to Torrey Pine trees
Bluffs and Slope Grading	▪ Protect the natural bluff formations
Traffic	▪ Issue of concern, but it was noted that the traffic volumes from residential use are less than projected with the Riverview commercial project previously approved for the Site.

B. Specific Plan Considerations

Both the Specific Plan criteria and the implementing project design have incorporated community input. The Specific Plan addresses these concerns through development regulations and design standards contained in Chapters 5 and 6. These include:

- Density limits - Total density and corresponding unit count reduced from 20.25 units/acre (48 units) to 16.1 units/acre (38 units).
- Parking Standards - Doubled guest parking standard from 0.25/unit to 0.50/unit
- Power Line Undergrounding Program - agreed to lead a program to underground power lines along the project site frontage as outlined in Section 6.2C
- Setbacks to Adjacent Residential - Increased minimum building setbacks from existing neighbors to the southwest and southeast
- Fencing & Landscaping Standards – requires native and drought tolerant plant materials, sets fencing standards and parkway landscaping including trees, requires Torrey Pine relocation, or mitigation in accordance with DMMC.
- Establishes requirements for flood protection of future habitable structures, including the use of podium construction
- Incorporates natural bluff formations into the Open Space land use designation for the site, with construction limited to areas of previously graded slopes.
- Building Design Guidelines – to assure visual quality, require variation in facades, horizontal and vertical planes, roofing and materials, and specifies use of multiple smaller buildings across the site to avoid monolithic multi-family structures.
- Lighting Criteria – requires shielding and dark sky compliance

C. Project Design Considerations

The project design for the Community Response Alternative, included in Appendix C, further addresses these community concerns by:

- Limits total units provided per the Specific Plan density with 38 total units
- Provides parking on-site to serve the residents and guests in a concealed parking garage that also limits potential vehicular noise, headlights, and parking lot lighting impacts to nearby residents, and that provides a podium to meet flood standards
- Modifies building placement and massing across the site, with increased building separation along Jimmy Durante Boulevard, and larger interior courtyards.

- Varies 1st and 2nd floor building setbacks along Jimmy Durante Boulevard
- Moves retaining wall away from the sidewalk edge and added landscaped area adjacent to the sidewalk on Jimmy Durante Boulevard
- Adds trees adjacent to streets to enhance the streetscape and pedestrian interface - Increased the number of street trees from 9 to 19 on Jimmy Durante Boulevard, and from 2 to 7 on San Dieguito Drive.
- Locates pool and recreation facility away from adjacent neighbors at corner.
- Eliminates columns and overhead trellis structure at the pool to keep corner area low-scale and visually open, and added landscape along the corner frontage.
- Adds larger setbacks from Heather Lane, ranging from 15-40 feet providing a substantial landscape buffer to the adjacent residential neighbors.

CHAPTER 3 - LAND USE AND INFRASTRUCTURE

3.1 Land Use Objectives

Specific Plan Objective

The overriding objective of the WDMSP is to implement the Housing Element goals and policies for providing additional land suitable for new residential development at a density that also addresses affordable housing needs as part of the project.

Goals

In order to accomplish this objective at the Site, the ultimate development must balance:

- the policy objectives to develop this Site with multi-family residential uses, including delivery of constructed affordable housing units, while addressing
- physical constraints of the site, such as biological resources, floodplain and slope conditions,
- community compatibility constraints such as the desire for maintaining the low scale, high quality village character of Del Mar, and considering
- financial feasibility to assure that the intended units are constructed.

All of these important issues were considered during preparation of this Specific Plan document, and this extensive analysis was used to establish the following goals and regulatory modifications to achieve the objective for the Watermark Del Mar Specific Plan:

1. Promote a quality multifamily residential community consistent with the goals and policies of the Del Mar Community Plan.
2. Establish an appropriate land use designation that serves the housing needs of current and future citizens to achieve a density that will support affordable housing goals for the community.
3. Provide affordable housing units within the project to help meet the City of Del Mar goals for such units (further defined in Chapter 5, Section 5.9-I).
4. Preserve natural and previously undisturbed bluffs within the Site and protect and preserve on-site wetlands.
5. Establish development standards and design regulations to achieve multifamily density to implement the Housing Element while addressing the physical site

constraints including drainage and flood protection, and providing for visually attractive landscaping, architecture, and site amenities.

6. Create a multi-family residential development with pedestrian linkage and walkability to trails, parks, and beaches, as well as to the businesses and restaurants that serve the local community.

7. Provide parking for all the residential units that screens automobiles from view from the public right of way, minimizes lighting impacts, provides secure off-street parking, and serves to provide a Podium building level safely above the Base Flood Elevation for residential units while minimizing impacts and disturbance to ground water.

8. Provide residential units through the condominium subdivision process with units constructed to for-sale standards. As part of the condominium process, a Homeowner's Association will be established with responsibility to manage common areas and implement CC&Rs for the development.

9. Establish a site and building design that enhances the streetscape and location at one of the important entryways into the City of Del Mar.

3.2 Land Use Distribution

This Specific Plan establishes a new residential land use designation for the property. As shown on Exhibit 3-1, the land use and zoning designations for the Site will be Watermark Del Mar Specific Plan (WDMSP).

The Conceptual Land Use Categories (Exhibit 3-2) and the table below identify the categories that provide the framework for development within the Specific Plan area.

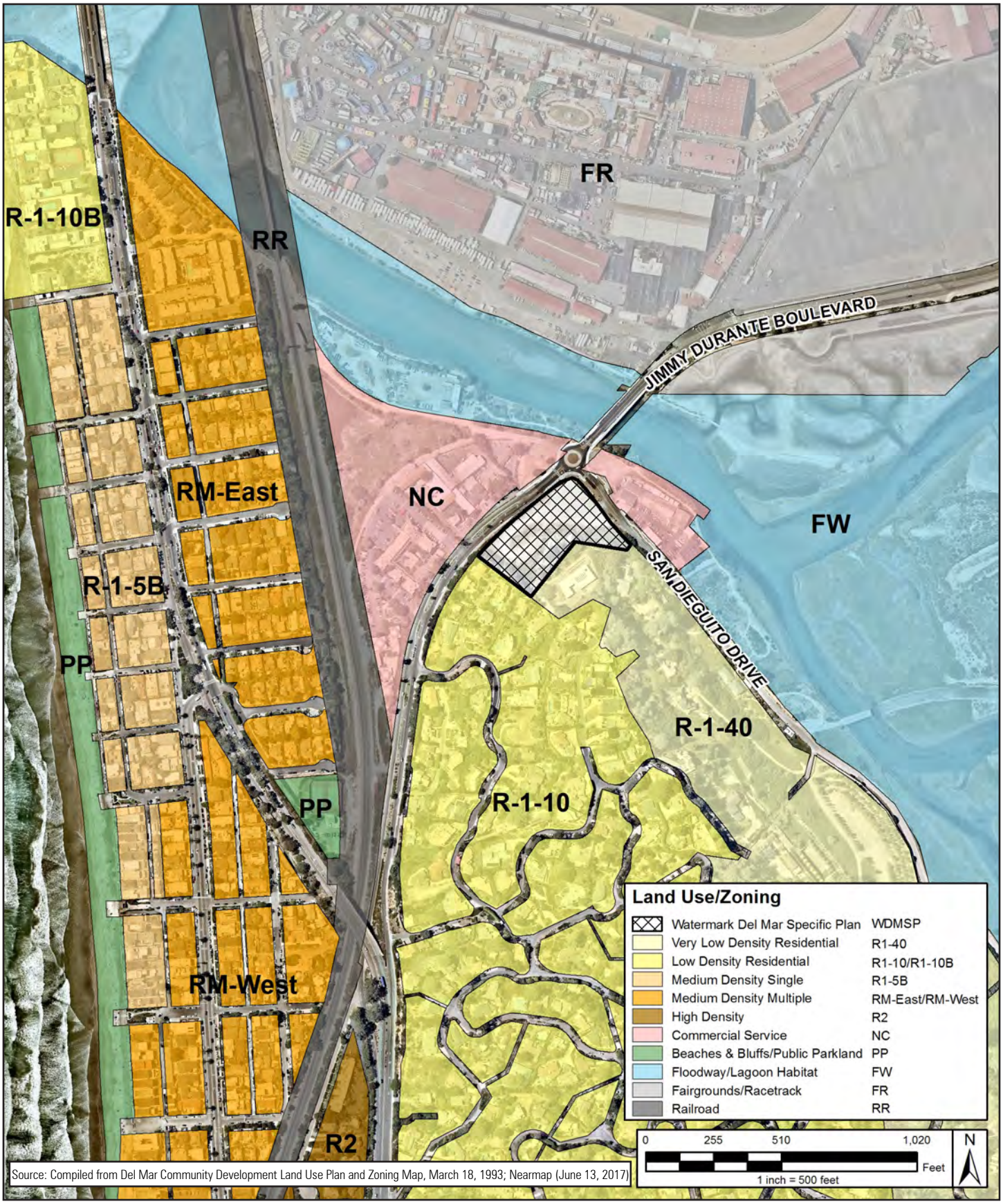
Land Use Category	Acreage
Residential (R-MF)	1.93
Open Space (OS)	0.44
Total Specific Plan Acreage	2.37

Specific uses permitted within each land use category are described in Chapter 5. Development standards and associated regulations and requirements governing development and design for all area within the Specific Plan are set forth in Chapters 5 and 6.

A. Residential (R-MF)

The Residential (R-MF) land use category applies to the site areas available for development of residential units and associated facilities and amenities. This designation is intended to accommodate multi-family residential development.

Exhibit 3-1 Land Use and Zoning Designations



Source: Compiled from Del Mar Community Development Land Use Plan and Zoning Map, March 18, 1993; Nearmap (June 13, 2017)

Exhibit 3-2 Land Use Categories

B. Open Space (OS)

The Open Space (OS) land use category is intended to accommodate permanent natural open space, drainage courses, and to protect natural plant and animal habitats associated with habitat restoration and enhancement areas, buffers, stormwater management areas, and utility, access, and other easements. The OS designation is applied to the onsite wetland and bluff areas.

3.3 Modifications Necessary to Support the Provision of Affordable Units

In order to provide for a multifamily residential project consistent with the City's Housing Element policies, the WDMSP provides individualized development and design regulations to address Site specific conditions. These include new development regulations, including standards for land use, zoning and design in Chapters 5 and 6, which have been crafted to implement the Specific Plan goals and balance the criteria and constraints associated with policy objectives, physical conditions and community desires. These modifications are required to adapt to and address the physical constraints of the Site in order to accommodate higher density development, meet the community character criteria desired by the City of Del Mar and achieve a viable development which will result in construction of affordable housing units.

A. Flood Zone Development

One of key constraints on the site is the location of 100-year floodplain. While it could be possible to achieve the Housing Element's target density at this site without developing in the flood zone, that would require the types of buildings more typically used for the higher densities, with 3-5 stories, and affecting height, bulk and mass in a way that would be inconsistent with Del Mar's desired community character. In order to provide sufficient density at this site AND restrict the buildings to two stories, it is necessary to distribute the units across more of the site. In addition, habitable areas must be located above the Base Flood Elevation (BFE) of 18 feet AMSL. The solution for this was a design concept to create a partially subterranean parking garage that could create a podium level that is above the BFE for construction of the residential units.

In order to regulate this, several new and modified definitions are incorporated into the Specific Plan (Chapter 5), including a definition of "Podium," and a new term, "Established Grade."

The concept for having the garage roof/podium deck serve as the first level for the residential units and as the basis for measuring building height in the flood zone is included in the new defined term Established Grade. The standard provides for a specific elevation measurement standard at the podium of 20 feet AMSL, and also defines that areas outside the podium within the floodplain measure height from the BFE of 18 feet AMSL. Areas outside the flood zone will continue to use existing grade for measurement of height, and this has been added to the new Established Grade definition for clarity.

Other definitions are revised where necessary to incorporate the new Established Grade terminology. This includes: Height, which utilizes the 26 foot/2-story limitation found elsewhere in Del Mar, and Basement, both of which redefine the basis for measurement to be Established Grade.

Other definitions are affected by the introduction of the Podium construction considering that the podium can be viewed as equivalent to ground level. Lot Coverage is modified to exclude open areas above garage podium decks, since these areas will serve as courtyard open space, and Bulk Floor Area is modified to exclude areas below the garage roof/Podium deck. The Bulk Floor Area definition was further revised to exclude Basement areas, and to add a clarification that partially enclosed outdoor areas below a roof are included. A related definition for Floor Area Ratio was added to clarify the method of calculation.

B. Hillside Development

The Specific Plan criteria allow for development on previously graded slopes on the Site to accommodate the proposed Hillside Units. Similar to nearby residential development, these sloped areas can provide opportunities for larger, higher value view units. This allows for a more diverse offering of units within the Site, and such units support the overall economic value of the site. These units also can help to create a more compatible transition from the nearby adjoining hillside terraced single family neighborhood to the multi-family development and supports added value to the community.

Hillside Units have been added as a defined term as used in the Specific Plan. The definitions of Basement, Level and Story have been revised for clarity and internal consistency. The measurement criteria for basement was relocated to be within the Basement definition (instead of Story), to add criteria regarding the number of stories and levels for Hillside Units, and to explicitly state that two basement levels are permitted for Hillside Units. The Established Grade for these units remains Existing Grade, so that there is no change from the DMMC in how height is measured for these units.

The Specific Plan definition for Multiple Family Dwellings has been modified to add specificity and clarify that detached individual and duplex units are included when part of an overall group of units.

C. Density and Intensity

The WDMSP establishes a new, higher density residential category to meet Housing Element provisions, with accompanying standards for lot coverage (45%), floor area ratio (0.62) and minimum street setbacks that vary from most other residential zones within Del Mar. These standards are necessary to accommodate a multi-family development on this Site.

All of the WDMSP regulations are provided to allow development in conformance with the Specific Plan that will meet the stated objective and goals for the Site, and the modifications are justified by exceptional pubic benefits to be provided by such a project.

3.4 Public Facilities, Infrastructure and Services

A. Existing Circulation and Access

Regional access to the City of Del Mar is provided primarily by the I-5 freeway via interchanges with Via de la Valle and Del Mar Heights Road, as well as from Highway 101 (known as Camino del Mar within the City). Primary access to the WDMSP property is via Jimmy Durante Boulevard to San Dieguito Drive, both of which border the property.

Jimmy Durante Boulevard has an existing 80-foot right-of-way adjacent to the WDMSP property. This street is one of the primary North/South routes in Del Mar, and is generally improved with two travel lanes, divided by a raised, landscape median, with turn pockets at driveways and intersections along its length. North of the Site, on the bridge over the San Dieguito River, there is no median. The road has curbs and gutters with on-street bike lanes striped on both sides. On the east side of the street is a continuous sidewalk from south of the San Dieguito River Bridge into the Village, including along the project frontage. The City has recently (2017) constructed a roundabout at the intersection of Jimmy Durante Boulevard and San Dieguito Drive. The new roundabout improvements include curb, gutter and sidewalks with pedestrian crossing access and a raised median to guide traffic within the roundabout.

San Dieguito Drive has an existing 60-foot right-of-way adjacent to the WDMSP property. This street is striped for two travel lanes, with an AC berm on both sides of the street but no curb or gutter along much of its length. Approaching the intersection with Jimmy Durante Boulevard, the street widens at the transition to the new roundabout.

Transit in the City of Del Mar includes bus service by the North County Transit district (NCTD) via Route 101, which currently operates on Camino Del Mar. The nearest bus stop is approximately 0.7 mile from the Site. Seasonally, additional bus service is available to the Del Mar Fairgrounds. Regional rail service is provided by the COASTER commuter rail and Amtrak, with the nearest station in Solana Beach, approximately 2.5 miles from the Site.

Pedestrian and Bicycle Circulation – Del Mar has an extensive system of sidewalks, trails and bike lanes. As noted above there are existing sidewalk and bike lanes on Jimmy Durante Blvd. fronting the Site. Existing trail access is located across San Dieguito Drive from the Site.

B. Water Facilities

Existing public water lines are located in streets adjacent to the Site as shown on Exhibit 3-3. Water service will be provided through a point of connection in Jimmy Durante Boulevard, extended to the property to a new on-site water meter assembly. A private water system will be provided to serve the Site uses for domestic, fire, and landscape irrigation purposes. A new fire

Exhibit 3-3 Water, Sewer, and Storm Drain Infrastructure

Source: Sowards & Brown Engineering 4/30/2015, Nearmap (June 13, 2017)

hydrant will be provided on Jimmy Durante Boulevard and an additional hydrant will be provided on San Dieguito Drive

C. Sewer Facilities

Existing sewer lines are located in streets adjacent to the Site as shown on Exhibit 3-9. Sanitary sewer service will be provided for Specific Plan development by connecting to the existing sanitary sewer main adjacent to the property at the westernmost portion of the Site's Jimmy Durante Boulevard frontage.

D. Stormwater and Drainage Facilities

Existing drainage facilities in the area include an existing 18" RCP storm drain that currently conveys runoff from the site and nearby areas, that is then discharged to the San Dieguito River via outfall (City of Del Mar Storm Drain DHB 410) just south of Jimmy Duarte Boulevard Bridge. A private storm drain system is required to be incorporated into the design for Specific Plan development that will connect to the existing storm drain outlet on San Dieguito Drive. All runoff shall provide storm water treatment and best management practices that may include a bio-retention basin prior to being discharged to the existing storm drain and outfall. The conceptual drainage plan is shown on Exhibit 3-10.

E. Energy

Gas and electric utility services are provided by San Diego Gas and Electric. There are existing overhead electrical transmission and distribution lines currently along Jimmy Durante Boulevard and San Dieguito Drive. Natural gas lines currently exist to the west and south of the Site. Electrical and natural gas service is available to serve the energy needs associated with the residential buildings and supporting amenities associated with Specific Plan development.

F. Telecommunications

Cable services in Del Mar are provided by Time Warner Cable, with telecommunications services available from AT&T. Satellite services for television, internet and phone are also available from other private providers.

G. Waste Disposal

Trash and recycling services in the City of Del Mar are provided through an exclusive franchise agreement, currently with Waste Management of North County. Multi-family residential services are provided using bins. Multi-family housing complexes of five units or more are required to participate in recycling programs, and the City of Del Mar has a mandatory recycling ordinance that requires all designated recyclable material be separated from other trash.

H. Law enforcement

The City of Del Mar contracts for law enforcement services from the San Diego County Sheriff's Department, including routine patrol of streets by patrol and traffic

deputies, crime prevention services, and other law enforcement services. Del Mar also has a Park Ranger who supplements enforcement within public parks and public spaces.

I. Fire Protection

Fire protection throughout the City of Del Mar is provided by the Del Mar Fire Department. The responsibilities of the department include fire suppression and protection, emergency medical services, vehicle accidents, rescue, and hazardous material incident response. The Del Mar Fire Department consists of one fire station located on the San Diego County Fairgrounds on Jimmy Durante Boulevard, north of the Site across the bridge, and currently serves the fairgrounds as well as the City of Del Mar.

J. Parks and Beaches

The City of Del Mar has over 2 miles of coastline beach, with associated water activities, as well as existing formal park facilities at Powerhouse and Seagrove Parks near 15th Street with informal picnic areas and a children's play area. North Beach (Dog Beach) is located north of 29th Street, and there are a variety of trail opportunities within and immediately adjacent to the City. These include the Scripps Bluff Preserve and the San Dieguito River Lagoon located at the northern end of Del Mar.

The City of Del Mar provides a Lifeguard Department, which patrols and oversees the extensive beach areas. The lifeguards establish and maintain safe swimming and surfing areas, and provide water-related rescues and medical aid. The lifeguards are also certified to issue citations for certain infractions that may occur on the beach.

The City of Del Mar also has a Park Ranger Division comprised of the park ranger and beach and community service officers that works closely with the Lifeguard and Community Services Department to ensure public safety and well-being of the community. They protect the natural resources of the beaches, parks, lagoons, preserves, waterways, and community parkland.

K. Libraries

The Del Mar Library is located at 1309 Camino Del Mar, providing local library services and facilities to Del Mar residents. It is a part of the San Diego County Library system, with access to the resources of its 33 branches.

L. Schools

Public education within the City of Del Mar is provided by the Del Mar Union School District for elementary school (grades K-6) and the San Dieguito Union High School District for middle and high school (grades 7-12).

CHAPTER 4 - EXCEPTIONAL PUBLIC BENEFITS

In order to provide for a multifamily residential project consistent with the City's Housing Element policies, the WDMSP provides individualized development and design regulations in Chapters 5 and 6 to address Site specific conditions as presented in Section 3.3. The Specific Plan process was selected for Watermark Del Mar precisely because it allows for customized regulations that can accommodate residential housing at this Site to implement the Housing Element while establishing certainty for the community regarding the development parameters, limitations for the planned use and specific public benefits. In conjunction with these regulations provided through the Specific Plan, there are public benefits that will be achieved for the City of Del Mar and its citizens, through implementation of the Specific Plan provisions and project development.

4.1 List of Exceptional Public Benefits

The exceptional public benefits associated with the WDMSP include:

1. **Implementation of the Housing Element policies to rezone this property for residential use at a density to allow affordable housing, with the applicant taking on preparation and processing of a Specific Plan in lieu of the City directly rezoning to designate the WDMSP property for residential use. [38 units proposed at a density of 16.1 units per acre].**
   - The Specific Plan process allows for a balancing of public policies, uses and development regulations to establish customized regulations that can accommodate housing density at this Site in a manner that addresses specific site conditions, while establishing transparency and certainty for the community regarding the development parameters, limitations for the planned use, and defined public benefits.
   - Instead of the City incurring public costs and utilizing public resources for processing the legislative changes, including environmental review, those studies and documents are incorporated into the Specific Plan process whose costs are paid by the applicant.
   - The Specific Plan establishes the number, location, and design of residential units to be developed, and incorporates a specific number and mix of affordable housing units to help meet the City of Del Mar goals for such units.
   - The number of total units that the Housing Element policies would allow was voluntarily reduced by the developer to address the priorities and preferences of the community. The number of affordable units was also reduced, but in order to maintain housing element goals, was not as high a proportion as the total.

2. **Construct on-site affordable housing units within the WDMSP property [six units proposed].**
   - Implementation of the WDMSP provisions will deliver affordable housing units for the City of Del Mar at the Site, as illustrated by the project plans development package in Appendix C.

3. **Restrict on-site affordable housing units to remain affordable for a period of not less than 55 years.**
   - This exceeds the more typical requirement for affordability restrictions to be in place for a term of 30 years, thereby increasing the duration of time the affordable housing units are guaranteed to be available within the City.

4. **Transfer ownership of three on-site affordable housing units to a local non-profit public benefit corporation [transfer three of the six units proposed].**
   - Providing for this transfer allows an opportunity for the on-site affordable units to meet more restrictive affordability standards to serve the community and further implement Housing Element goals. These units are a substantial financial value that is being eliminated

5. **Off-street parking provided within a parking structure.**
   - Eliminates the need for surface parking, thereby avoiding neighborhood concerns with a surface parking lot such as noise from vehicular activity and vehicle lights from evening use.
   - Hides and minimizes the visual impact of the automobile and service areas.
   - Provides a method to raise habitable areas of the units outside the floodplain, and serve as a podium level to allow residential units with a maximum height of two stories to maintain Del Mar community character.
   - Provides podium that is available for courtyard open space and internal pedestrian circulation for residential units.

6. **Guest Parking standard increased to provide double the amount required for other multi-family developments.**
   - Addresses community concerns that typical guest standards are not sufficient for this Site by requiring additional onsite guest parking.

7. **Increased setback to existing, adjacent single family residential development to maintain a minimum separation from property line between 15 and 35 feet.**
   - Addresses neighbor concerns regarding bulk and proximity of new development to existing homes.

8. **Reduce total traffic volumes (ADT) anticipated from development of the Site with residential uses versus trips from the existing underlying commercial designation or the currently approved Riverview office complex.**
   - This addresses community concerns regarding increased traffic volumes that would be associated with Site development.

9. **Remove surface, seasonal parking lot use adjacent to existing residences and onsite wetlands.**
   - This will eliminate a use that is perceived to have negative visual, traffic and environmental effects.

10. **Create an architectural and landscape design using high quality materials and community–inspired architecture to enhance one of the northern "gateways" to the City of Del Mar.**
    - Provides enhancements at this "gateway" with streetscape elements that can be replicated for other nearby properties in the area at the time they upgrade or redevelop.

11. **Preserve onsite bluffs that are visible from San Dieguito Lagoon trails as open space.**
    - Establishes building envelopes that will retain the character of the existing on and offsite bluffs.

12. **Provide $10,000 contribution towards trail improvements.**
    - This contribution was provided by the landowner prior to preparation of the Specific Plan in consideration for the opportunity to pursue the residential project and Specific Plan.

13. **Contribution towards intersection improvements at Jimmy Durante Boulevard and San Dieguito Drive, in the form of an up-front payment of $185,000.**
    - The advance payment towards improvement costs provided funds for design studies and improvements in advance of any site development.

14. **Restore onsite wetlands.**
    - Provide removal of invasive plant species and restoration of 4,750 sf coastal brackish marsh on the Site
    - Establish a wetland buffer of 50 feet where none currently exists.

15. **Underground power lines along project street frontages.**
    - Lead a program to underground power lines in conjunctions with Site development along the Jimmy Durante Boulevard and San Dieguito Drive, frontages, in collaboration with the City and SDG&E
    - Fund up to 50% of costs for undergrounding along the project frontage, with cost sharing and/or reimbursement for balance by City.

CHAPTER 5 - ZONING REGULATIONS

5.1 Purpose (WDMSP.010)

The purpose of the WDMSP Zone is to establish development standards to regulate land uses and development of property within the Watermark Del Mar Specific Plan. These regulations implement the goals and policies of the Del Mar Community Plan, including the Housing Element, and the statutes of the State of California regarding the provision of housing for persons of a variety of income levels. This Chapter of the WDMSP specifies regulations for site planning, development standards, and intensity of land use in order to: 1) accommodate the implementation of the residential density called for in this Specific Plan; 2) address flood hazard constraints at the property; 3) maintain community character; and 4) protect natural bluffs and wetland areas within the Site.

5.2 Boundaries (WDMSP.020)

Property within the WDMSP Zone consists of the 103,282 square-foot (2.37-acre) property, located south of the intersection of Jimmy Durante Boulevard and San Dieguito Drive, currently identified by the San Diego County Assessor as Assessor's Parcel Numbers (APNs) 299-100-47 and 299-100-48. Within the parcel boundaries, there are no public rights of way, vehicular access way or private roads or easements serving five or more units, therefore the Net Lot Area and Gross Lot Area are the same (2.37 acres). The WDMSP Zone shall be designated by ordinance to be depicted upon the City Zoning Map.

5.3 Applicability (WDMSP.030)

Unless otherwise specified, the provisions of this Chapter shall be applicable to all property within the geographic boundaries of the WDMSP, and are the controlling provisions of this Specific Plan. Some of the development standards contained in this Chapter supplement or replace those found in other Chapters of the Del Mar Municipal Code (DMMC). Unless specified in this Chapter, the other provisions of the DMMC shall also apply in the WDMSP. Where there is a conflict between the provisions of this and other Chapters of the DMMC, the provisions of this Chapter shall prevail.

The regulations found within this Section are not subject to "relief" otherwise allowed through the Del Mar Variance process (Section 30.74). Exceptions to, or relief from, the requirements found within this Section are limited to those specified within the language of this Section itself.

Questions or disputes relating to a Determination of Allowable Use (Sections 5.5-5.8) or an Interpretation of the zoning provisions in this Chapter 5 of the Specific Plan shall be resolved as provided for in this WDMSP. In addition to otherwise required finding(s),

the authority making such determination shall consider those goals, policies, and objectives that best implement the Community and Specific Plan.

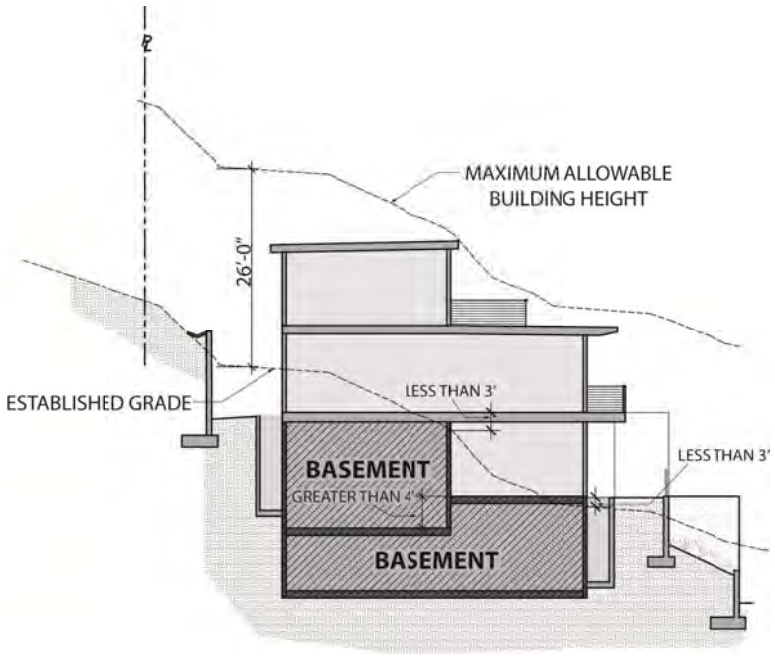
5.4 Definitions (WDMSP.040)

Words, phrases and terms not specifically defined in this Chapter shall have the same definition as provided in the DMMC, or, where not defined in the DMMC, as applied in normal usage.

For purposes of the WDMSP, the following terms shall have the meanings set forth in this Section. The need for and benefits associated with these modifications are discussed in Section 3.3 of Chapter 3.

A. Basement

A level of a building that is fully or partially below the Established Grade adjacent to the floor area, in which the finished floor above is less than three feet above the lowest point of the adjacent Established Grade. Basement levels shall not be considered as Stories. Hillside Units as defined in this Specific Plan are permitted to have two Basement levels per unit.



B. Bulk Floor Area

For purposes of determining compliance with the bulk floor area limitations contained in this Chapter, "Bulk Floor Area" is the total horizontal area, expressed in square feet, of all floors below a roof including enclosed and partially enclosed outdoor areas, measured as defined in DMMC Section 30.72.020 but excluding Basements and all areas within a parking garage. Those areas below the garage

roof/Podium deck shall be exempt from the calculation of a building's Bulk Floor Area, including parking spaces, drive aisles, and rooms/areas provided for mechanical equipment, waste bins, storage, mail, fire risers, stairwells and similar common areas.

C. Dwelling, Multiple Family

A group of residential units, each designed to house individuals or families in separate living quarters, within a single building or in multiple buildings on a single property, that are adjacent vertically or horizontally. These units may be attached or detached, in groups of one, two, or more, may have single or multiple owners, and may be rented or owner-occupied. A property with "Multiple Family Dwellings" will have: 1) multiple individual or family residents, each with their own title or lease; 2) private areas that are the personal space of each individual or family resident into which no one else has right of access; 3) separate entrances for each individual or family resident; 4) common areas that all residents have the right to use.

D. Established Grade (for Measurement of Height)

Where any portion of a habitable structure is built over a Podium, such as structured parking, the "Established Grade" shall be 20 feet above MSL. This Established Grade elevation includes a safety factor of two feet (2'-0") above the Base Flood Elevation of the San Dieguito River.

Where habitable structures are built on grade within the flood zone, the Established Grade shall be 18 feet above MSL, which is the Base Flood Elevation of the San Dieguito River.

Where habitable structures are built on grade outside the flood zone, the Established Grade shall be the existing grade of the Site, prior to the start of any current or proposed Site preparation, grading, or construction. Existing grades of the Site are shown on Exhibit 2-3.

E. Floor Area Ratio (FAR)

A number which indicates how many square feet of enclosed building area may be constructed on a property. FAR is determined by dividing the Bulk Floor Area of all buildings on a lot, as defined in this Chapter, by the net area of that property. In circumstances where a building spans two or more parcels owned by the same entity, or where the City allows the parcels to be developed as a combined project, several parcels may be treated as a single building site for the purpose of calculating the building's allowable Floor Area Ratio.

F. Height, Building or Structure

Building or structure Height shall be the greatest vertical dimension computed by using the vertical distance from any point of the roof or structure to the Established Grade directly below.

G. Hillside Units

The five residential townhome buildings built on grade outside the flood zone, adjacent to the southeasterly property line.

H. Level

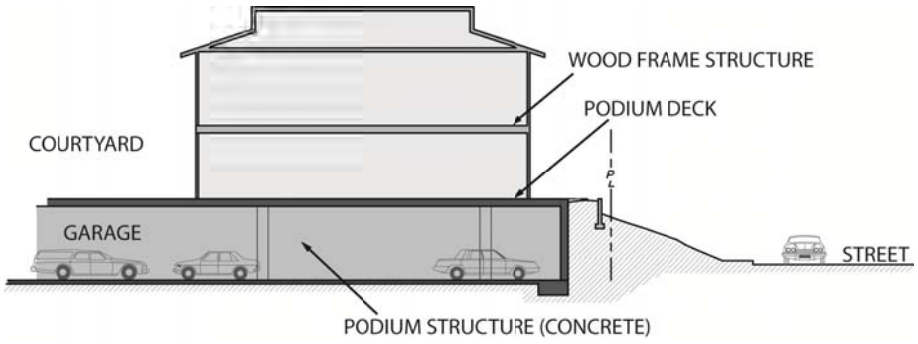
A horizontal division of a building extending from a floor to the next floor above, or if there is no higher floor, to the ceiling directly above. If the finished floor of one portion of a building lies no more than 4 feet above that of an adjacent finished floor, it shall be considered as being the same level as that of the adjacent floor. A level may or may not be a Story.

I. Lot Coverage

That percentage of a lot which, when viewed directly from above, would be covered by a structure or structures, or any part thereof, including any area under roofs, cantilevered decks, balconies, roof overhangs, and eaves, but not including Podium deck areas above a parking garage that are open to the sky. Paved areas, swimming pool decks, planters and other similar structures open to the sky shall not be considered as "Lot Coverage."

J. Podium

"Podium" construction is a concrete structure that forms the base level(s) of a building, such as a subterranean or first level garage. The concrete lid of the structure allows the construction above to be classified as a separate and distinct building type. The WDMSP project features two stories of residential wood frame construction above a concrete garage structure which includes uses such as mailboxes, waste bins, mechanical equipment, and storage rooms. The horizontal separation and building base for the residential units and courtyards above is also referred to as the "Podium deck" or "Podium level."



K. Story

That portion of a building included between the upper surface of any floor and the upper surface of the floor next above it. If any part of any level of a building is considered a Story, that entire level shall be considered a Story. If there is no floor above, then the space between such floor and the highest point of the finished ceiling next above it shall be considered a Story. A Story shall include:

1. An attic with a vertical dimension of five feet six inches or more between the floor and the level of the finished roof immediately above.
2. Any space with a vertical dimension of five feet six inches or more between the floor and the finished floor above or, where there is no floor above, the level of the finished roof immediately above; and
3. A mezzanine when such mezzanine exceeds one-third of the total floor area of the larger space in which it is located.

Hillside Units within this Specific Plan, are allowed to have multiple levels tiered with the site topography. In no place shall these units exceed two stories or the Height limit, whichever is lower. The multiple building levels for Hillside Units may include up to two Basement levels per unit, as defined above, which do not count as Stories.

5.5 Allowable Uses (WDMSP.050)

The uses allowed in the WDMSP Zone are based on land use category as listed below.

A. Residential Multi-Family (R-MF)

1. Multiple-family Dwellings in attached or detached unit configurations.

2. Office uses attendant to the operation of an on-site multifamily residential development with the cumulative area of such office use areas limited to a maximum total of 1,000 sq. ft.

3. Recreation areas and amenities including but not limited to swimming pools and spas, community rooms.

4. Infrastructure facilities including but not limited to those necessary for drainage and flood control, water recharge and percolation areas, retention or detention of flood waters, and other facilities necessary to provide water quality improvements and reduce water runoff pollutants; public communications; ingress/egress road; lighting; and other facilities necessary to provide for public safety or health.

5. Access roads, utilities, and infrastructure (such as landscaping, lighting, and signage).

6. Rental of residential units on a Long Term or Short Term basis, only as allowed by and in accordance with the DMMC. Units within Watermark Del Mar shall

comply with the DMMC regulations as applicable to rental of multi-family residential units, as may be amended. To the extent the DMMC is modified or amended to allow for additional short-term rental opportunities subject to the provision of affordable housing, the affordable housing provided as part of Watermark in accordance with the Specific Plan shall satisfy any such future requirement.

B. Open Space (OS)

1. Conservation and enhancement (protection of sensitive species, environmentally sensitive habitat areas, waters, wetlands, riparian, and water quality).

2. Infrastructure facilities including but not limited to those necessary for drainage and flood control, water recharge and percolation areas, retention or detention of flood waters, and other facilities necessary to provide water quality improvements and reduce water runoff pollutants; and other facilities necessary to provide for public safety or health.

3. Trails for access as minimally necessary for maintenance of habitat, buffers, utilities and infrastructure (revegetation, landscaping, fencing and signage for educational or restrictive management purposes) but excluding trails for motor vehicles.

4. Accessory or related uses that support the permitted passive open space uses, such as signage, fencing, open air classroom/education

5.6 Accessory Uses (WDMSP.060)

The following accessory uses are allowed in the WDMSP Zone:

1. Those uses, amenities and facilities customarily incidental to any use allowed in the WDMSP Zone. Examples may include but not be limited to: a leasing office, a security office, a business center, and storage facilities.

2. Off-street parking for motor vehicles and bicycles serving any allowed use.

3. Recreational uses and facilities intended for use by residents of on-site dwelling units, including but not limited to indoor and outdoor fitness facilities, swimming pools, spas, saunas, and common area patio spaces.

4. Home occupation as authorized by the DMMC.

5.7 Temporary Uses (WDMSP.080)

The following temporary uses are allowed in the WDMSP Zone:

1. Seasonal Parking is allowed to continue as an interim use until the property is developed. Such parking shall be located within areas of the Site historically used for such parking.

2. Construction trailer and/or information trailer up to 12 feet x 56 feet is allowed. Any trailer shall be located only within previously disturbed areas of the Site and may be located in areas historically used for seasonal parking.

5.8 Site Development Standards (WDMSP.090)

A. Density

The maximum density shall be 16.1 dwelling units per acre based on the net area of the Specific Plan boundaries (2.37 acres).

B. Lot Dimensions

Minimum lot size and dimensions are not applicable in the Specific Plan area as the Site is to be developed as a condominium project for multi-family residential uses.

C. Setbacks

The following are the minimum setbacks to all structures on the Site, including parking structure/Podium levels. Fences and walls may be located beyond the setback line. Architectural projections (such as cornices, belt course, sills, eave projections, footing, fireplaces/chimneys and awnings) without enclosing walls or screening may project beyond the minimum setback line by not more than two feet.

Boundary Location		Minimum Structure Setback
From San Dieguito Drive ROW		10 feet
From Jimmy Durante Blvd ROW		0 feet
From external, non-street property boundaries	Southwest (Heather Lane)	15 feet
	Southeast	15 feet
From wetland boundary		50 feet*

* The limits of the Open Space land use category incorporate this 50-foot building setback from the wetland boundary. The standard is included in this table to reinforce this requirement.

D. Height

1. The maximum Building Height shall be twenty-six feet (26′-0″) above the Established Grade as defined in this Chapter. This height limit applies to all buildings regardless of the number of levels within a structure.

2. All habitable space shall be at or above the BFE (Base Flood Elevation).

3. Specified rooftop structures, such as chimneys, vents, and solar equipment may exceed this Height in accordance with Chapter 30.86.110.B of the DMMC.

E. Floor Area Ratio:

The maximum Floor Area Ratio (FAR) shall be 0.62. The total Bulk Floor Area used to determine the FAR shall be calculated as defined in this Chapter.

F. Lot Coverage

The maximum Lot Coverage shall be forty-five percent (0.45). Lot Coverage shall be calculated as defined in this Chapter.

G. Parking Standards

Location
All on-site parking shall be provided in a parking garage, which shall be designed in a manner so that the roof also serves as the Podium level for habitable structures at an elevation above the 100-year Base Flood Elevation of the San Dieguito River.

Parking Garage Access
All vehicular access to the parking garage shall be from San Dieguito Drive.

1. Parking shall be for the use of residents and their guests only.

2. The garage shall be secured by a gate with access control at the private driveway to enhance the security of the parking structure and control vehicle access to the structure. The access control design shall provide for adequate room to enable a vehicle to turn around and exit if unable to enter the gate.

Size of Parking Spaces
Standard parking spaces shall be a minimum of 9 feet wide by 18 feet deep with 24-foot drive aisles when using 90-degree parking spaces.

Accessible Spaces
All required accessible (disabled) parking spaces shall be constructed in a manner required by the most current editions(s) of the State of California Uniform Building Code (Title 24) as amended.

Number of Spaces Required

The required number of parking spaces within the parking structure shall be based upon the cumulative total required for residential units within the project as follows, but in no event shall be less than 100 total spaces:

Studio or 1 Bedroom Unit	1 space per unit
2 or 3 Bedroom Unit	2 spaces per unit
4 or more Bedroom Unit	3 spaces per unit
Guest Parking	0.50 space per unit

When the calculation of the requirements for guest parking per this Chapter results in a fractional portion of a parking space, a fraction of one-half or greater shall be construed as one required space and a remaining fraction of less than one-half shall be disregarded from the calculation of required spaces.

Use of Parking Spaces

1. Guest parking spaces shall be designated and reserved for guest parking only, and identified through signage as "Guest Parking."

2. If the total parking for residents and guests exceeds the 100-space minimum, such spaces may be provided as additional reserved resident parking at the owner's option.

3. All parking spaces within the parking structure shall be prohibited from use for the storage of recreational vehicles, boats, trailers or other items that would prohibit parking by motor vehicles and motorcycles.

H. Use of Public Right-of-Way

Adjacent public rights-of-way, outside the WDMSP project boundaries, may be used for grading, landscape and hardscape to provide for an integrated streetscape, screening of the parking structure, and pedestrian and/or bicycle connections, subject to compliance with applicable provisions of DMMC Chapter 23.38, Encroachment Permits.

I. Requirement for Provision of Affordable Dwelling Units

1. When the number of residential units approved for development at this Site is at the maximum WDMSP density of 38 units (16.1 dwelling units per acre), six of the total dwelling units shall be constructed and reserved for use as affordable dwelling units. Fewer total units may result in a proportional reduction in the number of affordable units.

2. Density calculations resulting in a fraction of one-half or greater of a residential unit shall be rounded up to the next whole number and a remaining fraction of less than one-half shall be rounded down.

3. The affordable dwelling units required or developed per this Section shall include a mixture of unit sizes. Based on six units being reserved as

affordable, this will include two studio units, two one-bedroom units, and two two-bedroom units.

4. The rental rates or purchase price for all affordable dwelling units required pursuant to this Section shall be calculated in accordance with affordability levels for moderate income households [120% of the Area Median Income ("AMI")] as defined by the State of California Department of Housing and Community Development (HCD), and the San Diego County Office of Housing and Community Development for San Diego County, and as adjusted and published annually.

5. The affordable dwelling units required or developed per this Section shall be subject to the recordation of a deed restriction committing the property owner and successors in interest to limiting rental rates or purchase prices to the affordability rates to families with income levels at 120% of AMI or less as specified in this Chapter for a period of not less than 55 years from the date of issuance of the Certificate of Occupancy for such residential unit(s).

6. In lieu of a deed restriction required to ensure affordability as provided in this Section, all or part of the affordable dwelling units may be sold, deeded, or otherwise transferred to the City of Del Mar or to any other managing agency acceptable to the City of Del Mar or local non-profit public benefit corporation ("Local NP"), approved by the City of Del Mar. Any affordable dwelling units that are sold, deeded, or otherwise transferred to the City of Del Mar or other managing agency or Local NP pursuant to this section shall remain in full compliance with all codes and provisions for providing the required percentage of affordable dwelling units. If the units are transferred to a Local NP, as a condition of the transfer, the Watermark property owner. would receive a charitable contribution receipt from the Local NP for the appraised value of the donated units. Any such proposed transfer would be subject to acceptable contract provisions. At its option, the Local NP may elect to provide the Affordable Units on a more restrictive basis (as low, very-low or extremely-low income units) through its own internal policy(ies).

J. Design Review

1. Development in the WDMSP shall be subject to compliance with the applicable standards of review and review processes contained in the DMMC Chapter 23.08, the Del Mar Design Review Ordinance, and any amendments thereto, and Council Policy 112 regarding Specific Plan processing.

2. In addition to compliance with the Design Review Ordinance, development in the WDMSP shall be in compliance with the Design Guidelines in Chapter 6 of this Specific Plan.

K. Special Regulations - Bluff, Slope and Canyon Overlay Zone

Notwithstanding the applicable provisions of Chapter 30.52 of the DMMC (Bluff, Slope, and Canyon Overlay Zone) for purposes of this Chapter, the terms "natural slope," "steep slope," "substantial slope," "substantial steep slope," and/or "sensitive slope" shall mean slopes that meet all of the following criteria:

1. Have a gradient of 25% or greater;

2. Are part of a continuous landform with a vertical rise of 20 feet or more either on-site or extending off-site;

3. Have not been previously graded or otherwise disturbed; and

4. Contain predominantly native, natural plant species/habitat.

The existence of the above conditions shall be demonstrated to the satisfaction of the Planning Director.

The criteria listed above are a modification from the DMMC and are included in this Specific Plan to accommodate the proposed hillside townhome units. These units will be located within portions of the site documented to have been previously graded. These provide for more diverse offering of units within the Site, with larger, higher value view units. Such units support the overall economic value of the site to allow the exceptional public benefit of donating three units to a designated non-profit to assure long-term affordability. These modified regulations of the BSC overlay help to create a more compatible transition from the nearby adjoining hillside terraced neighborhood to the multi-family development and support added value to the community.

L. Special Regulations – Lagoon Overlay Zone

Development within the WDMSP Zone shall comply with all applicable provisions of Chapter 30.53 of the DMMC (Lagoon Overlay Zone). Specific provisions for the onsite wetland and buffer within WDMSP are as follows:

1. The Coastal Brackish Marsh wetland shall be enhanced by removal of invasives and restoration of additional native species, with an enhanced wetland buffer of 50 feet provided. Based on the very small size and marginal condition of the existing wetland, a 50-foot buffer would serve to protect the environmental and functional habitat values of the restored wetland, and lands which are integrally important in supporting the full range of the wetland and adjacent upland biological community through their function as upland transitional habitat.

2. Improvements associated with the wetland buffer shall include fencing, signage and may include a bio-retention basin, which are necessary to provide protection, preservation, and enhancement of adjacent wetland areas. The areas southeast of the wetland shall remain in place with removal of exotics and revegetation with native Coastal Bluff Scrub species

for enhanced upland vegetation. The area of the existing unpaved parking area shall be re-graded to create a buffer to the development edge. The access driveway and residential areas shall be raised above existing grade, such that the buffer area will provide a physical transition between the development and the marsh using slopes, the basin and native plantings to function as a buffer to the marsh. This area shall be protected via fencing and signage (DMMC 30.53.110).

3. Runoff from the project development that is directed into the bio-retention basin shall not be directed into the marsh. Project drainage shall be segregated from the marsh so that the marsh itself will continue to function and flow as it currently does.

4. The 50-foot buffer area shall include restoration and long-term maintenance for the buffer and any bio-retention basin bmp along with a Land Conservation Easement (in accordance with DMMC 30.53.130) to assure long term to ensure future protection of the designated area(s) from encroachment, disturbance, or degradation, and protection of the restored ecological function of the habitats.

The Lagoon Overlay Zone requires a buffer no less than 50-feet from wetlands, and the WMDMSP regulations are consistent with that provision for the onsite Coastal Brackish Marsh area onsite. The replacement of the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer will be subject to approval from the California Department of Fish and Wildlife (CDFW) as required of any wetland buffer proposal of less than 100-feet (DMMC 30.53.100). A wetland buffer width of 50-feet from this small marsh area was previously determined appropriate with the approved Riverview Office Project at this site. The 50-foot buffer width is still appropriate at this location given the very small size of the wetland, the improvement in the existing area adjacent to the wetland from an unvegetated dirt parking lot to an area that will be enhanced with native vegetation, and the addition of fencing and signage, all of which will combine to decrease existing edge effects to the marsh by limiting public use and creating additional native habitat to buffer the marsh.

M. Special Regulations – Floodplain Overlay Zone

Development within the WDMSP Zone shall comply with all applicable provisions of Chapter 30.56 of the DMMC (Floodplain Overlay Zone).

N. Condominium Form of Ownership

Nothing in this Chapter shall preclude a condominium form of ownership in accordance with DMMC Title 24 (Subdivisions). Construction in accordance with this Specific Plan shall be to "for-sale" standards. It is anticipated that this Site will be developed as a single development project, and will have an HOA with CC&Rs incorporating property management responsibilities.

Market rate units that are adjacent (horizontally or vertically) may be combined in accordance with this paragraph; combining of affordable housing units is prohibited. In the event that adjacent market rate condominium units are held in the same ownership, such units may be consolidated/combined into a single unit, subject to issuance of a building permit in compliance with building code requirements in effect at the time of permit issuance. To the extent that such consolidation affects only the internal configuration of each affected unit, no additional City review is required. Parking for such combined units shall be based on the original unit configuration as shown in the condominium plan and shall not be reduced. A unit that is combined under this provision may be modified to return to separate units per the original condominium plan, also subject to compliance with current building code requirements, and the parking shall be reassigned to each unit as originally specified.

CHAPTER 6 - DESIGN GUIDELINES

6.1 Purpose and Intent

The following guidelines and standards address site planning and design elements applicable to the overall Specific Plan property. Objectives of the Watermark Del Mar Design Guidelines are to:

- Establish a high quality, cohesive design concept to create an image for Watermark Del Mar that reflects the broader community character and will enhance this northern gateway into the City of Del Mar.

- Provide the City of Del Mar with assurance that the Specific Plan area will develop in accordance with the design quality and character proposed herein.

- Serve as a reference for Staff, the Design Review Board, Planning Commission, and City Council in the review and evaluation of development within the Specific Plan.

These Design Guidelines will ensure that the Specific Plan area reflects the vision embodied in the following concepts:

- Establish common features in site planning, architecture, landscape architecture and other design details to create a highly livable multi-family residential development that provides a range of housing sizes, ensures lasting value for the residential units, and seamlessly incorporates affordable housing units as part of the development.

- Materials and methods of construction should be specific to the regional area and climatic zone, exhibiting continuity of history and culture and compatibility with local character and community identity.

- The architectural image of the Specific Plan will be perceived primarily from the public streets adjacent to the property. Therefore, building scale and roof forms, as the primary design components, require careful articulation in their architectural expression as they relate to the public realm.

- Enhance the streetscape and appearance along the site frontage by creating visual interest and variety that maintains an appropriate scale and pattern of development.

- Provide adequate, usable, safe, and high-quality common courtyards and private amenity areas for residents.

Creativity and innovation, as well as consistent quality, are encouraged in the implementation of these guidelines.

6.2 Site Design Guidelines

A. Circulation

This section provides the standards for Site access and improvements to streets adjacent to the Site. Access to Watermark Del Mar is from Jimmy Durante Boulevard to San Dieguito Drive.

1. Vehicular access to Watermark Del Mar shall be from a single driveway on San Dieguito Drive. The location of the driveway should be in approximately the same location as the existing driveway currently in use for fairground, racetrack, and event parking, a minimum of 175 feet from the intersection with Jimmy Durante Boulevard.

2. The driveway curb cut shall access onto a private drive ramp to enter the secured parking facility for residents and guests.

3. A Fire Access Plan shall be prepared and approved by the Fire Marshall in conjunction with Site development plans.

4. A variety of pedestrian/cyclist access points to Watermark Del Mar shall be provided. In addition to access adjacent to the main parking structure ramp, additional pedestrian/cyclist entry points should be provided at a second location on San Dieguito Drive and at 2-3 locations along Jimmy Durante Boulevard to provide convenient access to the walking route to the Plaza and the downtown area to the south, and to the San Dieguito Lagoon and riverside trail opportunities to the north.

B. Parking

1. Parking for residents and guests shall be provided in a common parking structure designed to screen parking areas from the view of adjacent properties and public rights-of-way.

2. The parking structure may be constructed partially below ground. The structure shall be screened from view from adjacent properties or rights-of way through the use of low decorative walls, earth mounding, landscaping, and/or a combination thereof.

3. Access to the parking structure shall be secured, and controlled by gates, card key access system or other controls that will enhance the security of the parking structure and control vehicular access to the structure.

4. Bicycle parking/storage areas should be provided in the parking garage and at the Podium deck level. Storage may also be included within individual units to accommodate cyclists.

C. Pedestrian & Streetscape Improvements

San Dieguito Drive Frontage

1. Watermark Del Mar shall provide new sidewalk improvements extending from the existing roundabout improvements along the full length of the Site's frontage on San Dieguito Drive. Within the parkway, streetscape landscaping shall be provided in accordance with Section 6.4.C.

2. ADA Access shall be provided from the San Dieguito Drive public right-of-way into Watermark Del Mar.

3. An on-street loading zone space shall be provided along the San Dieguito Drive frontage, southeast of the planned driveway access into the Site. This loading zone space shall be designed to provide space for truck deliveries, including loading/unloading of furniture and appliances typically associated with the move-in and move-out of residents. The loading zone area shall include provisions for a pedestrian ramp at the sidewalk. This will link with pedestrian access to the Site, which in turn will provide access to the Podium level and elevators.

Jimmy Durante Boulevard Frontage

1. The recent roundabout installation has altered this gateway entry to Del Mar, and the design for Watermark and the adjacent parkway can enhance this streetscape appearance. Streetscape landscaping shall be provided in accordance with Section 6.4.C.

2. Sidewalk improvements were installed in 2016 along the entire property frontage of Jimmy Durante Boulevard, and extended around the corner at the intersection with San Dieguito Drive as part of the roundabout construction in 2017. Development on the Site shall repair/replace sidewalk improvements within the right-of-way along the project frontage if required to repair any damage as a result of new construction.

3. Jimmy Durante Boulevard may include special landscape treatments in the right-of-way to screen the parking garage Podium, including include sloped fill with landscaping. Further details are provided within the Landscape Design Guidelines (Section 6.4).

Utility Undergrounding

There are currently overhead utility lines for both distribution and transmission along the Site frontage on Jimmy Durante Boulevard and San Dieguito Drive. In conjunction with development of the Watermark Del Mar project, the developer shall lead a program to underground power lines along the property frontage, and shall be responsible for 50% of the costs for undergrounding adjacent to the Site. The undergrounding shall be planned in conjunction with the City of Del Mar and SDG&E.

6.3 Architectural Guidelines

A. Architectural Character

Watermark Del Mar is situated at a key intersection leading into the Village area of Del Mar and provides an opportunity to transform what is now a vacant lot into a welcoming northern gateway. To accomplish this, the design character the architecture should use timeless, coastal-inspired architecture that joins and enhances the architectural tradition established in Del Mar. The architectural elements specified in the WDMSP have been selected to achieve a distinctive identity, expressing a thoughtful integration of building structures with the distinctive coastal Del Mar vernacular that has evolved over time. Utilizing the elements that give the town its special casual coastal character as part of the project design will help the new development integrate harmoniously with the broader, established architectural fabric of Del Mar.

The Coastal vernacular is characterized by an eclectic mix of style elements and materials that reflect traditional and natural materials, and incorporate contemporary interpretation of classic features with simple forms and details. Buildings are architecturally distinguished by their low to moderate pitched roofs, projecting eaves, wood details, open porches and balconies.

The architectural image for Watermark Del Mar will be perceived primarily from the adjacent public streets and the design approach for Watermark Del Mar is to suggest a collection of beach homes when viewed from Jimmy Durante Boulevard. Providing articulation of building massing, scale and roof forms will be important elements to establish the desired variation and visual separation between the buildings. The intent of the Specific Plan is that both setbacks and individual building elevations will vary to contribute to an aesthetically pleasing and unique streetscape. Using varied finishes, colors, and material details from building to building can further distinguish them to create visual separation and interest. Within that variation, the elements for each should maintain integrity of the design style.

B. Building Massing and Scale

1. Building facades and rooflines shall provide a variety of architectural elements along Jimmy Durante Boulevard and San Dieguito Drive.

2. Building massing shall avoid a monolithic, repetitive pattern, and instead, units should be grouped in different configurations, with multiple buildings to create varied form and massing on the property.

3. Articulation (projections and recesses) of wall planes should be used to provide shadow and depth for elevations that are highly visible from Jimmy Durante Boulevard and San Dieguito Drive.

4. Variation to the number and mix of unit sizes (studio, one-bedroom, two-bedroom, and three or more bedrooms) is encouraged to provide more opportunities for variety in the building sizes, configurations, and

resulting form and details such as placement of window and doorway openings.

5. Large expanses of flat wall planes, both vertically and horizontally are prohibited. Long unbroken facades and box-like architecture elements should be avoided.

6. Building massing should maintain important vistas towards the bluffs along San Dieguito Drive.

C. Exterior Materials and Finishes

A combination of materials, textures, and colors should be used to help articulate the building design and achieve greater variety, visual interest, and richness in the architectural character. Exhibit 6-1 illustrates examples of stone, brick, plaster, and wood elements that are representative of the Del Mar palette and the coastal architectural elements found throughout Del Mar that are appropriate for Watermark Del Mar, including the following:

1. Natural materials with rustic texture such as brick, stone and wood.

2. Architectural siding including horizontal clapboard, vertical board and batten, and shingle elements.

3. Smooth, sand, or other light finish texture on exterior plaster or stucco.

4. Coursed stone or brick, stone laid in a random texture of rounded cobblestones, rubblework, brick or quarry stone foundations.

5. Contrasting trim using semi-transparent stain or accent painted wood.

6. A seaside inspired color palette shall be incorporated into the design, with color differentiation used within the overall project to reduce monotony and avoid repetitiveness within the building facades. Building colors should be predominantly natural tones, generally light colors with darker or lighter accents to highlight the character of the structure, particularly for balcony rails and awnings.

7. Material and finish changes should occur at logical break points on the structure.

8. Contrasting materials between first and second floors are encouraged when complementary to the design.

D. Roofs and Roof-Mounted Equipment

1. A variety of roof forms should be used on buildings within Watermark Del Mar, that may include low-sloping pitched, gable end, hip, shed, and/or flat roofs.

Exhibit 6-1 Architectural Character Imagery

2. Roof materials may include concrete "shingle" tile and dimensional asphalt/composition shingles that mimic the appearance of natural slate or natural shake roofing shingles, or standing seam metal. Based on fire concerns, wooden roofs are not permitted, and shingle roof forms should be those designed to recall the ambiance of wooden roofs.

3. Different roof styles, materials, and colors should be used on adjacent structures to enhance the visual distinction between buildings.

4. Where used, solar panels are to be integrated into the roof design, flush with the roof slope. Frames should be colored to complement the roof, whenever feasible.

5. Any roof decks and associated rooftop penetrations (e.g. access stairs, handrails, etc.) shall be architecturally integrated into the design of the structures.

6. Any roof appurtenances including mechanical equipment shall be shielded, noise attenuated, and architecturally screened from view from surrounding properties and public rights-of-way. Roof-mounted A/C units are not permitted.

E. Architectural Details

Architectural elements including balconies, decks, and chimneys should be integrated with building elevations to provide articulation and avoid large uniform wall masses. Specific architectural details consistent with the coastal theme may include the following types of elements:

1. Patio trellises, pergolas, or shed roof elements.

2. Decorative beams at eaves, exposed rafter tails, or projecting eaves to create shadow lines and contrast.

3. Square or cylindrical columns supported by a low pier base.

4. Where chimneys are used as architectural features, materials that contrast from the adjacent wall surface are encouraged to add visual texture and articulation.

5. Chimneys may include decorative metal caps that match trim colors.

6. Windows are important to the timeless coastal-inspired design, incorporating expansive light and connection to the outdoors. Window elements may include tall French doors, transom windows, double-hung or casement windows which may incorporate different sized window panes, horizontal banks of windows, or window mullion patterns.

F. Trash Enclosures and Mailboxes

1. Waste receptacles, including adequate areas for both trash and recyclable bins, shall be provided internally within the parking structure or be adequately screened from view from surrounding properties or public rights-of way. Scout service, where a low-profile truck is used to pull bins to the collection truck, is available in Del Mar for accessing bins within parking garages. The size of bins, their location, and collection frequency necessary to serve the residents shall be coordinated with the waste removal provider, which is currently Waste Management.

2. Common mailboxes and storage areas shall be provided internally within the parking structure.

3. All utility and mechanical equipment shall be screened from view.

G. Exterior Lighting

1. Exterior lighting shall be provided to illuminate outdoor areas including Podium deck level courtyards and walkways, residential entries, and recreational areas. Energy conservation, safety, and security shall be emphasized when designating any lighting system.

2. All exterior lighting should be designed and incorporated into the building schemes to provide illumination appropriate for the level of activity and to avoid glare and spillover. Gradual reduction of light intensity between major points of activity should provide the desired modulation of light without sacrificing safety and utility.

3. Lighting fixture types, quantities, and locations should be carefully considered in order to best enhance the residential environment, support and protect a Dark Sky night environment, and ensure consistency with the lighting policies of the City of Del Mar.

4. All fixtures shall be designed to prevent light spillover, with illumination directed downward to minimize the spread of the beam, and all lighting standards should be hooded or shielded. Light sources should also minimize blue light emissions. No uplights are permitted in any areas of the Site.

5. Pedestrian lighting may be incorporated with interior paths and walkways.

6. Parking area lighting shall be confined and contained within the enclosed parking structure.

7. Lighting of all areas adjacent to the natural slope and wetland areas onsite should be directed away from the open space. Where necessary, development should provide adequate shielding to protect the open space areas from unnecessary night lighting.

H. Walls and Fences

Walls and fences contribute to the character of the overall project appearance and should be used to help establish and reinforce the character of Watermark Del Mar. They provide for various edge conditions to establish enclosure, delineate Site areas, offer visual and physical privacy, provide for views in and out of the Site, and provide security. The design concept for fences and walls within the WDMSP is to incorporate a variety of materials to create interest and avoid monotony, while establishing specific design elements and materials to be used throughout the property to have consistency and unifying elements. Exhibit 6-2 illustrates examples of the styles and materials appropriate for Watermark Del Mar. Design criteria for on-site walls and fences are as follows:

1. Perimeter Retaining and Accent Walls – Includes retaining walls located within the property facing Jimmy Durante Boulevard and San Dieguito Drive that are a component of the planted yard areas between the street and building or Podium setback areas. These walls may vary in height to account for grade conditions, but shall not exceed 48 inches of visible height. Wall materials shall have a consistent, decorative finish and coloration such as decorative masonry or smooth exterior plaster over CMU with a natural stone cap. Shrub massing and cascading plantings over walls will be utilized to soften and provide additional textural variation to wall facades. Perimeter Retaining and Accent Walls shall maintain a minimum separation from any Private Patio and/or Pool Fencing of not less than 3 feet, and such area shall be landscaped.

2. Private Patio and Pool Fencing – Where private patio and community pool areas are located facing Jimmy Durante Boulevard, the limits shall feature fencing parallel to the street using materials consistent with the architectural style and materials of the primary structures. Patio fencing may be solid or semi-transparent and shall not exceed 60 inches of visible height. Pool fencing may be solid or semi-transparent, and shall not exceed 72 inches of visible height. Screening vegetation will be utilized to reduce visibility of patio and pool fencing from Jimmy Durante Boulevard. Appropriate fencing materials can include stucco, picket or other wood fencing, with separation between units provided by planters. Private Patio and/or Pool Fencing shall maintain a minimum separation from any Perimeter Retaining and Accent Walls of not less than 3 feet, and such area shall be landscaped.

3. Internal Retaining Walls – On-site retaining walls internal to the Site (not visible from the street), shall be either decorative masonry, textured block or stepped, plastered walls similar to the perimeter retaining walls. Where safety fencing is necessary atop retaining walls because of grade differential, such fencing shall be 3.5 feet high, and an open view material shall be used, such as cable rail fencing or tubular steel.

Exhibit 6-2 Wall and Fencing Design Concepts

4. Cast in Place Retaining Walls – This style of wall may be utilized for construction of the walls flanking the entry ramp to the garage and may extend to approximately 12 feet high at the garage gate entry. In order to provide visual interest for the cast in place concrete, such walls shall incorporate a design using a combination of colors and/or textures.

5. Open Space Fencing – The fencing at the wetlands and buffer along San Dieguito Drive shall be provided to define the area and discourage unauthorized access, while promoting openness and views into the area. The San Dieguito River Trail fencing has established a theme fence recognized in this area as delimiting open space. A similar fence design with natural round wood posts and rails should be used for consistency.

6. Residential Property Line Fencing – Fencing shall be provided along the boundaries with the adjacent southwestern and southeastern residential properties. Fencing may be 6 feet high. Materials for the solid or semi-transparent fence shall be uniform where located along the boundary, and should include durable materials such as wood, masonry or tube steel. Materials and screening vegetation should be consistent with community character and provide aesthetic value to the edge condition. Vegetation will also be utilized to further soften the fence aesthetic and interface with adjacent residential properties. As part of the community outreach with adjacent neighbors, design options were reviewed, and the landscape plan reflects the selected designs. Along the southeastern property line, the fencing shall be a solid wood fence, with a vertical shrub planting (*podocarpus*) on the inside of the fence for added screening. Along the southwestern properties/Heather Lane, a tiered option shall be used with a fence design using solid pilasters and wood rails to be set back approximately 3 feet, with planting on the outside of the fence adjacent to the offsite properties, including low shrubs (*dietes*) accented by *bougainvillea*, and a vertical shrub planting (*podocarpus*) on the inside of the fence for added screening.

6.4 Landscape Architectural Guidelines

A. Overview

Watermark Del Mar is situated at the northern edge of the Del Mar coastal hillsides, near the southern edge of the San Dieguito River and Lagoon. While there are a number of urban edge conditions, including streets, commercial and residential development nearby, the Site location provides a unique opportunity to integrate the natural beauty of the surrounding environment into the project's design vernacular, to create a landscape that blends with the natural elements and hillside background while providing the refined aesthetic quality for which Del Mar is known.

Landscape materials and plant palettes have been selected to accentuate the coastal-craftsman style of the planned architecture while introducing the natural character of the adjacent wetlands and native landscape. A Mediterranean and coastal California plant palette is specified for use throughout the Site in order to combine drought tolerance with aesthetic impact. The overall landscape palette features native plant species to unify the Site with the surrounding landscape. The WDMSP regulations provide distinct landscape divisions including: street frontage, Podium deck level courtyards, coastal brackish marsh, and southern coastal bluffs. Each landscape type should be designed to unify the Site's coastal character while addressing the climatic requirements of each area.

B. Landscape Objectives

These landscape design guidelines establish regulations and general requirements for landscaping of the project. The goal of these guidelines is to integrate the landscape elements of the Site within the existing setting, while establishing the project's own individual identity. A transition between the existing adjacent uses, including both developed and natural areas shall be provided utilizing trees, shrubs and groundcovers.

General Guidelines include:

1. The Site landscape shall use predominantly drought-tolerant plants, native and/or non-native, that require minimal irrigation and maintenance.

2. Color and texture from plant foliage, bark, and flowers shall be utilized to create a visually interesting environment, particularly in areas adjacent to pedestrian activity.

3. Plant selection near sidewalks, pathways and paved areas, including streets, shall also be based on preventing unreasonable damage to paving and pathways.

4. Tree species with invasive root systems should be oriented away from utility infrastructure.

5. All landscaping within public areas and rights of way shall have an automatic irrigation system to maximize irrigation efficiency and eliminate overspray on the adjacent hardscape surfaces. If reclaimed water becomes available, it may be considered for irrigation use in parkways and on slopes.

6. The project landscaping should consider the existing landscape of adjacent properties, particularly at the interface with natural slopes and wetlands, to create a visually harmonious environment.

C. Street Frontage

The street frontage describes the area directly adjacent to Jimmy Durante Boulevard and San Dieguito Drive. This area is of particular importance as it establishes the first impression of the project and is highly visible to residents, the local community, and visitors to Del Mar.

San Dieguito Drive

1. Vehicular access to the Site will be from San Dieguito Drive, and the landscaping along this street frontage should be used to provide visual interest and way-finding for the Site entry.

2. A sidewalk contiguous with the new curb is required along the frontage, and suitable landscaping should be located between the sidewalk and building areas, incorporating a pattern of street trees along with accent shrub and tree plantings to mark entries.

3. Beyond the driveway access (southeast), the street is adjacent to the open space wetland and buffer area with landscaped bio-swale basin, therefore the frontage landscape should provide a transition between those open areas and the street.

4. Buffer plantings should also extend between the project driveway and open space areas.

Jimmy Durante Boulevard

1. The primary public streetscape view of the property is from and along Jimmy Durante Boulevard. Street trees shall be provided to create a strong landscape form along this gateway street. There will be only pedestrian/bicycle access from the future residences along this street, no vehicular access, and the landscaping along this street frontage should be used to reinforce the residential character of the development.

2. A sidewalk contiguous with the curb was recently constructed along the property frontage and linking into the Village area. The parking garage will be partially subterranean, with the Podium deck level ranging between approximately four and eight feet above street grade. Landscaping between the new sidewalk and structures associated with the parking garage and building areas should be used to soften the grade change from the street level to the Podium deck level. This can be accomplished with a combination of low decorative walls on the Site and sloping landscape in the public right-of-way. Where the Podium wall is exposed, decorative surface treatment shall be provided and vines may also be used. Sloping landscape is allowed to be constructed in the existing public ROW subject to compliance with applicable provisions of DMMC Chapter 23.28 regarding Encroachment Permits.

D. Podium Deck Level Courtyards, Common and Recreational Areas

The Podium deck level will provide the primary pedestrian circulation to and between the residences, and the social gathering areas for residents and visitors within Watermark Del Mar. Landscape of the Podium deck level courtyards and recreational areas should be designed to soften structural facades and enhance the residents' experience of these outdoor spaces.

1. Planting areas shall be provided between units and around private patios to provide privacy.

2. Raised planters may be utilized to provide architectural accent, further define the various courtyard spaces, and create opportunities for specimen trees. Planters should showcase a blend of Mediterranean and California coastal plant material in accordance with the plant palette.

3. Irrigation at the Podium deck level should maximize irrigation efficiency and eliminate overspray on adjacent structures and hardscape, such as through use of an in-line drip system.

4. The Podium deck level should feature various accents to enhance the landscape experience and maintain a pedestrian-oriented scale at main entry points.

5. Raised walkways may be used above the Podium deck to provide second level access to the flats and townhomes.

6. Vined trellises may be used to create a soft aesthetic and sense of entry.

7. Hardscape within the central courtyard should be selected to relate to the architectural character of the structures, and is anticipated to be comprised of precast concrete pavers or integral colored concrete or enhanced paving.

8. Hardscape within private patios may use alternate materials to provide additional detail and personalization to these spaces, such as modular hardwood deck tiles.

9. A common recreation facility shall be provided for the residents, which may include amenities such as a pool, spa, and recreation center.

10. The pool area shall be fenced for safety and security, and screening plantings should be provided if necessary to provide privacy for pool users.

E. Open Space

The southeastern portion of the property includes the previously undisturbed areas of the Site, and these areas will be retained as open space, preserved in a natural condition to protect habitat and existing drainage courses. A buffer to the wetland will also be provided in this area to create additional separation between the sensitive Site areas and future development as shown on the site plan.

Wetlands and Buffers

The coastal brackish marsh area is a wetland located at the southeast comer of the Site.

1. Invasive plant material shall be removed and appropriate native plant material shall be utilized to enhance the wetland area. The removal of invasive species and planting per the wetland plant palette will be monitored by the Watermark Del Mar team's project biologist based on final plans as approved by the Resource Agencies.

2. A temporary irrigation system may be provided in the wetland area during native plant establishment period, subject to any final conditions of the Resource Agencies.

Slope Interface

The Site is located adjacent to the northern edge of the Del Mar coastal hillsides. Where previously disturbed areas are re-graded for development, there will be an interface with adjacent slope areas. between landscaped slopes and retaining walls.

1. Landscaped slopes shall be designed to utilize appropriately scaled plant material that unifies the Site with surrounding natural slopes while softening wall facades.

2. Retaining walls used on the interior of the Site to transition from the lower Podium deck level to the upper development terrace shall have decorative treatment and be planted with a combination of vines and shrubs to soften their appearance.

3. Invasive plant material shall be removed and appropriate native plant material retained. If supplemental plantings are needed when invasive species have been removed, replacement plants should incorporate southern coastal bluff scrub species that may be accented with Torrey Pine trees.

4. Irrigation of native slope plantings shall be provided by systems designed with low precipitation rates to reduce runoff.

F. Signage

All project signage shall be regulated in accordance with the provisions of DMMC Chapter 30.84. Project identification may be provided at the project driveway entrance. This may be provided on monument signage, in accordance with the provisions of DMMC Chapter 30.84, including verification that adequate vehicular and pedestrian sight distance is maintained. Signage is subject to DRB review and approval.

G. Plant Palette

A preliminary plant palette selected for the various functional areas of the Site are specified in the following table. In accordance with provisions of the Lagoon Overlay Zone (DMMC 30.53.160), the selected species include non-invasive, drought tolerant species, many of which are native to the San Diego coastal region and which are compatible with adjacent wetland habitat species. These are illustrative of the size, form, and water use characteristics intended for the Site. Specific plant materials may be substituted in final design if they provide similar characteristics.

In order to ensure that invasive, exotic plant species are not inadvertently planted, plant palettes for final landscape plans and revegetation plans shall be cross referenced with the California Invasive Plant Inventory Database maintained by the California Invasive Plant Council (Cal-IPC). No plants in the California Invasive Plant Inventory Database shall be used in the landscaping or the revegetation area. As an added crosscheck, the California Department of Fish and Wildlife (CDFW) shall be provided copies of the landscape plans for their review prior to issuance of grading permits.

LANDSCAPE PLANT PALETTE		
Plant Type	**Botanical Name**	**Common Name**
Street Frontage & Transition		
Trees	*Cassia leptophylla*	Gold Medallion Tree
	Arbutus x 'Marina'	Arbutus Multi-Trunk
Shrubs	*Agave attenuata 'Nova'*	Blue Clone
	Aloe striata	Coral Aloe
	Bulbine frutescens	Stalked Bulbine
	Furcraea foetida 'Mediopicta'	Mauritius Hemp
	Leucadendron x 'Safari Sunset'	Conebush
	Muhlenbergia capillaris	Pink Muhly
	Phormium tenax 'Dusky Chief'	New Zealand Flax
	Rosmarinus officinalis 'Prostratus'	Dwarf Rosemary
	Salvia leucantha 'Santa Barbara'	Mexican Bush Sage
	Senecio mandraliscae 'Blue Chalk Sticks'	Senecio
Podium Deck Level		
Trees	*Lagerstroemia indica*	Crape Myrtle
	Howea forsteriana	Kentia Palm Multi-Trunk
Shrubs	*Agave attenuata*	Agave
	Asparagus densiflorus 'Myers'	Myers Asparagus
	Bulbine frutescens	Stalked Bulbine
	Coleonema pulchrum 'Compacta'	Compact Breath Of Heaven
	Dietes iridioides	Fortnight Lily
	Distictis buccinatoria	Blood Red Trumpet Vine
	Furcraea foetida 'Mediopicta'	Mauritius Hemp
	Liriope spicata	Creeping Lily Turf
	Phormium tenax 'Yellow Wave'	New Zealand Flax
	Pittosporum tenuifolium 'Kohuhu'	Tawhiwhi
	Salvia leucantha 'Santa Barbara'	Mexican Bush Sage
	Trachelospermum jasminoides 'Star'	Star Jasmine
Slopes		
Tree	*Pinus torreyana*	Torrey Pine
Shrubs	*Artemisia californica*	California Sagebrush
	Baccharis pilularis	Coyote Brush
	Cneoridium dumosum	Bush Rue
	Corethrogyne filaginifolia 'Incana	San Diego Sand Aster
	Corethrogyne filaginifolia 'Linifolia'	Common Sand Aster
	Dudleya edulis	Fingertips
	Dudleya pulverulenta	Chalk Lettuce
	Encelia californica	California Encelia
	Eriogonum fasciculatum	Common Buckwheat

LANDSCAPE PLANT PALETTE (cont.)		
Plant Type	**Botanical Name**	**Common Name**
Slopes (cont.)		
Shrubs	*Eriophyllum confertiflorum*	Golden Yarrow
	Hesperoyucca whipplei	Chaparral Yucca
	Heteromeles arbutifolia	Toyon
	Isocoma menziesii	Coastal Goldenbush
	Lotus scoparius	California Deer Weed
	Malosma laurina	Laurel Sumac
	Mimulus aurantiacus	Sticky Monkey Flower
	Opuntia littoralis	Shore Cactus
	Opuntia prolifera	Coastal Cholla
	Rhus integrifolia	Lemonade Berry
	Salvia apiana	White Sage
	Salvia mellifera	Black Sage
Bio-Retention Basin		
	Atriplex californica	California Orach
	Atriplex canescens	Four-Wing Saltbush
	Baccharis sarothroides	Broom Baccharis
	Isocoma menziesii	Coastal Goldenbush
Wetland Enhancement		
(Existing Coastal Brackish Marsh Species To Be Used For Enhancement Plantings Within The Existing Wetland)		
	Distichlis spicata	Saltgrass
	Jaumea carnosa	Salty Susan
	Juncus acutus ssp. leopoldi	Southwestern Spiny Rush
	Salicornia pacifica	Pickleweed
	Typha latifolia	Broad Leaved Cattail

CHAPTER 7 - PLAN IMPLEMENTATION

7.1 Construction Sequence

Construction is anticipated to commence following completion of entitlement efforts and completion of building design and associated permits and last for approximately two years, at which point building occupancy would occur. Construction equipment would include equipment typical of this type of construction such as rollers, rubber tired dozers, scrapers, water trucks, pavers, paving equipment, cranes, forklifts, and tractors/loaders/backhoes. Concrete and delivery trucks would also be used. Construction equipment would be used intermittently depending on construction phase.

The key construction phases would consist of parking structure construction, disturbed slope grading, residential structures over the parking structure Podium, and the balance of the residential structures. Construction trucks and equipment would operate within the limits of the construction hours identified in the City's Noise Ordinance. Construction logistics, including parking for on-site workers, materials storage and equipment staging will be considered in preparing construction phasing plans.

Prior to construction, a Storm Water Pollution Prevention Plan (SWPPP) would be prepared to identify Best Management Practices (BMPs) to minimize off-site sediment transport for the duration of the project. In addition, the grading plans would be subject to City approval, and would require measures to comply with the City's municipal storm water permit. The City's Municipal Code requires project compliance with National Pollutant Discharge Elimination System (NPDES) for storm water discharges and general construction activities; regular cleaning or sweeping of parking lots and impervious areas; and implementation of storm water BMPs. The project would implement erosion and sediment control measures required by the City Ordinance, and other pertinent regulations and conditions. A traffic control plan would be prepared and made a standard condition of approval. The plan would include provisions for construction times and control plans for allowance of bicyclists and pedestrians along Jimmy Durante Boulevard and San Dieguito Drive throughout construction. This plan would also include provisions for allowance of emergency vehicle passage at all times.

7.2 Financing Mechanisms

Several types of financing strategies and tools are available for financing development and necessary infrastructure improvements. Since this Specific Plan area is located at an infill location, no major off-site improvements are necessary, and limited financing mechanisms are needed.

For development within this Specific Plan area, funding for on-site facilities shall be provided directly by the project. This includes improvements within or across adjacent public rights-of-way provided concurrent with the project development, such as local

street improvements, utility connections from the main trunk lines, and drainage facilities.

The construction of all public street ROW and utility improvements, private on-site improvements including buildings, parking areas, landscape and hardscape, and amenities serving the project will be the responsibility of the developer/property owner. These improvements will be privately financed directly and through capacity and connection fees.

The recurring maintenance costs for infrastructure and improvements will be provided as follows:

Public Maintenance

Roadways

Maintenance of vehicular travel ways, curbs, gutters and concrete sidewalks within the public rights-of-way will be provided by the City of Del Mar and funded by the City's tax revenue.

Utility Infrastructure

Maintenance of public utilities and facilities will be the responsibility of the City of Del Mar (water, sewer, storm drains).

Private Maintenance

Roadways

Landscape frontage improvements, including any walls, stairs, and connections to the public sidewalk from the Site, will be maintained by the property owner. The private driveway into the Site will be maintained by the property owner.

Utility Infrastructure

The owner(s) of the property will contract for services such as solid waste disposal, and private utilities, such as electric, gas, telephone, cable television and internet service, which will be maintained by the respective individual private utility company.

Landscaping

Maintenance of all landscaping and hardscape on the Site, in addition to landscaping in the public rights-of-way as noted above, will be the responsibility of the property owner.

7.3 Specific Plan Administration

A. Specific Plan Interpretations

In instances where any section, subsection, sentence, clause, phrase, portion, or word contained within this Specific Plan is undefined, unclear or vague, then the Planning and Community Development Director shall make a determination as to its meaning and intent. The Planning and Community Development Director may elect to forward interpretations to the Planning Commission for consideration and

determination (appealable to the City Council) for final determination at his or her discretion.

B. Enforcement of the Watermark Del Mar Specific Plan

The City of Del Mar Planning and Community Development Director shall have authority to review development proposals and activities for compliance with the WDMSP. Compliance with the Specific Plan as adopted, and with any environmental mitigation measures, shall be monitored at these stages, as appropriate:

1. During the review and approval of development entitlements and other permits as appropriate.

2. During the review of construction documents, and prior to the issuance of grading or building permits.

3. Prior to the issuance of a certificate of occupancy for any building within the Specific Plan area.

Enforcement of the WDMSP shall be in accordance with the Enforcement and Penalty provisions of the DMMC.

C. Process for Amendment to the Watermark Del Mar Specific Plan

This document attempts to be comprehensive, but it is understood that not all things can be envisioned, and there may be situations where modifications in the Specific Plan may be necessary. The procedures to amend this Specific Plan shall be by ordinance or resolution as specified by State of California Government Code 65456 through a public hearing before the City Council pursuant to the Del Mar Municipal Code. The applicant shall be required to submit a completed application with graphics, statements, or other information as may be required to support the proposed amendment. Said amendment or amendments shall not require a concurrent general plan amendment unless a land use change is involved.

There are two different categories of potential amendments to the WDMSP, Tier-One or Tier-Two Amendments, and this Section sets forth the processes for submittal, review and determinations on such requests for amendments. The review process for WDMSP amendments varies, depending on the degree of modification proposed.

Approval Requirements for Tier-One and Tier-Two Amendments

1. Approval of a Tier-One Amendment shall require an affirmative super majority (4/5) vote of the City Council.

2. Approval of a Tier-Two Amendment shall require an affirmative simple majority (3/5) vote of the City Council.

3. The Planning Commission shall review and make a written recommendation to the City Council on all proposed amendments to the WDMSP.

Categories of Amendments to the WDMSP

Tier-One Amendments:

1-1. An increase in the density specified in Chapter 5 of the WDMSP.

1-2. An increase in the allowable Floor Area Ratio specified in Chapter 5 of the WDMSP.

1-3. An increase in the allowable Building Heights specified in Chapter 5 of the WDMSP.

Tier-Two Amendments:

2-1. A change in any development standard specified in Chapter 5 of the WDMSP other than those listed above under Tier-One.

2-2. A material modification in any component of the Exceptional Public Benefits associated with the project.

2-3. A change to the geographic boundaries of the WDMSP.

2-4. Modifications required to satisfy those changes to Federal and/or State law that require a corresponding amendment to local ordinances and would result in increases in FAR, lot coverage and/or height.

2-5. Modifications required to satisfy Coastal Commission requirements for certification of the LCP amendments that accompanied the preparation of the WDMSP if they would result in increases in FAR, lot coverage and/or height.

D. Public Noticing Requirements for Amendments to the WDMSP

All amendments to the WDMSP shall be subject to the applicable public noticing requirements of State law and of the DMMC, in effect at the time of the amendment request.

E. Exemptions from WDMSP Amendment Requirements

1. Corrections of typographical or administrative errors found in the WDMSP document shall not require an Amendment to the WDMSP.

2. Minor deviations shall be deemed to be in conformance with the Specific Plan by the Planning and Community Development Director if they comply with the requirements identified in this section and are not detrimental to the public health, safety, and welfare. Such deviations to the adopted Specific

Plan must be consistent with the purpose and intent of the originally approved Specific Plan. To classify as a minor deviation, the following requirements must be met:

a. The total residential density within the Specific Plan area shall not exceed 16.1 units per acre.

b. The public health, safety, and welfare shall not be jeopardized by the proposed modifications.

c. No additional or increased potentially significant adverse environmental impacts are expected to occur as a result of the proposed modifications, except as evaluated in a certified EIR for the project.

3. The following deviations constitute examples of "minor changes" that are in substantial conformance with the approved Specific Plan and shall be approved without amending the Specific Plan.

a. Minor modifications to the Specific Plan area boundaries that respond to more accurate or recent data or actual on-site conditions.

b. Minor modifications to the architectural or landscape design guidelines. Where modifications to the architectural or landscape design guidelines are more substantive, they are also allowed without amending the Specific Plan, subject to review and approval by the Design Review Board.

c. Minor modifications to the grading plan subject to review and approval of the City Engineer.

d. Minor modifications to the water, sewer and/or drainage plan(s) that improve efficiency or are necessary to respond to actual Site conditions.

e. Minor modifications in intensity such as building size, Lot Coverage, FAR, setbacks or separation between buildings, or extent of landscape areas, as long as they remain within the parameters of the Specific Plan standards, and the building volume shown on the project plans in Appendix C (Exhibits C-1 to C-8) are not substantially changed.

f. Minor changes in the building footprint shown on the project plans in Appendix C (Exhibits C-1 to C-8) that do not materially affect the design and do not exceed the maximum FAR of the Specific Plan.

g. Minor changes in, or reallocation of, square footage between units, or between enclosed HOA common area and residential units,

shown on the project plans in Appendix C (Exhibits C-1 to C-8), as long as the change or reallocation does not result in a net increase in total square footage or overall FAR.

h. In the event that the project shown in Appendix C is not implemented, a new project design is allowed without amending the Specific Plan, subject to conformance with the WDMSP, with review and approval by the Design Review Board.

i. Addition of new information or data to the Specific Plan maps, exhibits and/or text which does not change the effect of any concepts or regulations.

j. Modifications required to satisfy those changes to Federal and/or State law or to satisfy Coastal Commission requirements shall be permitted unless they would result in increased FAR, lot coverage or height (which would require a Tier II amendment).

CHAPTER 8 - CONSISTENCY WITH THE DEL MAR COMMUNITY PLAN

The Del Mar Community Plan sets forth a series of goals, objectives, and policies for the attainment of the community's collective vision of the City. A summary of how this Watermark Del Mar Specific Plan achieves or helps to implement the goals, objectives, and policies of the Community Plan, and therefore is consistent with the applicable goals and policies of the Community Plan, is presented in this Chapter. To reduce the length of this General Plan Consistency Analysis, this Chapter does not assess Specific Plan consistency with every goal or policy included in the adopted Community Plan. Instead, it focuses on the goals and policies relevant to the land uses and development within the Specific Plan area.

Overall Goal: Preserve and enhance the special character of Del Mar, the elements of which are a village-like community of substantially single-family residential character, a picturesque and rugged site, and a beautiful beach.

The Watermark Del Mar Specific Plan establishes development and design standards to enhance the special character of Del Mar, including development and design regulations for a new multi-family use that preserves sensitive areas on the property and provides for homes that blend with and enhance the community's overall character with an architectural statement established to create timeless costal-inspired homes.

8.1 Environmental Management

Goal 1: Establish without delay a comprehensive program to preserve and acquire permanent open space sufficient to meet the long-range needs of the community, preserve and enhance natural resources, and protect areas and people susceptible to seismic and flooding hazards.

The Watermark Del Mar Site includes a wetland area and a scenic sandstone bluff. The WDMSP includes regulations regarding the siting and orientation of the uses and structures to retain the wetlands with appropriate buffer setback and the previously undisturbed sand stone bluff, in order to preserve and protect these sensitive resources. There are also development and design requirements that provide for a partially underground parking structure which allows for structures to be safely maintained above the floodplain areas where they occur on the Site.

8.2 Transportation

Goal 2: Minimize the impact of the automobile on the character of Del Mar and emphasize a more pedestrian-oriented environment, safer sidewalks, landscaped buffer zones, and alternate means of transportation.

The WDMSP requires multiple pedestrian /cyclist access points along Jimmy Durante Boulevard and San Dieguito Drive that will facilitate future residents' ability to connect to existing sidewalks and scenic walkways along the San Dieguito River, in addition to accessing potential work locations and services without utilizing an automobile.

8.3 Community Development

Goal 3: Preserve and enhance Del Mar's special residential character and small town atmosphere with its harmonious blending of buildings and landscape in proximity to a beautiful shoreline.

The design standards of the WDMSP are provided to enhance the northeastern gateway to the City of Del Mar and provide a uniquely Del Mar architectural statement to residents and visitors alike. The architectural elements reflect those found throughout existing residential and commercial structures: the use of brick similar to the Del Mar library, siding found throughout the community on residential and commercial structures alike, liberal application of trellis work and architectural carpentry, and a mixture of stone and plaster wall materials found throughout the coastal community. Landscaping criteria has been established to combine drought tolerance with aesthetic impact and emphasize the Site's coastal character while addressing the climactic requirements of the various Site conditions.

Goal 5: Preserve the economic integrity of the community.

The WDMSP provides for residential uses that are designed to be an economic success that can enhance the property values of the surrounding residences and the surrounding commercial properties in addition to providing an incentive and catalyst to underutilized vacant parcels to meet or exceed the quality of the Watermark Del Mar development. Development in accordance with the Specific Plan would be one of the first significant developments in Del Mar in some time and would represent a significant economic investment in the Jimmy Durante corridor. Property values and property tax revenues are anticipated to significantly increase with implementation of the Specific Plan, which will also provide the community with residents that will enhance the supporting economic base of the community.

Goal 6: Assure continuing public participation in city planning by developing procedures in which citizens can participate in updating general plan goals and policies and help in implementing programs including consultation and advice on enabling legislation.

One of the key reasons for using a Specific Plan process for this property was to incorporate formal public outreach in addition to Watermark Del Mar's informal extended public outreach, to support the community's goal to enhance public participation. The Specific Plan outlines the enhanced public participation process used to initiate, evaluate, and ultimately implement the City of Del Mar's stated

objective to provide residential uses and an affordable housing component on the Site.

8.4 Housing Element (2013-2021)

A. Housing Goals

Housing Goal 2: To encourage and support the provision of a wide range of housing opportunities by location, type, and sales and rental rates in order to meet the existing and future needs of Del Mar.

In order to implement the Housing Element goal to provide affordable housing opportunities within the City, the Del Mar City Council supported and authorized the use of a Specific Plan process for the Watermark Del Mar property to comprehensively address and define the legislative and discretionary actions, as well as the community benefits of WDMSP.

Policy 2.1: Provide a variety of residential development opportunities to fulfill the City's share of regional housing needs, including single-family residences, townhomes, condominiums, apartments, mixed residential/commercial projects, and second-dwelling units on properties otherwise zoned for single-family use.

The WDMSP creates a new land use designation and zone that will allow for multifamily residential uses at a density that will accommodate a variety of product types including townhomes and flats.

Policy 2.2: Encourage and support the construction of housing for all segments of the community, including those with special needs; and:

Policy 2.3: Encourage and support the development of affordable housing by offering incentives for housing projects that provide housing at established affordable sales and rental rates with such incentives to include, but not be limited to: density and floor area ratio bonuses; reduced processing fees; expedited permit processing and reduced parking requirements.

In order to facilitate the exceptional public benefits associated with the construction of affordable housing at the Site, the WDMSP provides for the legislative changes needed to authorize appropriate residential density, and incorporates modifications of certain development regulations from the Del Mar Municipal Code to achieve the density at this site. Details of the modified regulations are listed in Chapter 5 of this Specific Plan, and serve as incentives that are necessary to support the provision of affordable units.

Housing Goal 3: To promote equal opportunities for all residents to reside in the housing of their choice and capabilities; and

Policy 3.2: Continue to implement fair housing choices by actively expanding City programs to support a range of housing affordability and by removing impediments to the construction of and access to fair housing; an;

Policy 3.3: Continue operating existing programs and add new programs that create incentives for the development of housing in general, and for affordable housing in particular.

In accordance with the WDMSP, a total of six affordable dwelling units would be subject to the recordation of a deed restriction committing the property owner and any successors-in-interest to affordable restrictions on rental rates or purchase prices to families with income levels at 120% of the Area Median Income ("AMI") or less for a period of 30 years from the date of issuance of the Certificate of Occupancy for such residential units.

In addition, the WDMSP provides that a portion of the affordable dwelling units may be sold, deeded, or otherwise transferred at a nominal price to a local non-profit public benefit corporation ("Local NP") approved by the City of Del Mar. Such transfer would provide opportunities for those particular units to be available at even lower affordability rates.

B. Housing Programs

Objective #2 - Provide adequate sites to achieve a variety of housing types.

Program #4: Implement the Community Development Element and Zoning Ordinance (includes land use re-designations and modification of zoning standards to accommodate higher density residential development.

2-G: Within 12 months of City Council adoption of the 2013-2021 Housing Element, the City will assign a new land use designation to two adjacent vacant parcels, (APNs 299-10-47, -48) roughly 2.3 acres in size and currently zoned as North Commercial (NC) Zone, to allow, by right, residential development of the properties at a density of 20-25 du/ac. with such density allowance to include a requirement for a percentage of the residential units to be available, long term, at affordable rates, either through dedication to a nonprofit housing advocacy organization or through deed restrictions for no less than the minimum duration required under state housing law applicable to affordable dwelling units.

The WDMSP provides for residential uses at a higher, multi-family density of 16.1 units per acre, that addresses site constraints and design considerations for community compatibility. The proposed 38 units will include six of the units to be available, long term, at affordable rates, implementing the goal to accommodate new residential units and ultimately deliver affordable units to the marketplace. This would help implement the City of Del Mar Community Plan Housing Element, with design features responsive to community input.

The WDMSP has been prepared as an alternative process to the City applying new land designations to the parcels directly. The Specific Plan process was chosen to ensure that opportunities were provided for the involvement of citizens, public agencies, public utilities, civic education, and other community groups, as the Specific Plan was prepared to encompass the legislative actions to assign a new Community Plan, Zoning Map, and Local Coastal Program designations in addition to the accompanying CEQA documentation. The Del Mar City Council affirmed the use of a Specific Plan for the Watermark Del Mar property. The Specific Plan establishes development standards and design regulations to achieve a multifamily density to implement the Housing Element while addressing the physical site constraints including drainage and flood protecting, and providing for visually attractive landscaping, architecture, and site amenities.

APPENDIX A – LCP AMENDMENT

Local Coastal Program
Land Use Plan Amendment
Summary of Policy Compliance

The Del Mar Local Coastal Program (LCP) sets forth a series of policies for the community. The LCP Land Use Plan would be amended for Watermark Del Mar, as described by the Specific Plan. A summary of how this Watermark Del Mar Specific Plan achieves or helps to implement the policies of the LCP is presented below, followed by a summary of compliance with the Chapter3 policies of the California Coastal Act. To reduce the length of this analysis, this Chapter does not assess Specific Plan compliance with every goal and policy included in the adopted LCP. Instead, it focuses on the policies relevant to the land uses and development within the Specific Plan area. Selected goals and policies relevant to the proposed LCP amendment are listed, with numbering following the LCP.

Land Use Designations/Allowed Uses Table

Add new category for Watermark Del Mar:

WDMSP – Multiple Family Residential Dwellings at a density up to 16.1 du/net acre

Discussion of Coastal Policies for Watermark Del Mar Specific Plan
(From Local Coastal Program – Land Use Plan)

Section II-B Land Use Development Goals and Policies – General

Goal II-A: Preserve and enhance Del Mar's small town atmosphere with its harmonious blending of architecture, landscape and natural landforms in proximity to a beautiful shoreline.

Policy II-1 *Maintain the existing small-scale character of the community and permit only one- and two-story, low intensity development with a maximum allowable height of 26 feet.*

The WDMSP maintains the standard for one- and two-Story development with a maximum allowable Height of 26 feet. The basis for measuring this Height is defined for the Specific Plan using the Base Flood Elevation to assure compliance with Goal III-A regarding flooding hazards, balancing the need for hazard protection and limited building height. The intensity of development specifies a maximum permitted density of 16.1 du/acre, which is necessary to achieve the City's housing goals at this site.

The design guidelines of the WDMSP further regulate the appearance of the multi-family structures. They include a specification that the buildings adjacent to streets have the character of separate structures as found throughout the community, and prohibit a single, large, monolithic building.

Policy II-2 ***Insure that future development, whether commercial or residential, retains the aesthetic quality of the community by protecting and preserving public views to the ocean and other significant natural resources; and by minimizing the disturbance of natural topography and vegetation.***

The WDMSP property is located such that there are no public views to the ocean. However, there are public views of the undisturbed coastal bluffs on the northeastern portion of the site, which comprise part of the overall background visible from and across the San Dieguito River. Based on the building area allowed by the Specific Plan, these existing views will be retained from and across the San Dieguito River. These bluff areas can also be seen from the streets approaching the site from the north and west. There is a small area of wetland marsh vegetation (4,750 square feet) at the toe of this bluff area, and both the undisturbed bluffs and the wetland area will be preserved in open space in accordance with the WDMSP. The development footprint of the residential structures will be limited to the areas of the site that have been previously graded and disturbed.

Section III B Shoreline Hazards – Goals and Policies

Goal III-A: Establish a comprehensive program to protect shoreline areas susceptible to storm/flooding hazards.

Policy III-2 ***Conserve the natural character of land, water, vegetative and wildlife resources within the community by ensuring that future development minimizes the disturbance of existing or natural terrain and vegetation, and does not create soil erosion, silting of lower slopes, slide damage, flooding problems and/or cutting or scarring, through application of the following policies:***

a. Regulate development in accordance with the specific Beach (BOZ), Floodway (FW) and Floodplain (FP) Overlay Zone regulations contained within this chapter.

The WDMSP property is located within the Floodplain Overlay Zone, and includes provisions for development consistent with the FP Overlay regulations. This includes protection for all habitable spaces, which must be at or above the Base Flood Elevation.

In developing the Specific Plan regulations, consideration was given to planning for future flood hazard avoidance. Based on recent experience in other communities where flooding has exceeded projected levels, and acknowledging the potential for future sea level rise, a safety factor was used of 2 feet above BFE as the criteria for structures to be located on Podium construction. Structures being built on-grade at the corner adjacent to the intersection would be located at the BFE, to assure flood hazard avoidance, while balancing the community interest in minimizing building height at this corner.

b. Review all proposed drainage and irrigation systems for their ability to control runoff and seepage into downstream areas and to ensure that no significant erosion or the associated siltation of downstream resources will occur.

The WDMSP landscape design standards specify the use of low-volume and drip irrigation, to minimize the use of irrigation water. The Specific Plan also has requirements for controlled runoff from the site, incorporating a bio-retention basin that will further limit the potential for any adverse effects on downstream resources.

c. In addition to the requirements of the Coastal Bluff regulations of this chapter, require the use of drought-tolerant plants in new and redevelopment projects throughout the City in order to minimize potential erosion impacts from irrigation systems and to reduce water consumption.

The WDMSP landscape design standards specify the use of low-volume and drip irrigation, with drought-tolerant plant materials to limit the use of irrigation water which will minimize potential erosion impacts from irrigation systems and reduce water consumption.

Policy III-3 Control the development of properties within the Bluff, Slope and Canyon (BSC) Overlay Zone to protect the health, safety and general welfare and to preserve scenic sandstone bluffs, related canyons, steep slopes and their downstream resources. The regulations of the BSC Overlay Zone are cited in Chapter VI of this Land Use Plan entitled, Sensitive Lands.

The WDMSP property includes an area with undisturbed, scenic sandstone bluffs on the northeastern portion of the site. These are visible from areas to the north, and comprise part of the overall background visible from and across the San Dieguito River. They can also be seen travelling south on Jimmy Durante Boulevard as one approaches the intersection of San Dieguito Drive. These bluff formations, and the small area of wetland marsh vegetation at the toe of this bluff area, will be preserved in permanent open space in accordance with the WDMSP. The development footprint of the residential structures is being limited to the areas of the site that were previously graded (prior to 1973) or otherwise disturbed.

Section III-D Runoff and Erosion Control

Goal III-C: Protect resources and property located downstream from hillside and bluff areas from damage due to uncontrolled runoff.

Runoff from the property will be controlled by drainage improvements, including a bio-retention basin so that there is no uncontrolled runoff leaving the site that could impact resources and property located downstream.

Policy III-10 Minimize damage from runoff from all projects within the City by:

a. Ensuring that storm drains are designed and provided in such a manner to carry the entire amount of intercepted storm runoff estimated to occur during a storm having a return period of ten years;

Runoff from the developed areas of site will be into new, onsite storm drain pipes and drainage systems, adequately sized to accommodate the flows. Site storm runoff will be directed into a bio-retention basin prior to discharge to an existing public storm drain in the area. A hydrology study and preliminary drainage design plans will be prepared by a licensed civil engineer, and all reports and plans are subject to City Engineer review and approval.

b. Ensuring the provision of adequate storm drain inlet capacity for the anticipated storm runoff from developed areas within the identified watersheds of San Dieguito and Los Penasquitos Lagoons.

Storm runoff from the WDMSP property flows to an existing storm drain on the south side of San Dieguito Drive, with adequate capacity for runoff from site development. Post-development runoff will be routed through a bioretention basin, prior to discharge to a new storm drain pipe that will connect to that existing storm drain.

c. Ensuring that new development is accompanied by the provision of drainage control measures which control and direct storm flow runoff into existing storm drain systems or into natural drainage courses when approved by the City Engineer and provide new storm drains as necessary to protect from unrestricted flows and runoff.

The project storm runoff will be collected and routed through a bio-retention basin, prior to discharge to a new storm drain pipe that will connect to an existing storm drain on the south side of San Dieguito Drive. The sizing of the storm drain system, including the inlets, bio-retention basin and all storm drain lines will provide adequate capacity for runoff from site development.

d. Applying the grading, erosion, and sedimentation control regulations of the Lagoon Overlay Zone and the Bluff, Slope and Canyon Overlay Zone of Chapter VI of this Land Use Plan to those projects located within such overlay zones.

The WDMSP property is located within the Lagoon Overlay Zone and the Bluff, Slope, and Canyon Overlay Zone. The grading, erosion, and sedimentation control regulations associated with those Overlay Zones will be applied to development in the WDMSP without modification.

Section III-E Flood Hazards

Goal III-D: Minimize risks to life and property associated with flooding and flood waters.

As noted previously, in developing the Specific Plan regulations, consideration was given to planning for future flood hazard avoidance to minimize risks to life and property associated with flooding and flood waters. Based on recent experience in other communities where flooding has exceeded projected levels, and acknowledging the potential for future sea level rise, a safety factor was used of 2 feet above BFE as the criteria for structures to be located on Podium construction. The WDMSP includes provisions for development consistent with the FP Overlay regulations, including protection for all habitable spaces, which must be at or above the Base Flood Elevation. Structures being built on-grade at the corner

adjacent to the intersection would be located at the BFE, to assure flood hazard avoidance, while balancing the community interest in limiting height of structures closest to intersection.

Policy III-12 …The following Floodplain (FP) Overlay Zone policies shall be applied to all applications for a Floodplain Development Permit. A Floodplain Development Permit shall be required…Applications for Floodplain Development Permits shall be reviewed for consistency with the following requirements to be assured that new development will:

a. Be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
b. Be constructed with materials and utility equipment resistant to flood damage;
c. Use methods and practices that minimize flood damage;
d. Have the lowest floor (including basement) of any residential structure elevated to or above the base flood elevation;
f. When located in an area of shallow flooding (Zones AO and VO on the community's FIRM), have the lowest floor (including basement) elevated to or above the depth number indicated on the most current FIRM; or if there is no depth number on the most current FIRM, be elevated at least two feet above the highest adjacent grade.
g. When located in Zones AO and AH on the FIRM, have adequate drainage paths around structures situated on sloping ground, to guide floodwaters around and away from said structures;
h. Where a non-residential structure is to be flood-proofed, have the design and methods of construction in accordance with accepted standards of practice for flood-proofing or include the specific elevation in relation to mean sea level to which such structures are flood-proofed;
i. Have all new and replacement water supply and sanitary sewage systems designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters;
j. Have on-site waste disposal systems located to avoid impairment to them, or contamination from them, during flooding;
k. Have all electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

The project development is required to comply with all of the above Floodplain (FP) Overlay Zone policies, which shall be verified through design plans prior to issuance of a Floodplain Development Permit.

Section IV-B Coastal Access

Goal IV-B: Give priority to pedestrian and bicycle traffic as opposed to automobile traffic through application of the following policies and pursue the increased use of alternate transportation modes to regionally significant areas within Del Mar. Examples of "alternate transportation modes" include: bicycle, pedestrian, bus, shuttle service, and railroad.

Policy IV-15 Retain and maintain existing bikeways including those along Coast Boulevard, Camino del Mar, Jimmy Durante Boulevard and Via de la Valle.

The WDMSP will not change or affect the existing bikeways along the project frontage of Jimmy Durante Boulevard. Bicycle amenities are required for future site development including storage areas for resident bicycles, and connection points to the existing public bikeways, per standards of the Specific Plan.

Policy IV-30 ***The City shall apply the following Off-Street Parking Regulations to new projects and redevelopment projects to assure that the parking needs generated by new development are provided on site.***

Off Street Parking Regulations for Multiple Family Dwelling Units:	
For each studio or one bedroom unit	Garage parking for one automobile
For each two or three bedroom unit	Garage parking for one automobile with on-site parking for one additional automobile, or garage parking for two automobiles
For each four or more bedroom unit	Garage parking for two automobiles with additional on-site parking for one automobile, or garage parking for three automobiles.

The WDMSP parking standards implement these Off-Street Parking Regulations, and also require guest parking at double the rate required elsewhere in the City, as follows:

Studio or 1 Bedroom Unit	1 space per unit
2 or 3 Bedroom Unit	2 spaces per unit
4 or more Bedroom Unit	3 spaces per unit
Guest Parking	0.50 space per unit

All required parking spaces are to be within the parking garage structure, to include a cumulative total based on the requirements above, but in no event shall there be less than 100 total spaces.

Section VI-B Steep Slope Preservation

Goal VI-A: Preserve Del Mar's steep sloping hillsides and downstream resources.

Policy VI-1 ***Preserve and protect sensitive slopes and associated bluff and canyon areas and, their downstream resources through the application of the following Bluff, Slope and Canyon Overlay Zone Regulations.***

C. Allowable Uses. Unless specified herein, allowable uses in the BSC Overlay Zone shall be those uses and accessory uses allowed by the underlying land use designation and zone specified in Figure II-A, subject to the regulations and restrictions of this Land Use Plan.

The underlying land use designation and zone are being modified with this LCP Amendment to allow for multi-family residential uses rather than professional commercial uses on the WDMSP property. Sensitive undisturbed bluff and wetland areas onsite are designated in the WDMSP as permanent open space.

E. Development Review. Within the BSC Overlay Zone, no building, improvement, structure, or portion thereof shall be erected, constructed, converted, established, altered or enlarged, nor shall any lot or premises be excavated or graded for any purpose, including but not limited to in-ground structures such as swimming pools or spas, or cleared of vegetation, unless in accordance with this Land Use Plan and the following:

1. ***In order to preserve viewsheds and the open space appearance of the area from a distance, no structure shall exceed a height of 14 feet as measured pursuant to the provisions of the Del Mar Municipal Code unless it is found that scenic viewsheds and the open space appearance of the area will be less affected by structures of a greater height.***

   As noted previously, the WDMSP property includes an area with undisturbed, scenic sandstone bluffs on the northeastern portion of the site that are visible from areas to the north, and comprise part of the overall background view shed from and across the San Dieguito River. The location of the development footprint designated in accordance with the WDMSP will preserve views of these bluffs along with the character and the open space appearance of the area from a distance.

   The undisturbed bluffs can also be seen travelling south on Jimmy Durante Boulevard as one approaches the intersection of San Dieguito Drive. These bluff formations, and the small area of wetland marsh vegetation at the toe of this bluff area, will be preserved in permanent open space in accordance with the WDMSP. The buildings at the intersection corner are limited to a single Story, to have a lower scale and additional visual openness at this intersection.

   The WDMSP allows for additional height up to 26 feet that is needed in order to achieve the affordable housing goals at higher density for this property. The Height measurement from the Podium deck level is necessary to achieve compliance with floodplain safety regulations. The construction of buildings on this site will limit visibility of the slope areas that can currently be seen beyond the vacant property from Jimmy Durante Boulevard. However, this screening effect would exist whether the structures were 14 feet in height or taller, due to the angle of views from the street.

2. ***New development shall be sited and designed to minimize grading and alteration of natural topography and shall be subservient to and complement the natural topography of the area. Protection of the natural values of the surrounding topography and landscape shall take precedence over architectural values.***

   While much of the WDMSP property has been previously graded, the areas of natural topography onsite are designated by the Specific Plan to be outside any site grading, and left undisturbed and preserved. One of the key considerations for the project design was to protect the undisturbed sandstone bluff formation near San Dieguito Drive, in a way that retains its visibility. The Site is located along the lower portions of a much larger bluff/ridge formation that extends offsite. The proposed development is located in a manner that is consistent with development patterns in the area, which includes residential homes stepping gradually up this hillside. The overall form, scale and character of the bluff/ridge landform will be retained with the proposed project.

3. ***Construction, grading or other encroachment of any kind on substantial slopes exceeding twenty-five percent grade, or within twenty feet of the top and ten feet***

of the bottom of substantial slopes exceeding twenty-five percent grade or the construction of structures which overhang such slopes or slope setbacks, shall be prohibited, except when specific encroachments are allowed in accordance with the following policies.

The development footprint will be located within previously disturbed and graded areas of the property. Discussion of the encroachments and their conformance to specific allowances are presented below. The development area is necessary to accommodate the density per the Housing Element, and to provide public benefits associated with the project, including affordable housing, while preserving the most sensitive areas of the site.

4. ***Encroachments within the slope areas and steep slope setbacks specified above shall be allowed only when it is found that there is no feasible alternative siting or design which eliminates or substantially reduces the need for such construction or grading, and it is found that the bulk and scale of the proposed structure have been minimized to the greatest extent feasible commensurate with preserving the physical characteristics of the site.***

   The bulk and scale of the project have been minimized with consideration for the density goals for the site, along with the desire to preserve the overall physical characteristics of the site. The location and layout for the units in the slope areas supports the ability to provide both affordable housing units and provide for building separation and character. If these units were eliminated, in order to achieve the density specified by the Housing Element, it would be necessary to add them onto the Podium deck level, which would increase bulk and scale of those buildings, creating the appearance of more monolithic structures.

5. ***Run-off from impervious surfaces shall be discharged directly into existing or new and adequately designed publicly-owned discharge and drainage systems which can be shown to have sufficient capacity to handle all anticipated drainage flows associated with the proposed project. In the event that no public discharge or drainage systems are available in the immediate vicinity, an alternate system may be allowed if it is found by the Planning Director in consultation with the City Engineer that such alternative will serve to convey such drainage and run-off to a clearly defined legal natural drainage course which can be shown to have adequate capacity to handle all anticipated drainage flows without adverse impact. All design and plans for drainage improvements shall be prepared by a licensed civil engineer and shall be subject to the review and approval of the City Engineer.***

   Runoff from the developed areas of site will be into new, onsite storm drain pipes and drainage systems, adequately sized to accommodate the flows. Site storm runoff will be directed into a bio-retention basin prior to discharge to an existing public storm drain in the area. A hydrology study and preliminary drainage design plans will be prepared by a licensed civil engineer, and all reports and plans are subject to City Engineer review and approval.

6. ***Construction, irrigation and landscaping shall harmonize with the natural as well as the man-made environment.***

The building architectural design uses earthen tones, natural materials, and design elements found elsewhere in the Del Mar community. Landscape materials use native materials in all interface areas with natural slopes, and naturalized, drought-tolerant plant materials throughout the site.

8. ***In order to maximize and preserve natural open space, natural landforms and views, projects involving more than one dwelling unit on a lot shall be clustered on the flatter portions of the site, if determined to be practicable and desirable.***

The residential homes of the WDMSP will be located on previously graded and disturbed portions of the property, in order to allow protection of the natural, undisturbed sandstone bluffs and the wetland marsh area at the toe of the bluff slope. While some of these previously graded areas include sloping topography, the overall design of the project accommodates the hillside residential development pattern in the area, preserves views and natural open space resources of the property.

9. ***Temporary and/or permanent erosion control measures shall be provided in order to control erosion both during and after project implementation.***

Erosion control measures are required by the grading ordinance, and will be implemented at the WDMSP property during construction. The bio-retention basin as designed will assist in providing long-term sediment control from the Site.

10. ***The removal of native vegetation, when allowed pursuant to the findings required in this policy, shall be limited to the minimal amount necessary to implement projects and shall be indicated on erosion control plans.***

As previously noted, the WDMSP development footprint is limited to areas of the site that have been previously graded and disturbed. Where vegetation has regrown in those areas, the removal of native vegetation will be limited to the footprint of the development.

11. ***The protection of areas or vegetation designated for retention in their natural state shall be accomplished through the installation of protective temporary and/or permanent fencing around such designated areas prior to the commencement of grading and/or development activities on site. For protection of designated trees or other major vegetation, said fencing shall be placed so as to protect the root zones of the vegetation to be protected.***

Protective fencing will be provided during construction activities.

12. ***All native vegetation approved for removal shall be replaced with drought tolerant, fire retardant, native or naturalizing substitute vegetation of sufficient size and quantity to provide soil stabilization.***

The WDMSP landscape design guidelines establish regulations and general requirements for project landscaping. As part of these requirements, it is specified that the Site landscape shall use predominantly drought-tolerant plants, which require minimal irrigation and maintenance. The specific size

and planting specifications on final landscape plans will be reviewed for conformance with this standard.

16. *To protect the visual resources of hillside areas, the City shall encourage the undergrounding of all new utility lines and new utility line extensions for projects within the Bluff, Slope and Canyon Overlay Zone when such undergrounding would not be detrimental to the sensitive hillside areas or to themselves.*

    All onsite utility line service extensions for the site development will be installed underground. Additionally, the developer will lead a program to underground existing overhead utility lines along the project frontage in collaboration with the City and SDG&E.

F. Grading Methodology and Practice. All development within the BSC Overlay Zone shall observe the following grading and landscaping policies:

1. *All projects involving grading shall be subject to the submittal of an erosion and sedimentation control plan.*

2. *All erosion control measures shall be subject to detailed maintenance arrangements.*

3. *For projects involving a total of more than 25 cubic yards of cut and/or fill grading operations, no grading shall occur from November 15 to March 31.*

4. *All grading and cut and fill areas shall be landscaped either during or immediately after construction to prevent erosion and to increase slope stability.*

Development within the WDMSP will be required to comply with these policies. No modification in these policies is proposed.

G. Retained Open Space/Conditions of Development. Areas to be retained in their natural state pursuant to the application of these Bluff, Slope and Canyon Regulations shall be subject to conditions to ensure the protection of the designated area(s) from future encroachment, disturbance or degradation. Said conditions shall include the recordation of an open space deed restriction, conservation easement or open space easement to assure protection of the designated area and" to serve notice to the property owner, subsequent owners or interested parties of the restrictions in effect on such property.

Natural open space areas to be permanently preserved will be subject to an open space deed restriction, conservation easement or open space easement to assure protection of the designated area.

Section VI-D Wetland Preservation

Goal VI-B: Preserve, protect and, where feasible, enhance the wetland areas of Del Mar.

The WDMSP property includes a wetland marsh area which will be enhanced by removal of invasives and restoration of additional native species. This area will be included as part of the permanent open space associated with project development, along with a fenced buffer area.

Policy VI-3 ***Ensure the protection of the wetlands of the Los Penasquitos Lagoon and San Dieguito Lagoon and their sensitive upland habitat by requiring that all development activities taking place in lagoon and uplands areas, designated on the Lagoon Overlay Zone Map (Figure VI-B), conform to the wetland preservation regulations of this chapter. In addition, the City shall implement the Bluff, Slope and Canyon Overlay Zone regulations of this Land Use Plan to protect sensitive wetland habitat from the impacts of upland development which lies outside of the Lagoon Overlay Zone but within the watershed of San Dieguito and Los Penasquitos Lagoons.***

Wetland Preservation Regulations

2. Permitted Uses in Wetland Buffer Areas. Permitted uses in wetland buffer areas shall be limited to:

a. Passive recreational access paths and viewpoints within the upland half of the buffer, only when designed to assure no adverse impacts to adjacent wetland areas.

5. Provision of Wetland Buffers

a. To protect wetland areas, all new construction projects which are located on property which includes or lies in proximity to wetland habitat, as shown in Figure VI-B, shall include the provision of a continuous wetland buffer. The buffer shall be l00-feet in width with permitted uses in the wetland buffer limited to those cited in Wetland Regulation #3 of this Chapter. The buffer shall be measured landward from the boundary of wetlands as delineated pursuant to the requirements of this chapter.

b. A wetland buffer of less than 100 feet in width shall be allowed only when, due to physical constraints such as the size and dimensions of the property, such buffer of a lesser width will protect the resources of the adjacent wetlands, based on site-specific factors. Such factors shall include, but not be limited to, the type and size of the development proposed; mitigation measures provided (such as planting of vegetation or construction of fencing); elevation differentials between the proposed development and wetland boundaries; or other similar factors which will serve to contribute to the purposes of a wetland buffer area. Proposals for mitigation measures for wetland buffers less than 100 feet in width shall be referred to representatives of the California Department of Fish and Game for a recommendation. In no event shall the wetland buffer be less than 50 feet in width.

The WDMSP property includes a small Coastal Brackish Marsh, a wetland habitat that contains one sensitive plant species (Southwestern Spiny Rush), but otherwise has a low diversity of vegetation species. This wetland is proposed to be avoided, protected in place, and buffered from the proposed development by the replacement of the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer.

This buffer width is consistent with the 50-foot buffer authorized for the Riverview Office project on this Site. For this Specific Plan it is considered appropriate at this location given the small size and limited diversity of the wetland along with the design parameters for the buffer. The existing wetland buffer area is an unvegetated dirt parking lot that will be enhanced with native vegetation. The design of the project will include fencing to limit human access, and includes an access road (rather than residential units) at the edge of the new buffer providing additional separation between residential uses and the wetland.

6. *Retained Open Space/Conditions of Development. Areas to be retained in or restored to their natural state pursuant to the application of these wetland preservation regulations shall be subject to conditions to ensure the future protection of the designated area(s) from encroachment, disturbance or degradation. Said conditions shall include the recordation of an open space deed restriction, conservation easement or open space easement on wetland buffer areas and an irrevocable offer to dedicate open space easement to assure protection of the designated wetland area and to serve notice to the property owner, subsequent owners or interested parties of the restrictions in effect on such property.*

7. *Siting and Construction Practices. All buildings or other improvements proposed to be placed or erected, and all grading activities proposed to be undertaken adjacent to wetland or wetland buffer areas shall be located so as not to contribute to increased sediment loading of the wetland or wetland buffer, cause disturbance to its habitat values, or otherwise impair the functional capacity of the wetland or wetland buffer.*

8. *Drainage and Erosion Control. All development activities on project sites within the Lagoon Overlay Zone shall be subject to conditions for the provision of measures to minimize and control runoff and the associated erosion and sedimentation of downstream areas. Runoff from developed sites shall be either directed towards existing storm drain systems or retained on-site in settling ponds or other drainage/erosion control measures.*

All development within the Lagoon Overlay Zone shall comply with the following erosion control measures:

Each of the following measures is required to be incorporated into the project, and will be documented through conditions of development, with final plan review in accordance with City of Del Mar regulations.

a. *The applicant shall provide a grading plan prepared by a registered civil engineer that incorporates runoff and erosion control procedures to be utilized during all phases of project development.*

b. *The grading plan shall be designed to assure that there will be no increase in the peak runoff rate from the fully developed site over the greatest discharge that would occur from the existing undeveloped site as a result of the intensity of rainfall expected during the six-hour, ten-year design storm.*

c. *Runoff control shall be accomplished by establishing on-site or at suitable locations nearby, catchment basins, detention basins, and siltation traps along with energy dissipating measures at the terminus of storm drains, or other similar measures of equal or greater effectiveness.*

d. *Sediment basins (debris basins, desilting basins, or silt traps) shall be installed in conjunction with the initial grading operations and maintained through the development process as necessary to remove sediment from runoff waters draining from the land undergoing development. Areas disturbed but not completed prior to November 15, including graded pads and stockpiles, shall be suitably prepared to prevent excessive soil loss during the rainy season.*

e. *The use of vegetation as a means to stabilize soils and control site erosion shall be accomplished pursuant to plans and specifications prepared by a licensed landscape architect or other qualified professional.*

f. All graded slopes shall be stabilized prior to November 15, by the planting of vegetation. Vegetative erosion control may include but is not limited to, seeding, mulching, fertilization, and irrigation within sufficient time prior to November 15 to provide landscape coverage that is adequate to achieve the provisions of this policy.

g. For projects involving a total of more than 25 cubic yards of cut and/or fill grading operations, no grading shall occur from November 15 to March 31.

h. Temporary erosion control measures, shall include the use of berms, interceptor ditches, sandbagging, hay bales, filtered inlets, debris basins, silt traps, or other similar means of equal or greater effectiveness.

9. Where the provision of erosion and/or drainage control measures is required pursuant to the policies of this section, the responsibility for maintenance for such measures shall rest with the applicant unless such responsibility is assumed by another agency or party found acceptable by the Planning Director. The responsibility for maintenance and a detailed maintenance program shall be included in an agreement(s) recorded against the deed for the property. The arrangements shall provide for the on-going repair and maintenance of approved control measures to assure continued effective erosion/drainage control. The agreements, and any associated cash deposits, bonding or letters of credit deemed necessary to assure on-going maintenance shall be secured prior to the release of permits.

Maintenance of all erosion and drainage control measures will be in accordance with these provisions, and documented in the required agreement(s).

10. Runoff from the projects within the Lagoon Overlay Zone shall be controlled and directed to ensure that neither toxic materials nor excess nutrients flow into lagoon areas.

Site runoff from the WDMSP property will be controlled through the new storm drain system onsite, which incorporates a filtration of storm water from parking areas, and use of a bioretention basin prior to discharge to the existing storm drain.

11. New or redevelopment projects within the Lagoon Overlay Zone shall include the retention of the maximum amount of native vegetation on the site. Revegetation of sites within the Lagoon Overlay Zone shall include the use of non-invasive, drought tolerant species native to the San Diego coastal region and which are compatible with adjacent wetland habitat species. Landscape plans including their associated berms, planters and fences shall also be designed to minimize the disruption of view corridors from public roadways and parks.

The WDMSP landscape design guidelines establish regulations and general requirements for project landscaping. As part of these requirements, it is specified that the Site landscape shall use predominantly drought-tolerant plants, which require minimal irrigation and maintenance. Plant species for distinct areas of the Site are listed in the Specific Plan. The specific size and planting specifications on final landscape plans will be reviewed for conformance with this standard.

The interface with natural open space areas is specifically addressed by the WDMSP guidelines.

For the coastal brackish marsh area at the southeast corner of the Site, they call for removal of invasive plant material within this existing wetland, with supplemental planting of appropriate native plant material to enhance the wetland area.

Within the remaining slope areas, invasive plant material is required to be removed and replanting is to include appropriate native plant material, including southern coastal bluff scrub that may be accented with Torrey Pine trees.

Policy VI-4 ***To protect the biological and visual resources of wetland areas, the City shall encourage the undergrounding of all new utility lines and new utility line extensions for projects within the Lagoon Overlay Zone when such undergrounding would not be detrimental to the wetlands or to the sensitive resources located in the upland areas adjacent to such wetlands.***

All onsite utility line service extensions for the site development will be installed underground. Additionally, the developer will lead a program to underground existing overhead utility lines along the project frontage in collaboration with the City and SDG&E.

California Coastal Act of 1976
Chapter 3

The following discussion presents the findings to support that the WDMSP and development permitted by the Specific Plan is in conformity with Chapter 3 of the California Coastal Act of 1976 (commencing with Section 30200 of the California Public Resources Code).

As stated in Section 30001, future developments that are carefully planned and developed consistent with the policies of this division, are essential to the economic and social well-being of the people of this state, and especially to working persons employed within the coastal zone, within the backdrop of the permanent protection of the state's natural and scenic resources, and protection of the ecological balance of the coastal zone.

The proposed WDMSP (LCP Amendment) and associated development is designed to comply with the legislative findings and declarations of Section 30001, and has at its core the goals presented in Section 30001.5 in that it does take into account the social and economic needs of the people of the state providing for a variety of public benefits associated with affordable housing in a community with limited opportunities to meet such demand. It also makes provisions to protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and resources, including undisturbed coastal bluffs and the Coastal Brackish Marsh, a wetland habitat area on-site.

As specified in Section 30602(g), it is important for the Commission to encourage the provision of new affordable housing opportunities for persons of low and moderate income in the coastal zone. The WSMSP provides for the construction of affordable housing at this site, which also implements other state requirements for housing in accordance with the City of Del Mar's adopted Housing Element (Section 30007).

ARTICLE 2 – PUBLIC ACCESS

Watermark Del Mar is located at the southeastern corner of the intersection of Jimmy Durante Boulevard and San Dieguito Drive, which is not adjacent to the shoreline. Development in accordance with WDMSP will not interfere with any existing or potential public access to the sea (Section 30211). Adequate access exists nearby (Section 30212). There are public sidewalks and trail opportunities in the immediate project area. The developer has made a contribution through a development agreement toward Riverpath Del Mar, to enhance public access in the area that exists directly across the street from this property. Development in accordance with WDMSP complies with Sections 301210 through 30214 as they would apply to the property.

ARTICLE 3 – RECREATION

Sections 30220 through 30224 do not apply. The property does not include areas suited for water-oriented recreational activities, oceanfront land, upland areas necessary to support coastal recreational uses, or opportunities for facilities that would increase recreational boating use. The property has existing approvals for general commercial (office) development, which has no higher priority than the proposed residential use. The WDMSP provides for public benefits through its affordable housing provisions.

ARTICLE 4 – MARINE ENVIRONMENT

The WDMSP property includes a very small (0.10 acre) Coastal Brackish Marsh, a wetland habitat that contains a sensitive plant species (Southwestern Spiny Rush). This wetland is proposed to be avoided, protected in place, and buffered from the proposed development by the replacement of the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer. A permanent fence with signage will be erected along the edge of the wetland buffer. Invasive vegetation species within this wetland area will be removed, with replanting of the area using compatible natives to further enhance the wetland area (Section 30230).

The quality of this coastal wetlands and its opportunity for biological productivity will be enhanced through the project implementation. The runoff from the project will be controlled and directed into a bioswale within the wetland buffer area adjacent to the marsh. The marsh itself will continue to function and flow as it currently does. No runoff from the project will be directed into the marsh, and the buffer area will be revegetated with compatible, non-invasive native species. (Section 30231)

Sections 30232 through 30236 do not apply as there is no development or transportation of crude oil, gas, petroleum products, or hazardous substances; no diking, filling, or dredging of open coastal waters, wetlands, estuaries, or lakes; no effect on commercial fishing and recreational boating industries; no construction that alters natural shoreline processes; and no channelizations, dams, or other substantial alterations of rivers and streams.

ARTICLE 5 – LAND RESOURCES

To the extent that ESHA is identified on the project site, the WDMSP will provide for protection of environmentally sensitive habitat areas against any significant disruption of habitat values. (Section 30240)

Development in areas adjacent to environmentally sensitive habitat areas has been sited and designed to prevent impacts which would significantly degrade those areas, and is compatible with the continuance of those habitat areas. WDMSP requires the provision of a buffer adjacent to the existing marsh habitat with control of stormwater runoff, water quality, and siltation effects, where no buffer currently exists, and will fence these areas to limit potential for impact to the habitat areas onsite.

Sections 30241 through 30243 do not apply as the property does not have timberlands, prime agricultural land, existing agricultural uses, and is not suitable for agricultural use.

There are no known archaeological or paleontological resources as identified by the State Historic Preservation Officer on the property. In recognition that many properties in coastal areas have the potential for subsurface archaeological resources, a program of monitoring during grading activities will be implemented for the WDMSP property. (Section 30244)

ARTICLE 6 – DEVELOPMENT

The WDMSP property is located within, and contiguous with existing developed areas able to accommodate it with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. (Section 30250)

The WDMSP property includes an area with undisturbed, scenic sandstone bluffs on the northeastern portion of the site that are visible from areas to the north, and comprise part of the overall background viewshed from and across the San Dieguito River. The location of the development footprint designated in accordance with the WDMSP will preserve the scenic and visual qualities of these bluffs along with the character and the open space appearance of the area from a distance. (Section 30251)

The undisturbed bluffs can also be seen travelling south on Jimmy Durante Boulevard as one approaches the intersection of San Dieguito Drive. These bluff formations, and the small area of wetland marsh vegetation at the toe of this bluff area, will be preserved in permanent open space in accordance with the WDMSP. The buildings at the intersection corner are limited to a single Story to have a lower scale and additional visual openness at this intersection.

The WDMSP defines a development footprint that is necessary to accommodate the density per the Housing Element, and to provide public benefits associated with the project, including affordable housing, while preserving the most sensitive areas of the site. The development is to be located within previously disturbed and graded areas of the property. The WDMSP allows for a modified height measurement from the Podium deck level, necessary to achieve compliance with floodplain safety regulations. The resulting building height will not affect views of the ocean or scenic coastal areas, but will allow for the area needed in order to achieve the affordable housing goals at higher density for this property.

While much of the WDMSP property has been previously graded, the areas of natural topography onsite are designated by the Specific Plan to be outside any site grading, and left undisturbed and preserved. One of the key considerations for the project design was to protect the undisturbed sandstone bluff formation near San Dieguito Drive, in a way that retains its visibility. The Site is located along the lower portions of a much larger bluff/ridge formation

that extends offsite. The overall form, scale and character of the bluff/ridge landform will be retained with the proposed project.

The WDMSP development will maintain and enhance public access to the coast by providing non-automobile circulation and amenities for pedestrians and cyclists within the development, including connectivity to existing, adjacent sidewalks and bicycle routes that link with trails and other coastal access. The WDMSP requires adequate parking facilities onsite for residents and guests, and incorporates onsite recreational facilities to serve the recreational needs of new residents within the development. (Section 30252)

The WDMSP provides standards to minimize the potential for adverse impacts. (Section 30253)

(a) The property is situated partially within the 100-year floodplain of the San Dieguito River. In order to minimize risks to life and property in these areas, the Specific Plan regulations were established for flood hazard avoidance. Based on recent experience in other communities where flooding has exceeded projected levels, and acknowledging the potential for future sea level rise, a safety factor was used of 2 feet above BFE as the criteria for structures to be located on Podium construction. Structures being built on-grade at the corner adjacent to the intersection would be located at the BFE, to assure flood hazard avoidance, while balancing the community interest in minimizing building height at this corner.

(b) The WDMSP will assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The residential homes of the WDMSP will be located on previously graded and disturbed portions of the property, in order to allow protection of the natural, undisturbed sandstone bluffs and the wetland marsh area at the toe of the bluff slope.

(c) The WDMSP will be consistent with any requirements imposed by an air pollution control district or the State Air Resources Board.

(d) The construction and amenities of Watermark Del Mar are designed to minimize energy consumption and vehicle miles traveled. The project construction will comply with CalGreen standards with energy efficient components; will locate new homes in an infill location, in proximity to the Village area and recreational amenities; and will provide pedestrian and cyclist amenities for future residents to encourage non-vehicular transportation.

(e) The WDMSP property is not a visitor destination points for recreational uses.

Sections 30254 through 30255 do not apply as the property does not involve public works facilities, sewage treatment plant development or a coastal-dependent development.

ARTICLE 7 – INDUSTRIAL DEVELOPMENT

Sections 30260 through 30265.5 do not apply as the WDMSP does not involve any industrial development.

APPENDIX B – COMMUNITY OUTREACH PROCESS

This section will need to be updated to reflect the process as it occurs. An outline of the planned outreach is provided for this draft. This Appendix will be modified to incorporate the input received during the community outreach process.

The Specific Plan process requires that opportunities for the involvement of citizens, public agencies, public utilities, civic education, and other community groups must be provided. For this Specific Plan both formal and informal methods of outreach and participation have been used, including the Citizens' Participation Program (CPP) as required by the Del Mar Municipal Code (DMCC).

Initially, informal methods of outreach and participation were used to facilitate interested parties' ability to obtain information about the project, provide an opportunity for the public to provide comments and input throughout the project review process, including input regarding specific project design, alternatives, environmental review and any issues of concern. Methods used include:

- Interactive website.
- List-serve for interested parties.
- Meetings with neighbors and stakeholders.
- Internal advisory group meetings.
- Meetings with coastal commission staff.

The formal community participation process includes:

- The implementation of the Citizens Participation Program per the Del Mar Municipal Code.
- CEQA Scoping Meeting.
- Three public workshops for community engagement during project processing.
- Planning Commission and Design Review Board interim presentations and review to elicit early feedback.
- Public hearings at the Planning Commission, Design Review Board and City Council.

Interactive website

The Watermark Del Mar project website, www.WatermarkDelMar.com, was launched on March 27, 2015. This website allows interested people to access detailed project information, view the project video and images, review project documents, sign up to receive project updates via the project e-newsletter, public notices, and submit comments and questions.

The Watermark Del Mar video showcases what the completed project will look like. Using computer imaging, this video shares several "before and after" views of the property to illustrate how the project's timeless, coastal-inspired architecture will complement the adjacent residential area. The images reflect the accurate design and scale of the project overlaid on photography of the existing Site.

List-serve for interested parties

Watermark Del Mar established a list serve on its website to allow members of the public to sign up to receive the project e-newsletter. This e-newsletter will provide regular project updates, as well as notices about public meetings and other opportunities for public participation. Anyone interested in the project is encouraged to visit and sign-up at the website.

Meetings with neighbors and stakeholders

The Watermark Del Mar team has offered personal meetings with interested community members to share information about the project and answer any questions. The vision of the Watermark Del Mar team is to create an exceptional residential community that reflects the high quality and beauty of the Del Mar community. Meeting with interested residents to gather public input will help to ensure that this will be a project the community will be proud of.

The opportunity for such meetings has been noted on the project website, and meetings have also been scheduled through email or phone requests. To date, over 30 meetings have been held with stakeholders and neighbors.

Internal advisory group meetings

The Watermark Del Mar Community Advisory Group was established with seven members. This advisory group met three times during the project design and Specific Plan process between April 2015 and October 2016.

Meetings with Coastal Commission staff

An initial on-site meeting with Coastal Commission staff was held on May 29, 2015 Another meeting onsite was held on August 22, 2017 to update staff, discuss technical coastal requirements, and review project design features..

Citizens Participation Program per the Del Mar Municipal Code

The purpose of the Community Participation Program (CPP) is to ensure that applicants for projects conduct efforts to notify potentially affected parties of proposed developments early in the design phase of a project. The CPP is also intended to give the applicants and their agents the opportunity to understand and respond to concerns raise about the project's potential impacts on the community. The CPP is not intended

to produce complete consensus on all applications but to facilitate dialogue among applicants, neighbors, and the community early in the development review process.

The Watermark Del Mar CPP meetings were held at the project site on Thursday, January 28th and on Saturday, January 30th, 2016. Two meetings were scheduled to provide options for the public to attend at a convenient time. The combined attendance was over 70 people who signed in, as well as several people who stopped by on an informal basis. Comment cards were submitted by 40 participants. The majority of the comments were complementary of the project and many provided good input for the team to consider. A summary of the comments received and responses to those comments were provided to all attendees and to staff.

CEQA Scoping Meeting

The City of Del Mar issued a Notice of Preparation for an Environmental Impact Report (EIR), soliciting input on the content for that document, between March 12, 2015 and April 10, 2015. A Scoping Meeting was held on March 26, 2015.

The scoping meeting was attended by 20 citizens, with input on the issues for evaluation in the EIR provided verbally at the meeting and in written form. A summary of that information is to be included in the EIR.

Three public workshops for community engagement during project processing

1. March 10, 2016, 6:00-8:00 pm: Watermark Del Mar Public Workshop #1; L'Auberge Del Mar, 1540 Camino Del Mar, Del Mar

2. March 24, 2016, 6:00-8:00 pm: Watermark Del Mar Public Workshop #2; L'Auberge Del Mar, 1540 Camino Del Mar, Del Mar

3. December 3, 2016, Open House from 10:00 am – 1:00 pm: Watermark Del Mar Public Workshop #3; Del Mar Plaza, 1555 Camino Del Mar, Del Mar, with information regarding 38-unit Community Response Alternative.

Planning Commission and Design Review Board interim presentations and review to elicit early feedback

1. February 24, 2016, 5:00 pm: City of Del Mar Design Review Board informational presentation; Del Mar Communications Center, 240 10th Street, Del Mar

2. March 8, 2016, 5:00 pm: City of Del Mar Planning Commission informational presentation; Del Mar Communications Center, 240 10th Street, Del Mar

3. April 27, 2016, 5:00 pm: Design Review Board Presentation and Informal Preliminary Review; Del Mar Communications Center, 240 10th Street, Del Mar

Public hearings at the Planning Commission, Design Review Board and City Council

To be provided.

APPENDIX C – PROJECT PLANS

A residential condominium development project for Watermark Del Mar is being processed concurrently with the Watermark Del Mar Specific Plan, and is illustrated on Exhibits C-1 to C-8. This project design provides for a residential development that is consistent with the WDMSP, and is defined by its key location at the northeastern gateway into the City of Del Mar, its proximity to trail systems associated with the San Dieguito River, and its role in creating an opportunity for higher density housing in a transitional location along a major transportation corridor for the City.

The Watermark Del Mar project is a multifamily residential condominium development that would feature 38 residential units in 17 structures. In addition, Watermark Del Mar would include a Recreation Room with roof deck, adjacent to a pool and spa area for the use of residents, and associated maintenance and administrative amenities. Watermark Del Mar would provide a parking structure with a minimum of 100 stalls on the 2.37-acre site. The project includes a single vehicular access point from San Dieguito Drive to this secured parking structure.

The WDMSP project proposes a mix of housing types including townhomes and flats. The individual units will encompass a variety of floor plans and sizes, ranging from three-bedroom to studio units. The WDMSP development is designed to integrate with the common areas and pedestrian circulation, foster connectivity, and promote and facilitate walking and cycling. The size and scale of the residential buildings will vary depending on the number of units attached together (1-6 units per building).

An important component of the project design is to fit with the established character of the City of Del Mar. The use of separate building elements for the multi-family uses, to retain the appearance of single family homes, is a key concept in the Specific Plan that affects much of the overall building form and massing on the site. A figure-ground analysis was performed to help illustrate how the project would relate to the neighborhood and the broader community (Exhibits C-9 and C-10). The figure-ground diagram is a two-dimensional map of urban space that shows the relationship between built and unbuilt areas, as a way of visualizing the plan of the city. The figure ground drawings can help understand the development patterns and relationships of buildings within an area, and how the proposed development fits with the existing fabric of the community or neighborhood, particularly in terms of the mass, proportions and edge conditions. Topographic contours have been included on these figure-ground diagrams, which show that there is a different character and spacing of buildings between the areas with level topography, which have more regular and closely spaced buildings, and the areas with more slope, where buildings are more widely spaced,

In the event that the approvals for this concurrent project design are not implemented, or are proposed to be substantially modified, the Specific Plan regulations remain the controlling standards and guidelines for the property within the WDMSP. Any future changes to the project plans, would need to be consistent with the regulations of the WDMSP, and would be subject to subsequent review of the applicable permits as outlined in the WDMSP and the DMMC.

Exhibit C-1 Illustrative Site and Landscape Plan

Not to scale. Source: Benson & Bohl, Schmidt Design Group

Exhibit C-2 Site Plan (1st Floor)

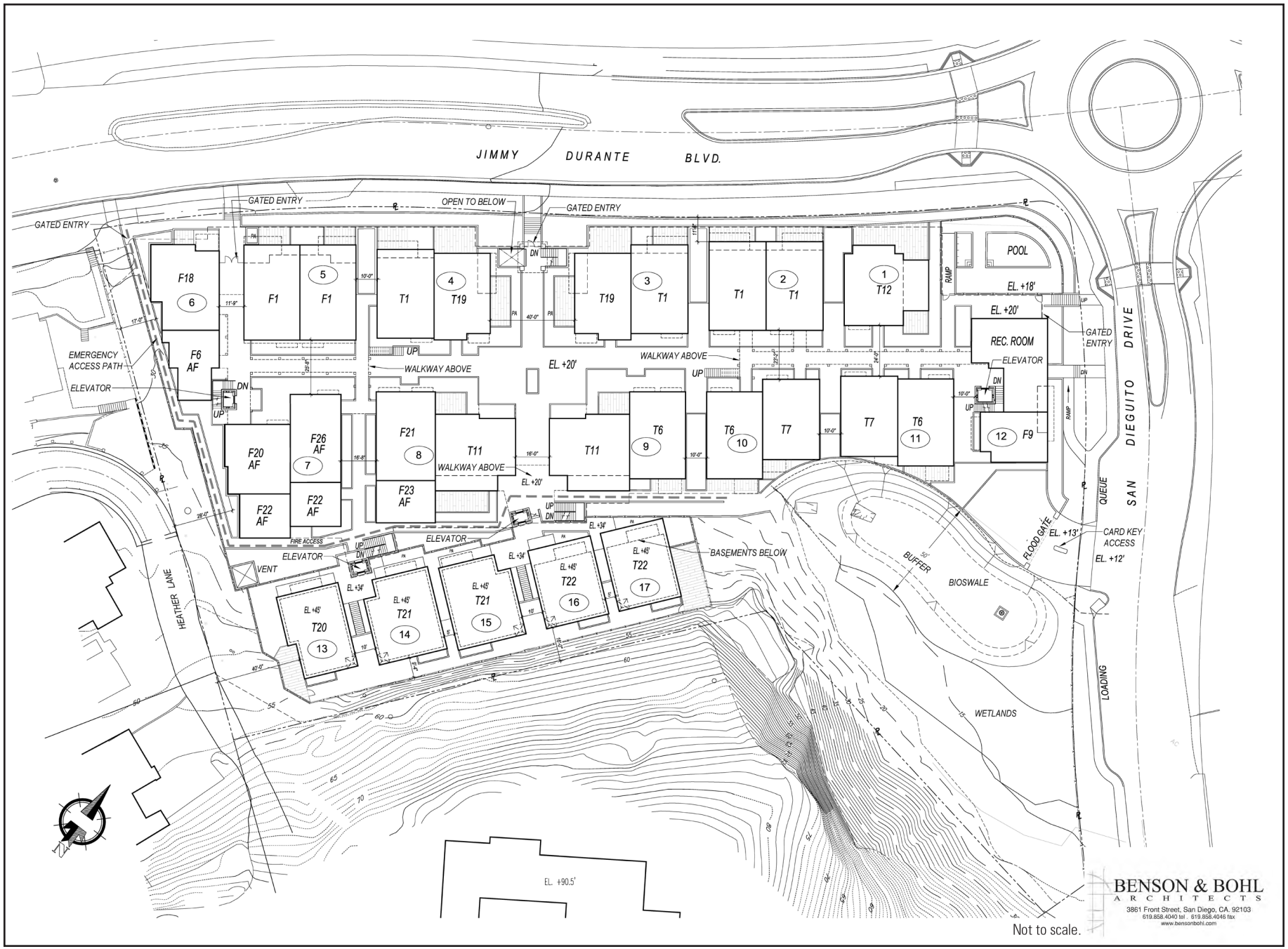


Exhibit C-3 Site Plan (2nd Floor)

BENSON & BOHL
ARCHITECTS
3861 Front Street, San Diego, CA. 92103
619.858.4040 tel . 619.858.4046 fax
www.bensonbohl.com

Exhibit C-4 Circulation, Access and Parking Plan

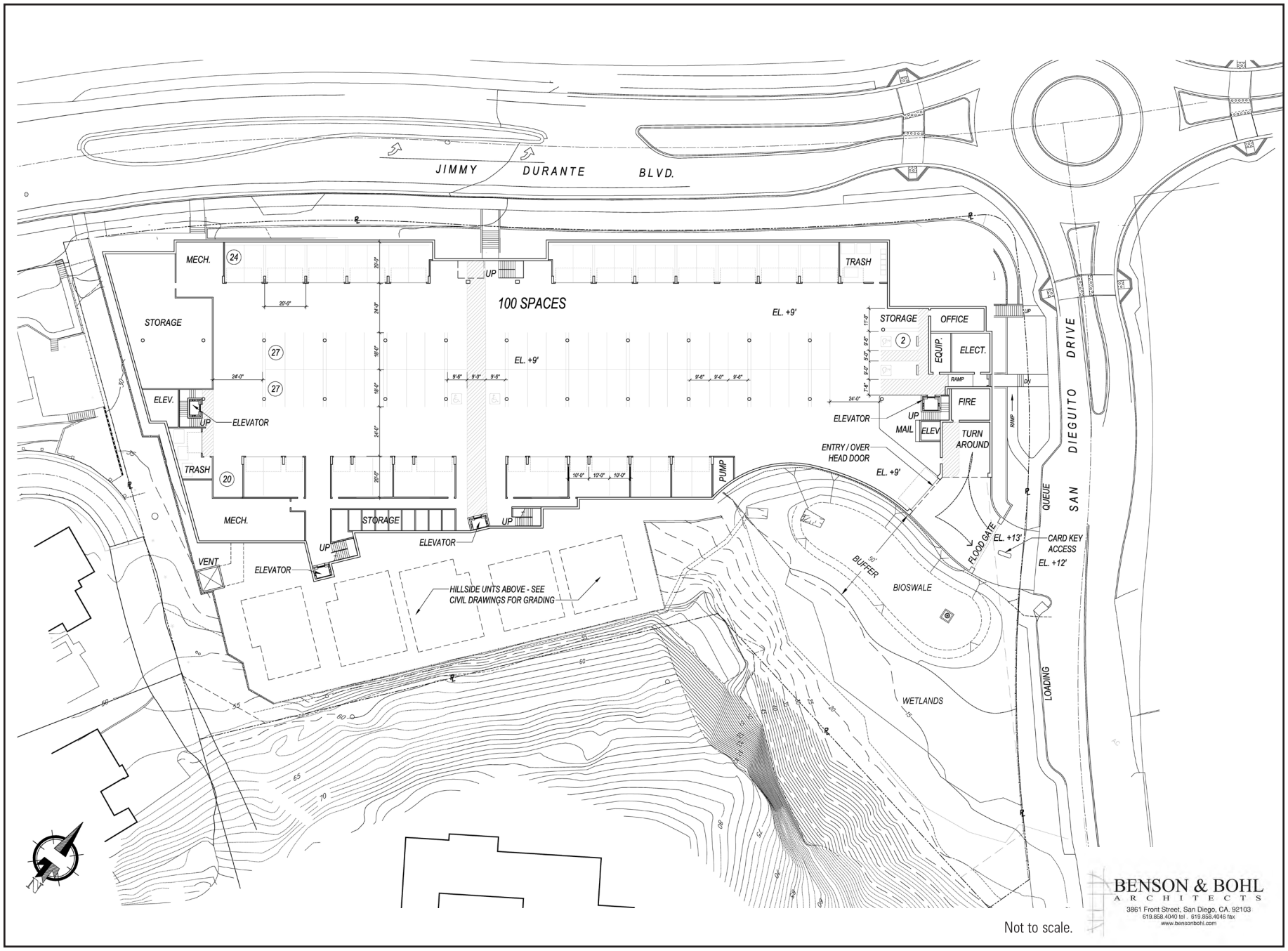


Exhibit C-5 Conceptual Grading Plan

Exhibit C-6 Drainage Plan

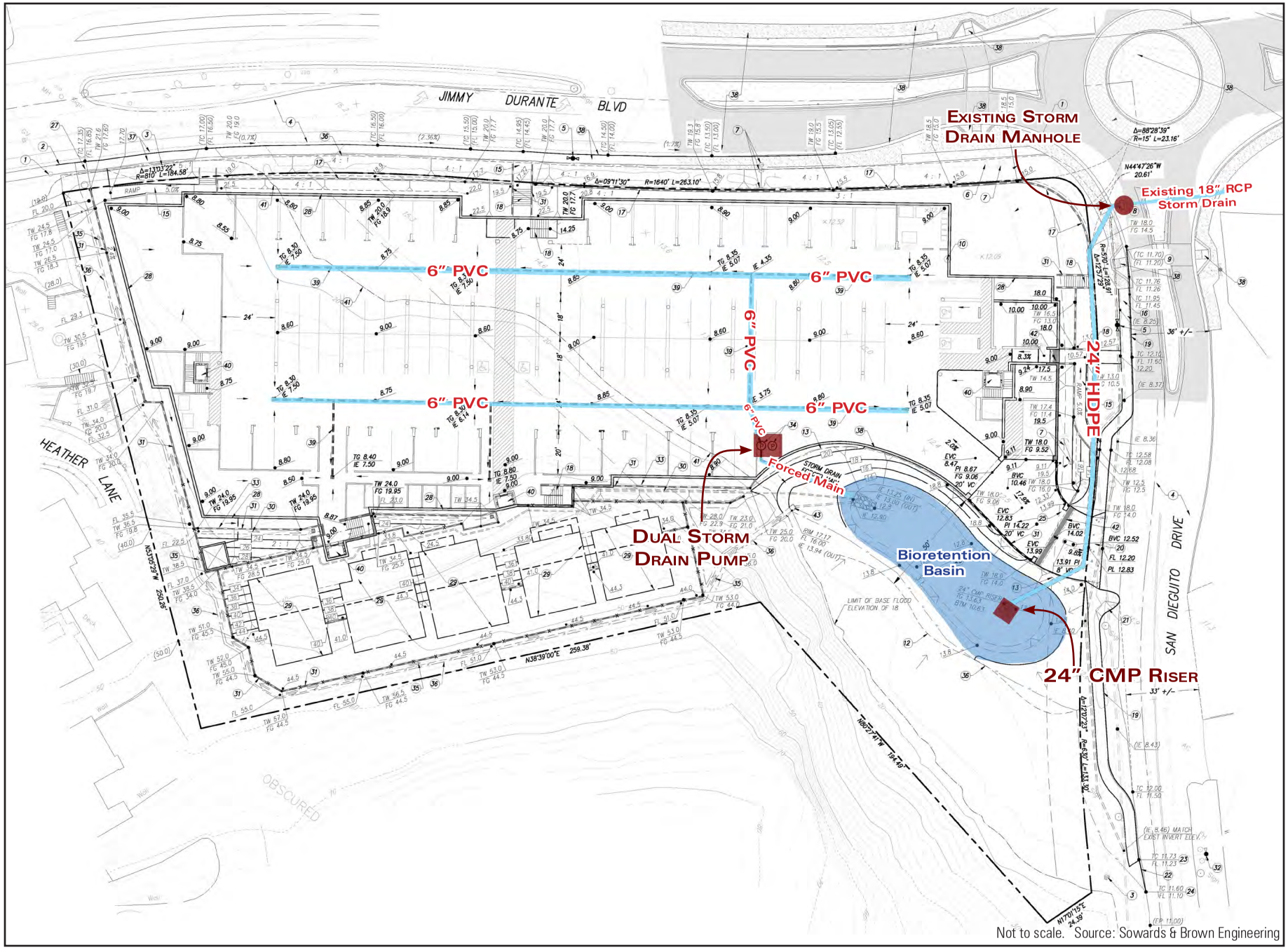
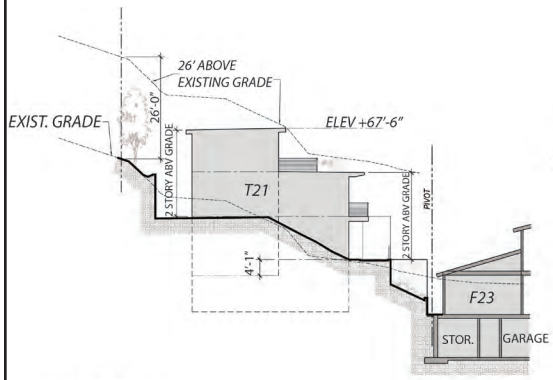
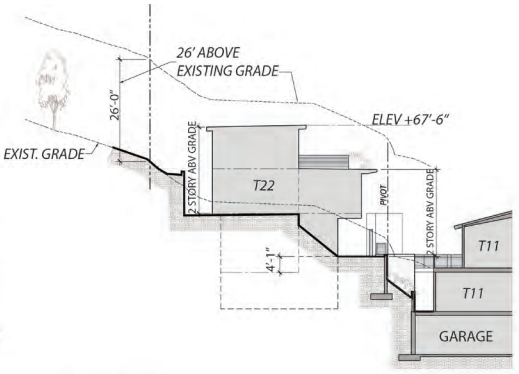


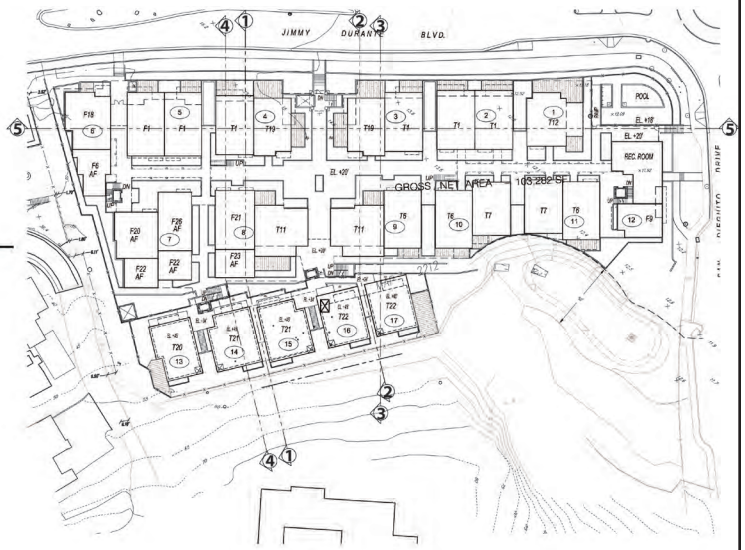
Exhibit C-7 Project Cross Sections - 1 of 2



1 SITE SECTION



2 SITE SECTION



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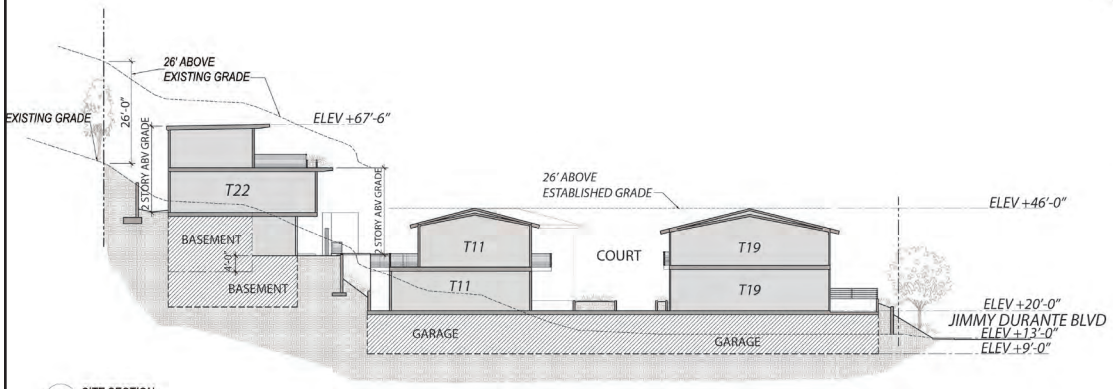

3 SITE SECTION

Not to scale.

BENSON & BOHL
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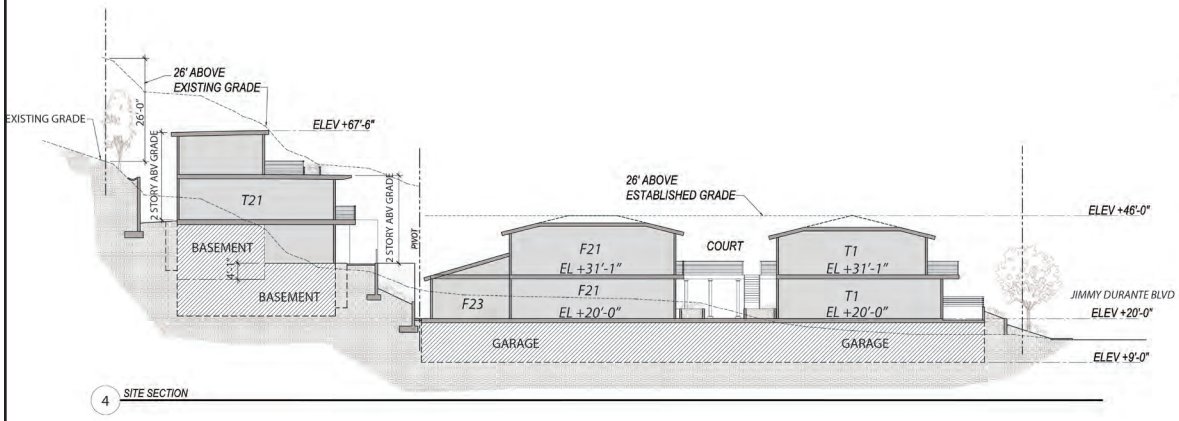
Exhibit C-8 Project Cross Sections - 2 of 2



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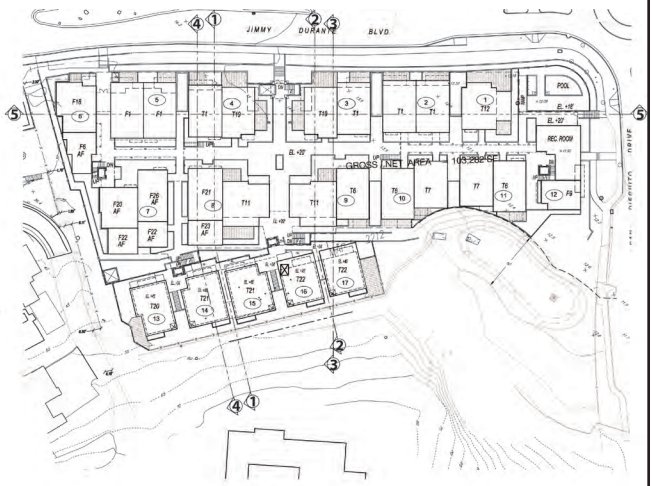

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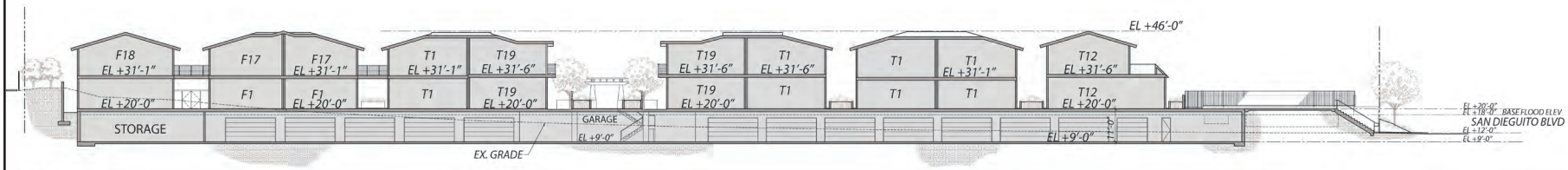

5 SITE SECTION

Not to scale.

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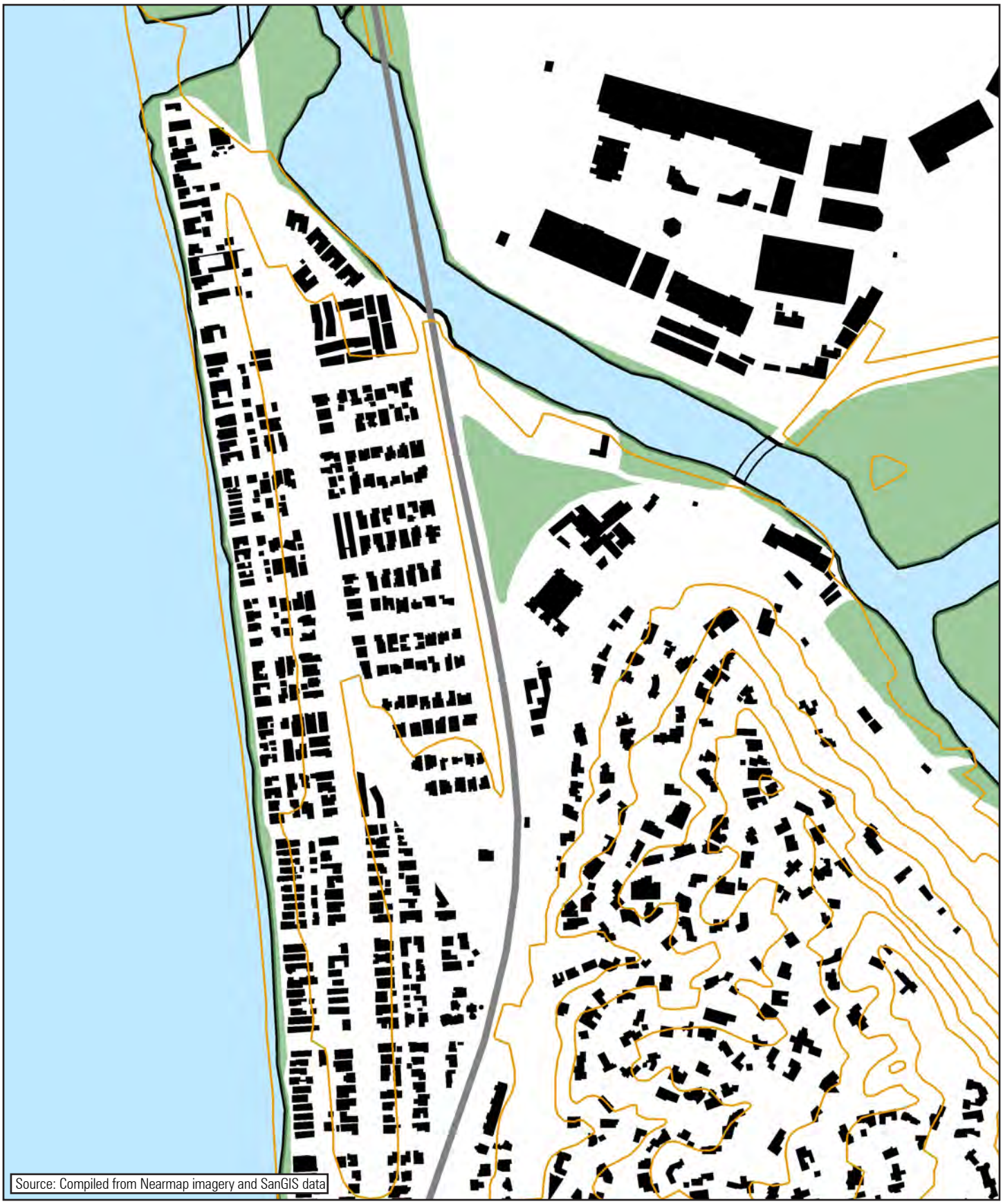
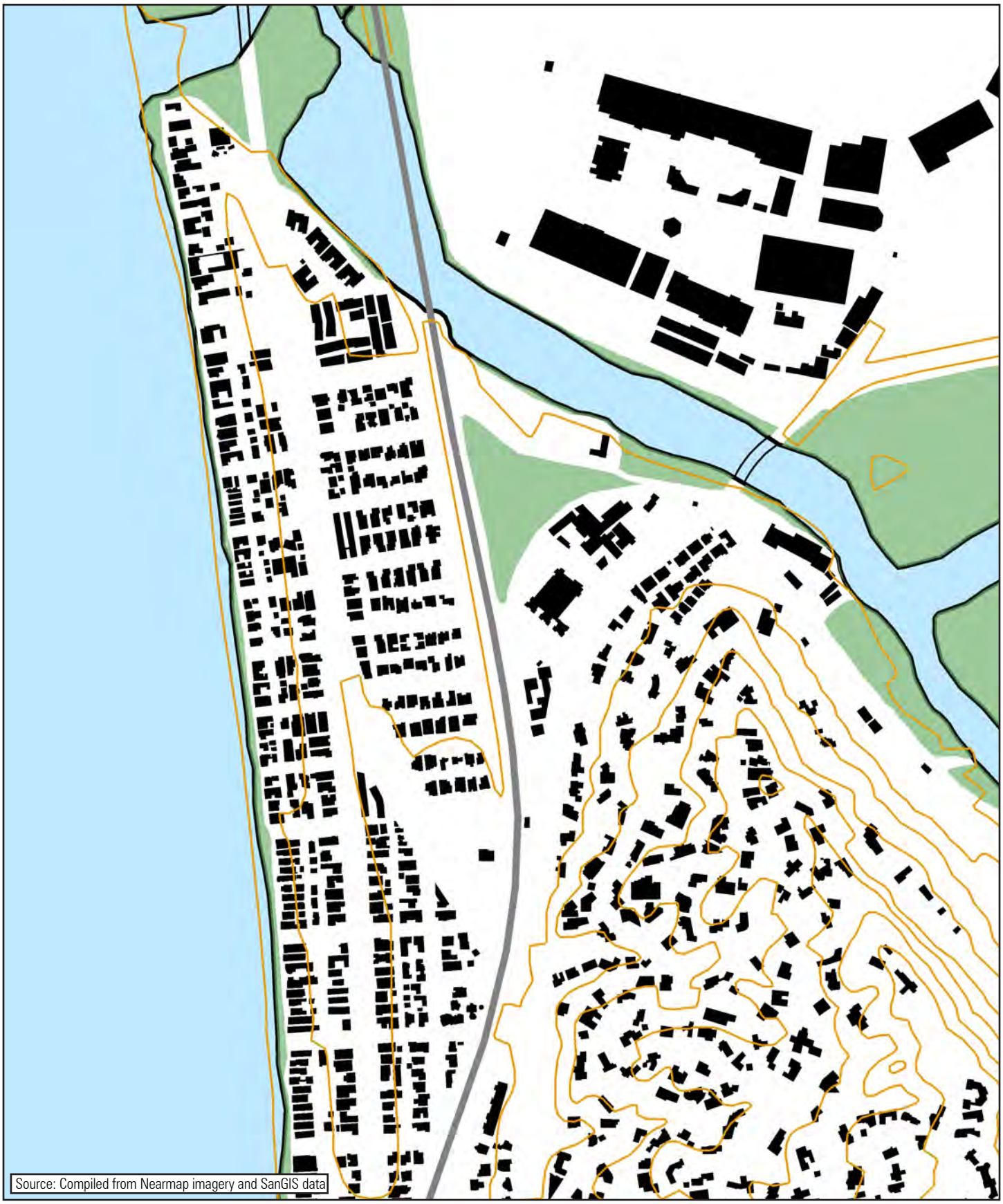
Exhibit C-9 Figure-Ground Diagram - Existing



Source: Compiled from Nearmap imagery and SanGIS data

Exhibit C-10 Figure-Ground Diagram - With Project



Source: Compiled from Nearmap imagery and SanGIS data

WATERMARK
DEL MAR

SPECIFIC PLAN

48-Unit Plan

DRAFT
September 2017

WATERMARK DEL MAR
SPECIFIC PLAN

48-UNIT PLAN

DRAFT
September 2017

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CHAPTER 1 - INTRODUCTION

This Watermark Del Mar Specific Plan (WDMSP) addresses the requirements for development of multifamily residential condominium homes with an affordable housing component at the 2.37-acre property south of the intersection of Jimmy Durante Boulevard and San Dieguito Drive. The property is presently designated for commercial uses. However, the City of Del Mar's adopted and certified Housing Element (2013-2021) establishes goals and programs which identify this property for a new residential land use designation, at a density of 20 to 25 units per acre. This Specific Plan describes the legislative actions necessary to create the regulatory framework to assign a new Community Plan designation, Zoning Map and LCP designation along with accompanying regulatory development standards and design guidelines for residential multifamily development of the property.

1.1 Specific Plan Location and Boundaries

The property within the Watermark Del Mar Specific Plan (the "Site") is located in the northern portion of the City of Del Mar, south of the intersection of Jimmy Durante Boulevard and San Dieguito Drive. It is located approximately 0.76 miles west of Interstate 5 and 0.32 miles east of Camino Del Mar. The Site consists of two adjacent parcels of land that are identified as Assessor's Parcel Numbers (APNs) 299-100-47 and 299-100-48 that total approximately 103,282 square feet (2.37 acres). The Site location is illustrated on Exhibits 1-1 and 1-2.

1.2 Authority and Requirements

California Government Code Section 65450 *et seq*. grants local planning agencies the authority to prepare Specific Plans for any area covered by a General Plan, as a tool for the implementation of the General Plan (known as the "Community Plan" in the City of Del Mar). A Specific Plan can effectively establish a link between implementing policies of the General Plan and an individual development proposal in a defined area.

The Specific Plan process was selected to regulate development of this property in order to provide customized regulations that will accommodate residential housing at this Site to implement the Housing Element while establishing certainty for the community regarding the development parameters, limitations for the planned use, and specific public benefits. The exceptional public benefits that will be provided through implementation of the Specific Plan provisions, and that allow for balancing of General Plan policies are outlined in the Specific Plan. (Refer to Chapter 4.)

The WDMSP has been prepared in accordance with State Specific Plan requirements under the authority of Government Code Sections 65450-65457 and consistent with the State guidelines for the preparation of Specific Plans. This Specific Plan contains sections required under Section 65451 of the Government code that address the following:

Exhibit 1-1 Regional Map

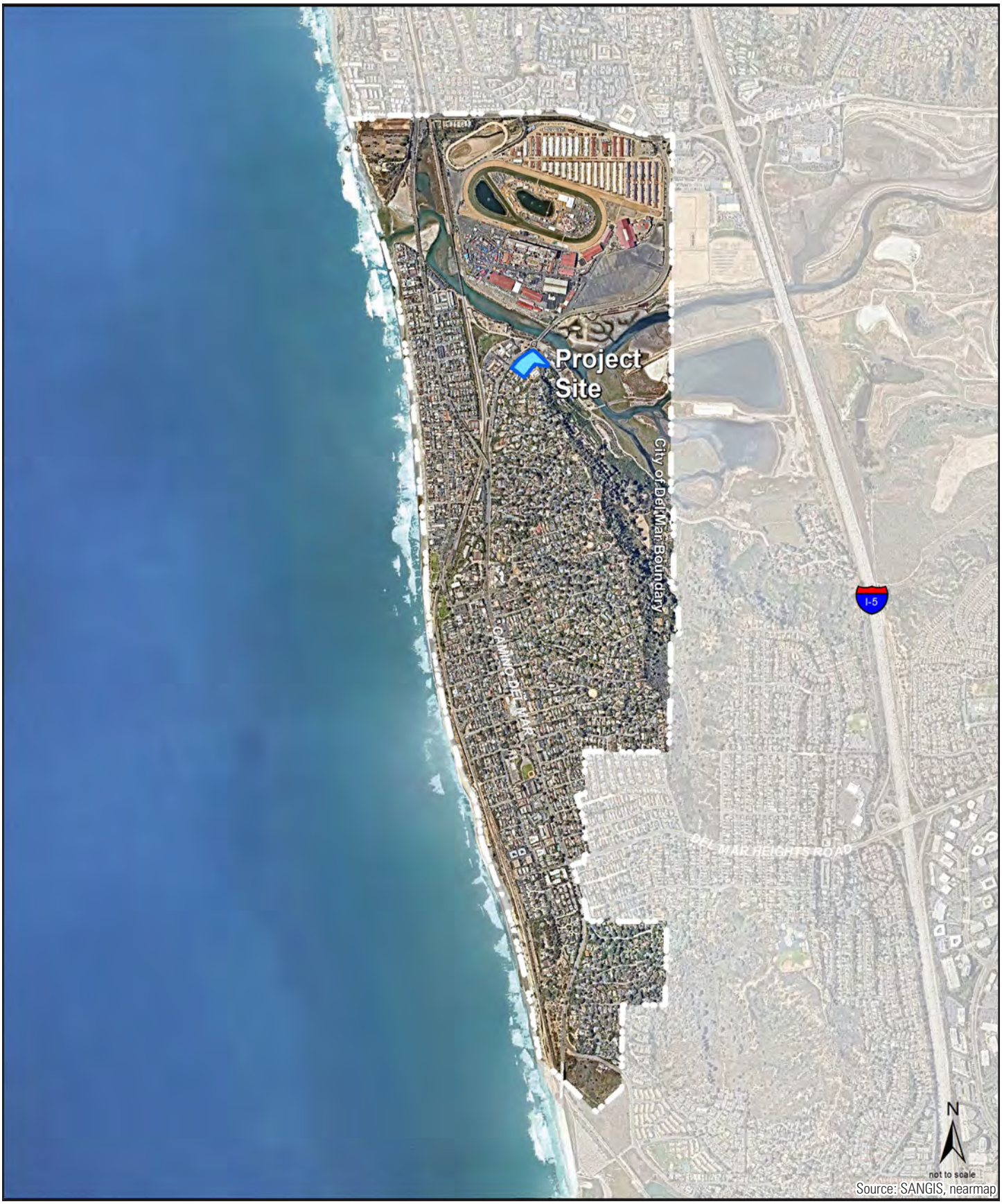


Exhibit 1-2 Vicinity Map

1. The distribution, location and extent of the use of land within the area covered by the plan. (Refer to Chapters 2 and 3.)

2. The proposed distribution, location, extent, and intensity of major components of infrastructure (transportation, sewage, water, drainage, solid waste disposal, energy and other essential facilities) proposed to be located within the area covered by the Plan and needed to support the land uses described in the Plan. (Refer to Chapter 3.)

3. The standards and criteria by which development will proceed, and standards for the conservation, development and utilization of natural resources, where applicable. (Refer to Chapters 5 and 6.)

4. Implementation measures including regulations, programs, public works projects, and financing measures. (Refer to Chapter 7.)

5. A statement of the relationship of the Specific Plan to the General Plan. (Refer to Chapter 8.)

1.3 Purpose and Intent of the Specific Plan

The Watermark Del Mar Specific Plan is intended to create a regulatory framework to govern the development of the subject property with high-quality multifamily residential uses in a manner that implements the goals of the Community Plan.

The Del Mar Community Plan (the City's General Plan under California law) is comprised of the following five elements: 1) Environmental Management; 2) Transportation; 3) Recreation; 4) Community Development; and 5) Housing. The background information and policy direction presented in one Community Plan element is also reflected in others, assuring continued internal consistency among elements of the Community Plan. Since the original adoption of the Community Plan in 1976, there have been several updates, the most recent of which is the Housing Element portion.

State law mandates that a housing element be included as part of the General Plan, and also requires regular updates in accordance with statutory deadlines. Del Mar's current update of the Housing Element was approved by the City and certified by the State in 2013, and covers the period of January 1, 2013 through April 30, 2021. The Housing Element update built upon other Community Plan elements and is considered to be consistent with the goals and policies set forth in other elements of that document.

The overriding objective of the WDMSP is to implement the Housing Element. The need for additional housing, including affordable housing, within Del Mar is explicitly stated in the adopted and certified Housing Element (2013-2020). Yet because the City is virtually built-out, only a limited amount of land remains for future residential development. The City also places high value on protection of natural resources, environmental protection for the cliffs, canyons, and wetlands, which presents further constraints on the location of new development and opportunities for providing housing. Due to the combination of historic land use patterns, high land and housing

costs, scarcity of vacant land, and environmental constraints, the City of Del Mar is faced with limited opportunities for the provision of new and affordable housing.

With these sometimes competing restrictions, the City through its Housing Element recognizes that balancing varied public policies is crucial to accomplish housing goals. To ensure that Del Mar can accommodate its fair share of housing needs, it is necessary to provide appropriate zoning and density standards and establish appropriate development regulations which facilitate the reasonable achievement of such standards.

The WDMSP incorporates legislative changes including a Community Plan (General Plan) Amendment; Rezone; and Local Coastal Program Amendment in order to fulfill the objectives for this site to be developed with residential uses at 20-25 units per acre, as identified in the policy goals of the City of Del Mar Community Plan Housing Element 2013-2021. The Specific Plan addresses Housing Element goals along with consideration for the physical site constraints including drainage and flood protection, while providing for visually attractive landscaping, architecture, and site amenities to address community compatibility.

The Watermark Del Mar Specific Plan document provides a description of proposed land use and infrastructure requirements and describes guidelines and standards for implementation of the site development. As a regulatory document, the WDMSP creates new zoning for the Site that will regulate the permitted uses, density, height, and other aspects of site development. The site area will be assigned a land use designation and will be designated on the City's zoning map as Watermark Del Mar Specific Plan (WDMSP). Section 5 of this Specific Plan includes the development regulations that will govern the subject property, and Section 6 includes the design standards that will assure the quality and character envisioned for the Site.

1.4 Specific Plan Process Overview

The City of Del Mar authorized the preparation of a Specific Plan for Watermark along with a defined process in July 2014, and recently (July 2017) adopted a new policy regarding processing of Specific Plans, to formalize the community outreach, legislative and discretionary actions required for, and during, the processing of all Specific Plan applications. The Watermark Specific Plan is compliant with the original process approved by the City Council, and will implement selected portions of the new process given the "in-progress" state of the Specific Plan.

A. Community Outreach

The Specific Plan process provides opportunities for the involvement of citizens, public agencies, public utilities, civic education, and other community groups. For this Specific Plan both formal and informal methods of outreach and participation have been provided, including the Citizens' Participation Program (CPP) as required by the Del Mar Municipal Code (DMMC). Details regarding the outreach process are included in Appendix B, and a discussion of input from those meetings is provided in Chapter 2.

B. California Environmental Quality Act (CEQA) Compliance

The legislative and discretionary actions associated with the project are subject to environmental review pursuant to the California Environmental Quality Act (CEQA). An Environmental Impact Report is being prepared for the Specific Plan project to evaluate potential impacts and identify any necessary mitigation measures. The Draft EIR will be circulated for public review and comment, with a Planning Commission public workshop for input during the review period. A Final EIR including responses to comments will then be prepared. The Final EIR will need to be certified by the City prior to approval of the Specific Plan.

C. Concurrent Process for Adoption of the Specific Plan Legislative Actions and Discretionary Permits

The Watermark Del Mar Specific Plan (WDMSP) shall not be effective unless and until it is adopted by an Ordinance of the City Council. The Specific Plan is not subject to Measure B requirements for a public vote since it is not located within the City's Downtown Commercial Area (Central Commercial Zoning District).

Approval of the Specific Plan would not alone authorize the project to be built. In addition to the legislative changes, the developer is required to obtain development permits applicable to the Site. These permits would be processed through the Design Review Board and Planning Commission for review and recommendation under the Specific Plan Policy for Concurrent Processing. The necessary entitlement actions include:

- Design Review Permit
- Land Conservation Permit
- Floodplain Development Permit
- Lot Line Adjustment to merge the existing two legal lots
- Tentative and Final Subdivision Maps for Condominium purposes
- Coastal Development Permit
- Building Permits
- Tree Removal Permit
- Other development permits as required by the City of Del Mar

The Conditional Use Permit review required for this development site under the provisions of the Lagoon Overlay, Bluff/Slope/Canyon Overlay, and Coastal Development Ordinance would be satisfied through the review and approval of the WDMSP and associated environmental documentation/mitigation measures.

The following summarizes the general steps in the review and approval processes for the WDMSP and the discretionary Development Permit Applications. This section is informative only and is not intended to supersede any applicable provisions of the WDMSP or the Del Mar Municipal Code (DMMC).

1. **Design Review Board (DRB)**
   The Design Review Board shall review and make a recommendation to the City Council on:

   a. The Watermark Del Mar Specific Plan.

   b. The conceptual design plans and preliminary grading plans for Watermark Del Mar.

2. **Planning Commission**
   The Planning Commission shall review and make a recommendation to the City Council on:

   a. The Watermark Del Mar Specific Plan.

   b. The associated Community Plan Amendment to apply the WDMSP designation to the Del Mar Community Plan Land Use Map.

   c. The associated Rezone to create a new Watermark Del Mar Specific Plan (WDMSP) Zone to be designated on the Zoning Map.

   d. The associated Local Coastal Plan Amendment (LCPA) which shall consist of assignment of a new land use map designation for the areas within the Watermark Del Mar Specific Plan from the current LCP designation of: North Commercial (NC) Zone to: Watermark Del Mar Specific Plan.

   e. The adequacy of the Environmental Impact Report (EIR) prepared for the WDMSP and any associated California Environmental Quality Act (CEQA) documents.

3. **City Council**
   The City Council shall take final action on:

   a. An ordinance to approve the Watermark Del Mar Specific Plan and specify that the provisions of the WDMSP replace those of the North Commercial Zone, as they currently apply to the plan area of the Watermark Del Mar Specific Plan.

   b. A resolution amending the Community Plan to assign the Watermark Del Mar Specific Plan designation to land use exhibits, as noted above.

   c. Certification of the Final Environmental Impact Report for the Watermark Del Mar Specific Plan, along with any associated California Environmental Quality Act documents.

   d. A resolution to approve, and submit for California Coastal Commission certification, the Local Coastal Program Amendment (LCPA) for the Land Use Plan and Implementing Ordinance

components of the Del Mar Local Coastal Program. The City Council resolution approving the LCPAs shall specify that the LCPA and the Watermark Del Mar Specific Plan shall not be effective unless and until certified by the California Coastal Commission.

e. A resolution to approve discretionary permits for the Watermark Del Mar project.

4. Coastal Commission

The Specific Plan was prepared in conformance with the goals and policies of the Local Coastal Program for the City of Del Mar. An amendment of the Local Coastal Program, including land use designations and implementing regulations to reflect the Specific Plan designation (WDMSP) for the property, is subject to review and certification by the California Coastal Commission, following approval by the City Council as outlined above.

D. Development Agreement

A development agreement will be prepared to memorialize and vest the rights and public benefits embodied in the Specific Plan after its approval.

1.5 Relationship of the Specific Plan to the Del Mar Community Plan (General Plan)

The City of Del Mar Community Plan Housing Element 2013-2021 ("Housing Element") was adopted by City Council on May 20, 2013 and certified by the California Department of Housing and Community Development on June 6, 2013. The Housing Element indicates the City will pursue amendment to its land use policies and regulations in order to accommodate affordable housing opportunities. Specific measures include land use re-designations and modifications of zoning standards to accommodate higher density residential development. Implementation Program 4 addresses the Watermark property as follows:

> *Pursuant to Government Code Sections 65583.2(h) and (i), within 12 months of City Council adoption of the 2013-2021 Housing Element, the City will assign a new land use designation to two adjacent vacant parcels, roughly 2.3 acres in size in the NC Zone, to allow, by right, residential development of the properties at a density of 20-25 du/ac with such density allowance to include a requirement for a percentage of the residential units to be available, long-term, at affordable rates, either through dedication to a non-profit housing advocacy organization or through deed restrictions for no less than the minimum duration required under state housing law applicable to affordable dwelling units.*

This Specific Plan has been prepared as an alternative process to the City applying a new land use designation to the parcels directly. It is intended to provide the implementation mechanism for the legislative actions necessary to make the land use changes to achieve this residential designation and density in place of the current North Commercial land use designation.

Under this Specific Plan, the maximum density would be 20.5 units per acre, which is within the specified range of 20-25 units per acre. A key goal for the 20-25 target density range is to accommodate new residential units and ultimately deliver affordable units to the marketplace.Development under the Specific Plan would produce 48 residential units at a density of 20.5 dwelling units per acre, including 7 affordable housing units at this site. This would help implement the City of Del Mar Community Plan Housing Element.

The WDMSP implements the goals and policies of the Del Mar Community Plan as summarized below, with details provided in Chapter 8.

1. Provide for a housing density that can enable development of affordable housing units to provide opportunities for underserved segments of the community.

2. Enhance Del Mar's character in a way that provides for new multi-family use that blends with the community's overall village-like character.

3. Enhance this gateway entry to Del Mar with improved streetscape design and landscape.

4. Preserve sensitive areas on the property, with permanent open space protection for natural resources including the onsite marsh and area of sandstone bluff.

5. Provide development and design requirements for protection from flooding hazards.

6. Maintain or enhance water quality associated with the San Dieguito Lagoon with stormwater design measures.

7. Ensure energy efficiency and water conservation, including landscaping.

1.6 Relationship of the Specific Plan to the Coastal Act and the Del Mar Local Coastal Program

The Watermark Del Mar Specific Plan will require an LCP amendment, therefore approval by the Coastal Commission. Upon approval, the WDMSP will serve as an approved LCP amendment to facilitate protection and conservation of open space, and enable and regulate development of housing to meet statewide and city goals within the Specific Plan area.

This Specific Plan amends only the portions of the LCP that are specifically applicable to the WDMSP area. The portions of the LCP that are not amended herein remain in full force and effect as to the Specific Plan area. In addition, all other policies, provisions, and requirements shall remain in full force and effect as they apply to other property in Del Mar not situated within the boundary of the Specific Plan area.

The WDMSP is consistent with and implements the applicable Coastal Act and Del Mar LCP Land Use Plan policies and requirements for the Specific Plan area. A detailed

consistency review for the LCP Amendment is provided in Appendix A with a summary below.

Coastal Act

This WDMSP implements the goals of the Coastal Act, because it

1. Takes into account the social and economic needs of the people of the state providing for a variety of public benefits associated with affordable housing in a community with limited opportunities to meet such demand.

2. Makes provisions to protect, maintain, enhance and restore the overall quality of the coastal zone environment and resources, including undisturbed coastal bluffs and Coastal Brackish Marsh, a wetland habitat area on-site.

3. Supports the provision of new affordable housing opportunities for persons of low and moderate income in the coastal zone by providing for the construction of affordable housing at this site, which also implements other state requirements for housing in accordance with the City of Del Mar's adopted Housing Element (Section 30007)

4. Does not interfere with coastal-dependent uses, nor with any existing or potential public access to the sea, and is located near public sidewalks and trail opportunities in the immediate project area.

5. Establishes regulations for flood hazard avoidance to minimize risks to life and property considering potential for future sea level rise.

Del Mar Local Coastal Program

The WDMSP implements provisions and policies of the Del Mar Local Coastal Program (LCP) as summarized below, with details for each policy provided in Appendix A.

1. Establish standards for a higher density residential use to meet housing element goals and comply with flood hazard protections, while maintaining the character of low intensity development, including maximum two-story and 26-foot height buildings.

2. Provide design guidelines to further regulate the appearance of the multi-family structures. They include a specification that the buildings adjacent to streets have the character of separate structures as found throughout the community, and prohibit a single, large, monolithic building.

3. Preserve both the undisturbed bluffs and wetland area in open space

4. Limit the development footprint of the residential structures to the areas of the site that have been previously graded and disturbed.

5. Provide regulations to implement protection for all habitable spaces, which must be at or above the Base Flood Elevation.

6. Provide landscape regulations for non-invasive, primarily drought-tolerant plant materials, along with appropriate irrigation that will control runoff and avoid erosion.

7. Install all onsite utility line service extensions for the site development underground, with a program to underground existing overhead utility lines along the project frontage in collaboration with the City and SDG&E.

1.7 Relationship of the Specific Plan to the Del Mar Municipal Code

The Watermark Del Mar Specific Plan will conform to and implement the Del Mar Community Plan, as amended herein. It is a legislative document including a new set of zoning standards for the property that, in concert with other remaining portions of the Municipal Code, will be applied to new project development. Where there is a conflict between the provisions of this Specific Plan and other sections of the Del Mar Municipal Code, the provisions of the Watermark Del Mar Specific Plan shall prevail.

1.8 Regulatory Effect

Under California law, Specific Plans may be adopted either by ordinance or by resolution. This option allows local jurisdictions to determine if a Specific Plan is intended as a policy statement (if adopted by resolution) or a regulatory document having the effect of law (if adopted by ordinance). The City of Del Mar intends this Specific Plan to have regulatory effect, therefore this Specific Plan shall be adopted by ordinance. Once adopted, in the event of conflicts between the provisions and definitions of this Specific Plan and those of any other laws or ordinances of the City of Del Mar, the provisions and definitions of this Specific Plan shall prevail over such other provisions of said laws and ordinances.

1.9 Construction of Language

As used in this Specific Plan, the terms "shall" means mandatory or required; "should" means recommended or desired; and "may" means optional. Where stated, numerical metrics take precedence over graphic metrics.

1.10 Severability

If any term, provision, or condition of this Specific Plan is determined invalid, void, or unenforceable, the remainder of this Specific Plan shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform, taking into consideration the purposes of this Specific Plan.

CHAPTER 2 - PLANNING CONSIDERATIONS

This chapter provides a brief overview of the existing setting of the Watermark Del Mar Specific Plan area, including the existing land use, physical conditions and site constraints, as well as a summary of input from the community regarding design and compatibility preferences.

2.1 Regulatory Setting

Del Mar Community Plan

The Del Mar Community Plan designates the Site presently for Commercial Services use in the North Commercial land use category. The stated intent is to allow commercial and professional activities that provide a service to the community. More recently, the Community Plan Housing Element 2013-2021 identified the Site to be redesignated for residential development at a density that accommodates affordable housing units with modifications of zoning standards to accommodate the higher density residential development.

This Specific Plan has been prepared as an alternative process to the City applying a new land use designation to the parcels directly. It provides the implementation mechanism for the legislative actions necessary to make the land use changes to achieve this residential designation and density in place of the current North Commercial land use designation. The land use designation of the Site would be changed to WDMSP upon approval of this Specific Plan as detailed in Chapter 3.

Del Mar Municipal Code (DMMC) – Zoning

The Site is currently in the North Commercial (NC) Zone, which is consistent with the existing land use designation. The NC Zone regulations are contained in DMMC Section 30.24. This zone will be changed as part of this Specific Plan to WDMSP as detailed in Chapter 5.

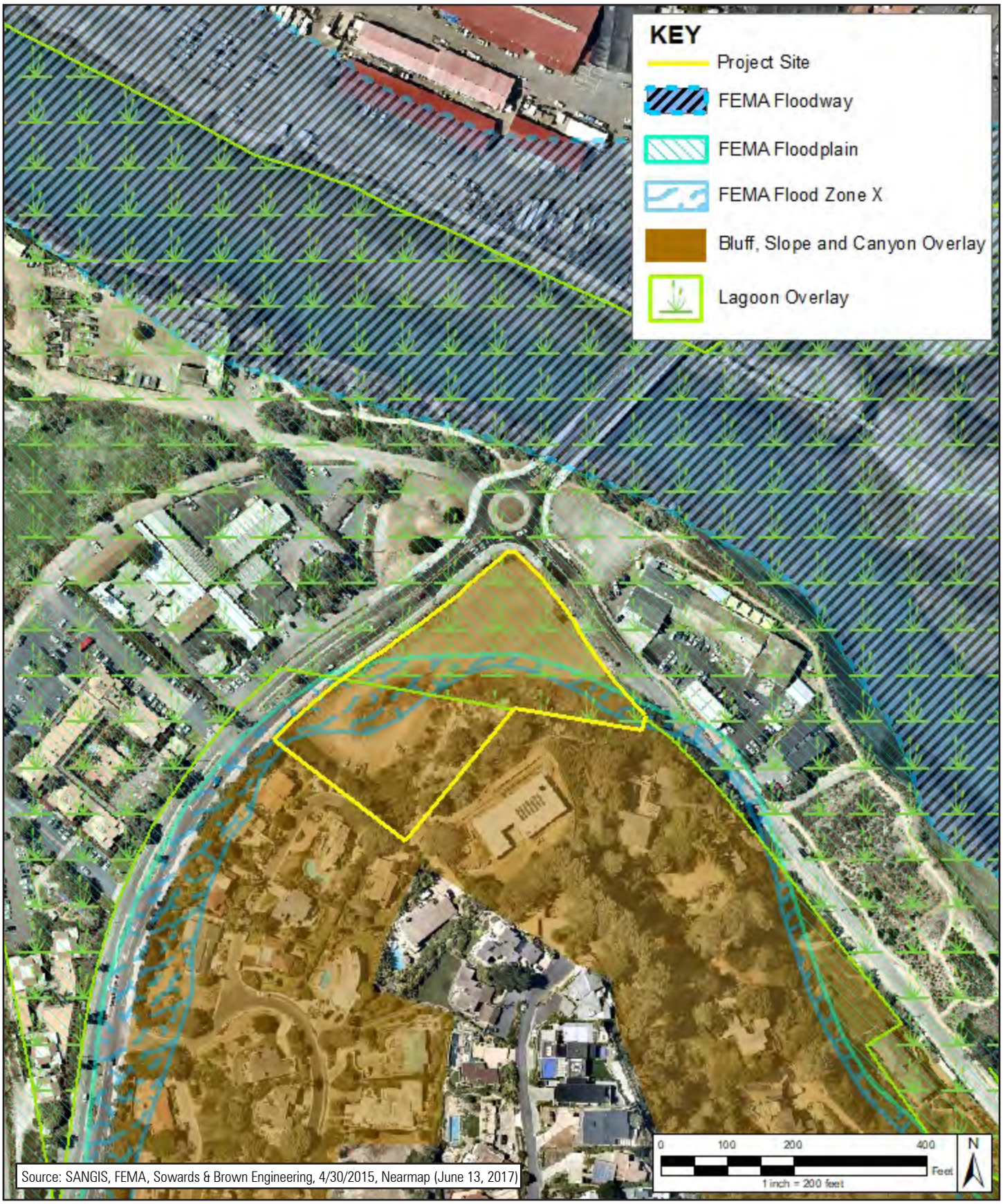
Del Mar Municipal Code (DMMC) – Zoning Overlays

There are three overlay zone designations applicable to some or all of the property including the Bluff, Slope and Canyon Overlay, Floodplain Overlay, and Lagoon Overlay. (Refer to Exhibit 2-1 for specific boundaries.)

APN	BSC	Lagoon	Floodplain
299-100-47	Yes	No	Yes *
299-100-48	Yes	Yes	Yes

** This parcel is not shown on the map of the Floodplain Overlay Zone on the zoning map or LCP map, but portions of the property fall within floodplain areas per the most recent FIRM map, and therefore are subject to compliance with the overlay zone policies and a Floodplain Development Permit is required.*

Exhibit 2-1 Existing Zoning Overlays



Source: SANGIS, FEMA, Sowards & Brown Engineering, 4/30/2015, Nearmap (June 13, 2017)

Local Coastal Plan

The Local Coastal Program Land Use Plan for the City of Del Mar designates the Site consistent with the Community Plan designation. It is located within a commercially designated area adjacent to Jimmy Durante Boulevard (North Commercial-NC). The NC Zone regulations and the three overlay zone designations as described above, (including the Bluff, Slope and Canyon Overlay, Floodplain Overlay, and Lagoon Overlay) are part of the Local Coastal Plan implementing regulations.

The Land Use Plan and Implementing Ordinances were certified by the Coastal Commission, and the City has authority for the processing of Coastal Development Permits for most projects within Del Mar. The Coastal Commission retains authority for processing coastal development permits for projects in areas known as "original jurisdiction" and for amendments to the Local Coastal Plan. The Site is not located within original jurisdiction area, but this Specific Plan will require an LCP amendment, therefore approval by the Coastal Commission. Upon approval of the amendment, the City of Del Mar would have permit authority on subsequent development permits, including the Coastal Development Permit (CDP). The site is located within the Coastal Commission Appeals Zone, and the City's final action on the CDP would be appealable to the Coastal Commission.

Existing Riverview FEIR and Discretionary Approvals

The Site was the subject of the Riverview Office Project Final Environmental Impact Report (2008 - State Clearinghouse Number 2005061143), and two current discretionary permit approvals in place associated with the Riverview Office Project (Design Review Board Permit DRB-08-28 and associated Land Conservation Permit LC-08-13). The Riverview Office Project included two, two-story commercial office buildings totaling 23,293 square feet, with 83 parking spaces on the Site. That approved project included grading, hardscaping, and landscaping within 200 feet of the San Dieguito Lagoon, and incorporated a buffer from the onsite wetland of 50 feet, with concurrence of the Department of Fish & Game (now CDFW). A recorded Development Agreement extending the expiration dates of the Riverview DRB and LC Permits is in place pending action on all required approvals for the Watermark Project, including this Specific Plan.

2.2 Site History and Current Property Use

The Site is currently vacant, and there is no evidence of previous structures or other permanent improvements on-site. However, based on aerial photographs, prior to 1959 the Site was subject to leveling and grading along the northern and western portions of the property near San Dieguito Drive and Jimmy Durante Boulevard. Significant grading, including cuts of up to 15 to 20 feet occurred between 1959 and 1979 along the southern and southeastern portions of the Site. The areas of the Site affected by previous excavation and grading are shown on Exhibit 2-2.

The Site is not paved, but is used seasonally, as it has been for several years, as a paid lot for overflow parking during the summer fair and racetrack events at the Del Mar Fairgrounds. Parking is located on the level portions of the Site, including the graded

Exhibit 2-2 Previously Disturbed/Graded Areas

Key

Current Property Line

N

No scale.

Sources and Notes: Both Jimmy Durante Blvd. and San Dieguito Drive, including the bridge, have been realigned since this 1973 photo. The current property boundary reflected on this exhibit was obtained by georeferencing the historical imagery (San Diego County, 1973, Flight 31, photograph 29) to current imagery (Nearmap aerial photo imagery flown June 13, 2017) and civil engineering CAD drawings with site boundary and topography (Sowards and Brown Engineering, rev. June 22, 2017) using three control points on building structures that have remained in place and first order polynomial transformation. The spatial relationship between the historical imagery and property line is accurate within these calibration parameters.

plateau area. This seasonal parking will continue as an interim use until the property is developed. The parking area markings onsite are visible on Exhibit 2-3.

2.3 Surrounding Land Uses

The Site is bounded by streets on two sides, with single family residential properties adjacent to the internal (non-street) boundaries. Other notable land uses in the project area include the San Dieguito River, located north-northeast of the Site beyond properties on the opposite side of San Dieguito Drive, the Del Mar Fairgrounds property further north, and the railroad tracks to the west, beyond commercially developed properties along Jimmy Durante Boulevard. (Refer to Exhibit 1-2.)

Diagonally across the intersection of Jimmy Durante Boulevard and San Dieguito Drive (northwest corner) is a linear park with an improved trail segment adjacent to the San Dieguito River known as Riverpath Del Mar. The property at the southwest corner is currently vacant. The property at the northeast corner has historically been used for vehicle parking and as a recycling yard and has recently been improved as a trailhead parking area to serve three nearby public access trails. Improvements include installation of two solar-powered parking machines and demarcation of 36 parking spaces on the existing decomposed granite surface.

Developed properties across San Dieguito Drive include varied business uses including Del Mar Blue Print, Del Mar Automotive, a brewery/restaurant, and a chiropractic office. Developed properties across Jimmy Durante Boulevard include retail and office businesses.

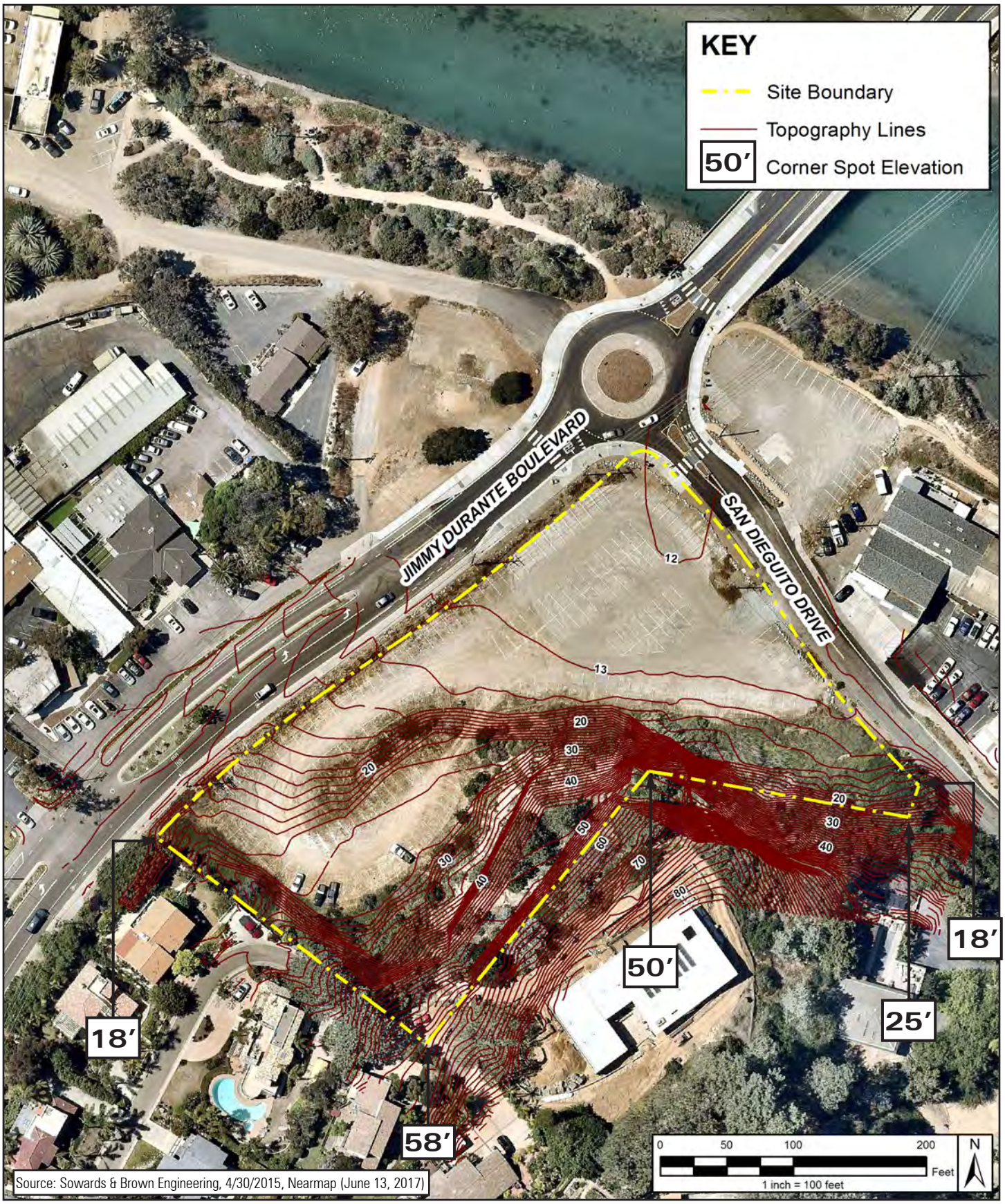
There are five residential properties that directly adjoin the Site within a larger existing area of single-family homes to the southwest, and atop the bluff to the south and southeast.

2.4 Physical Conditions and Resources

A. Topography

The WDMSP Site is located along the lower portions of a much larger bluff/ridge formation that extends offsite. The topographic relief of the Site, as shown on Exhibit 2-3, slopes generally downward from south to the north, toward the San Dieguito River. On-site elevations range from approximately 12 feet above mean sea level (MSL) near the northern corner of the Site to 60 feet above MSL in the southern portion of the Site. Onsite, there are relatively level areas along the adjacent streets at elevations from 12-18 feet above MSL. A level plateau area is located in the south central portion of the Site at an elevation of approximately 25 feet above MSL. The previously graded slopes that ascend to the southern and eastern perimeters of the Site provide a transition to offsite areas. The overall hillside slope continues off-site with single family homes terraced into the hillside/ridge landform that extends up to an elevation of approximately 300 feet above MSL.

Exhibit 2-3 Site Topography



Source: Sowards & Brown Engineering, 4/30/2015, Nearmap (June 13, 2017)

While much of the WDMSP property has been previously graded as shown on Exhibit 2-2, the remaining areas of natural topography onsite include an undisturbed sandstone bluff formation in the northeastern portion of the site near San Dieguito Drive. There is a small area of wetland marsh vegetation (4,750 square feet) at the toe of this bluff area (Exhibit 2-4). Both the portion of undisturbed bluffs on the Site and the wetland area will be outside any site grading, and designated by the Specific Plan to be preserved in open space. The development footprint of the residential structures will be limited to the areas of the site that have been previously graded and disturbed.

B. Soils/Geology

The WDMSP Site is underlain by Quaternary-age alluvium, talus deposits, old paralic deposits, and Tertiary-age sediments of the Torrey Sandstone and Delmar Formations. A thin and irregular veneer of man-placed artificial fill, generally a silty sand material, also mantles portions of the Site.

From a geologic and geotechnical perspective, the Site would be suitable for construction of a multifamily residential use as planned for the WDMSP property, if specific geotechnical recommendations are followed to address the existing geotechnical conditions at the Site. Such recommendations are required to be provided in conjunction with detailed grading plans for a project design in accordance with City of Del Mar engineering standards.

General techniques to address future development of the Site would likely include remedial grading including complete removal of talus and man-placed fill soils, removal and re-compaction of other near surface soils, ground improvement techniques (such as stone columns), and/or special foundation design (i.e. driven piles, auger-cast piles, or structural mat foundations), and dewatering during site construction or grading.

Some degree of ground shaking due to seismic activity along one of the regional active faults should be expected over the design life of the proposed project. However, construction in accordance with the requirements of the most recent edition of the California Building Code and the local governmental agencies should provide a level of life safety suitable for the type of development proposed.

C. Hydrology and Drainage

The WDMSP Site is located within the watershed of the San Dieguito River, and is at the downstream end of the San Dieguito Lagoon, which is tidally influenced. Portions of the site are within a Special Flood Hazard area as shown on FEMA's most recent Flood Insurance Rate Map, with a Base Flood Elevation of 18 feet AMSL. The flood zone areas are shown on Exhibit 2-1. The Site drains via overland flow across the graded, unpaved, urban lot generally toward the north and west, to the curb and gutter located in the adjacent San Dieguito Drive north of the Site. Flows are then intercepted by an existing curb inlet located at the intersection of San Dieguito Drive and Jimmy Durante Boulevard. The curb inlet conveys runoff to an existing storm drain outlet through an 18" RCP until directly discharging to the

San Dieguito River via outfall (City of Del Mar Storm Drain DHB 410) just south of Jimmy Duarte Boulevard Bridge.

Based on hydrological studies of the Site relative to its location within the watershed, it has been calculated that the 100-year peak flow from runoff associated with Site development can be safely discharged without flooding risk, and therefore, project development is exempt from peak flow detention requirements for 100-year storm flows. All stormwater runoff generated by Site development will be required to have water quality treatment in accordance with all San Diego Regional Water Quality Control Board's (SDRWQCB) and the City of Del Mar's Storm Water Management requirements.

D. Biological Resources

The WDMSP Site is undeveloped, but a majority of the Site is disturbed and used seasonally as a parking lot for the Del Mar Fairgrounds. The remainder of the Site is occupied by several different habitat types. (Refer to Exhibit 2-4.)

These include Non-Native Vegetation in the southwestern section of the Site, Southern Coastal Bluff Scrub in the southeastern corner of the property, and Disturbed Southern Coastal Bluff Scrub along the southern edge of the Site. Within this habitat are two sensitive plant species Del Mar Mesa Sand Aster (Corethrogyne filaginifolia var. linifolia), and Torrey Pine (Pinus torreyana). There is a small area (4,750 square feet) of Coastal Brackish Marsh, a wetland habitat, in the eastern part of the property that is isolated from the nearby San Dieguito lagoon. This area contains a sensitive plant species, Southwestern Spiny Rush (Juncus acutus var. leopoldii). The WDMSP implements the regulatory provisions of the Lagoon Overlay Zone, requiring this wetland to be avoided, protected in place, and buffered from future development by a 50-foot wetland buffer.

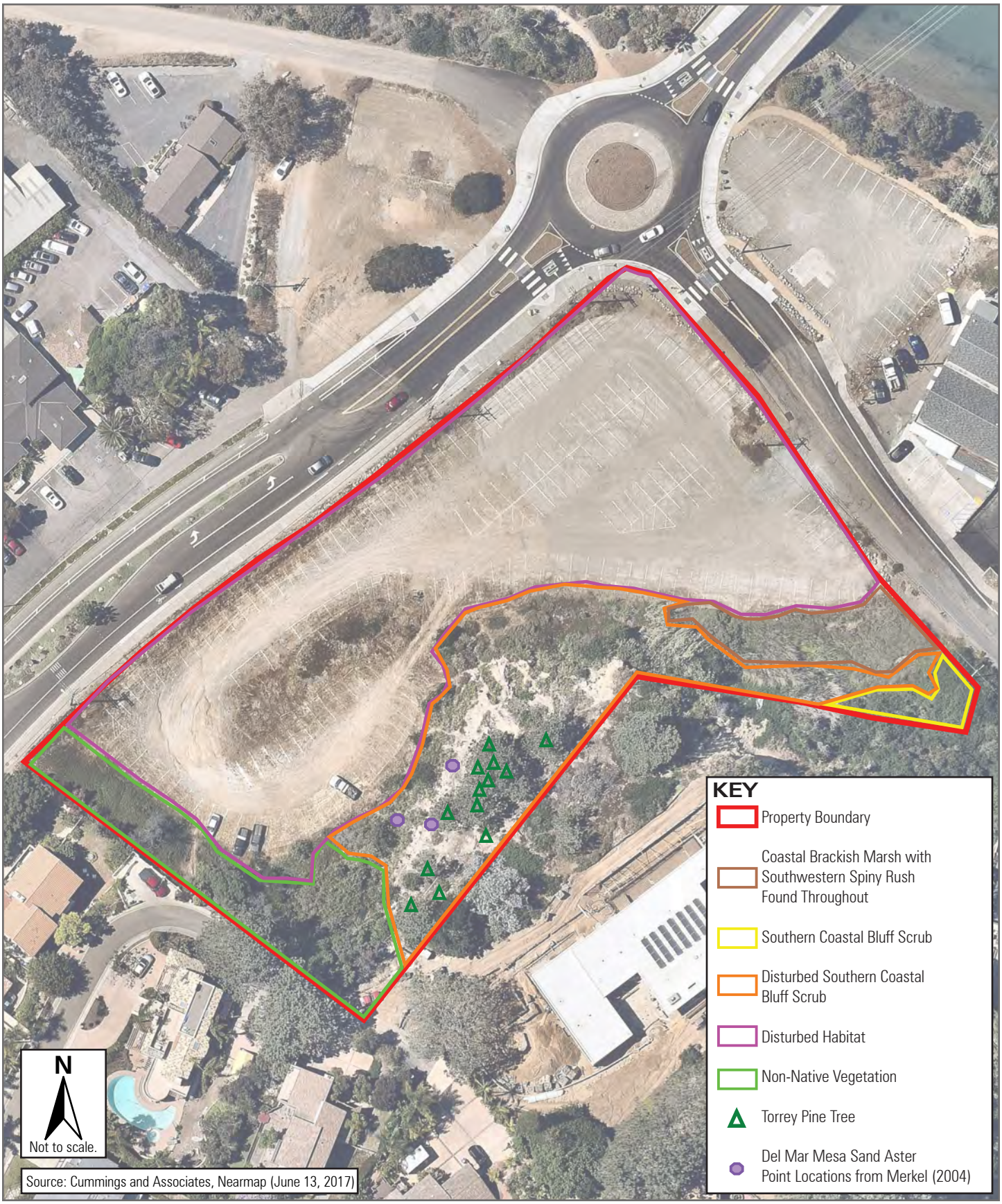
E. Cultural Resources

Based on archaeological review there are no known archaeological resources present on the property. However, there is potential for previously unknown archaeological resources to be discovered on site during excavation activities of the construction phase and monitoring during Site grading will be required.

2.5 Community Compatibility Input

Discretionary permits are being processed under the City of Del Mar's Concurrent Process along with the Specific Plan and other legislative actions. Project design concepts were presented in conjunction with the Specific Plan during plan preparation. The applicant conducted a number of community workshops for input on the proposed plans as part of the City Council-approved process for the project review that included input from the Design Review Board (DRB) and Planning Commission (PC) as well as additional community outreach. The comments provided in those meetings identified some key design concerns, which are summarized below. Some of the suggested modifications have been incorporated into the development and design standards

Exhibit 2-4 Vegetation and Sensitive Resources



as provided in Chapters 5 and 6 of this Specific Plan. The current project details are included in Appendix C.

A. Community Input Summary

Topic	Comments/Concerns
Density	▪ Too dense and too many units ▪ Housing Element density of 20-25 du/ac is too high. Maximum density should be no more than 17.5 du/ac, the current maximum density of the Community Plan
Streetscape/Bulk & Mass	▪ More separation needed between buildings ▪ More variation of setback along Jimmy Durante Boulevard ▪ Massing along Jimmy Durante Boulevard is too close to street - pull back retaining walls and add plantings in the setback
Underground Utilities	▪ Existing overhead transmission lines and poles along the project frontage should be put underground.
Interface with Existing Single Family Residential/Heather Lane	▪ Need larger building setback from property line ▪ Provide landscape buffer and prohibit pedestrian access to Heather Lane from Site ▪ Locate pool/active recreation areas away from existing homes ▪ Noise concerns from cars, garage sounds, roof decks, outdoor patios and balconies ▪ Lighting concerns from car headlights, residential windows, outdoor lighting
Parking	▪ Need more parking than standard due to lack of on street parking in the area, especially for guests
Flooding/Sea Level Rise	▪ Need to protect structures from flooding damage
Landscape	▪ Use drought-tolerant landscaping within the project ▪ Consider impacts to Torrey Pine trees
Bluffs and Slope Grading	▪ Protect the natural bluff formations
Traffic	▪ Issue of concern, but it was noted that the traffic volumes from residential use are less than projected with the Riverview commercial project previously approved for the Site.

B. Specific Plan Considerations

Both the Specific Plan criteria and the implementing project design have incorporated community input. The Specific Plan addresses these concerns through development regulations and design standards contained in Chapters 5 and 6. These include:

- Density limits - Total density implements the Housing Element at the low end of the density range (48 units).
- Power Line Undergrounding Program - agreed to lead a program to underground power lines along the project site frontage as outlined in Section 6.2C
- Setbacks to Adjacent Residential - Increased minimum building setbacks from existing neighbors to the southwest and southeast
- Fencing & Landscaping Standards – requires native and drought tolerant plant materials, sets fencing standards and parkway landscaping including trees, requires Torrey Pine relocation, or mitigation in accordance with DMMC.
- Establishes requirements for flood protection of future habitable structures, including the use of podium construction
- Incorporates natural bluff formations into the Open Space land use designation for the site, with construction limited to areas of previously graded slopes.
- Building Design Guidelines – to assure visual quality, require variation in facades, horizontal and vertical planes, roofing and materials, and specifies use of multiple smaller buildings across the site to avoid monolithic multi-family structures.
- Lighting Criteria – requires shielding and dark sky compliance

C. Project Design Considerations

The project design included in Appendix C, further addresses these community concerns by:

- LProvides parking on-site to serve the residents and guests in a concealed parking garage that also limits potential vehicular noise, headlights, and parking lot lighting impacts to nearby residents, and that provides a podium to meet flood standards.
- Locates pool and recreation facility away from adjacent neighbors at corner.
- Adds larger setbacks from Heather Lane, ranging from 15-40 feet providing a substantial landscape buffer to the adjacent residential neighbors.

CHAPTER 3 - LAND USE AND INFRASTRUCTURE

3.1 Land Use Objectives

Specific Plan Objective

The overriding objective of the WDMSP is to implement the Housing Element goals and policies for providing additional land suitable for new residential development at 20-25 units per acre, and to address affordable housing needs as part of the project.

Goals

In order to accomplish this objective at the Site, the ultimate development must balance:

- the policy objectives to develop this Site with multi-family residential uses, including delivery of constructed affordable housing units, while addressing
- physical constraints of the site, such as biological resources, floodplain and slope conditions,
- community compatibility constraints such as the desire for maintaining the low scale, high quality village character of Del Mar, and considering
- financial feasibility to assure that the intended units are constructed.

All of these important issues were considered during preparation of this Specific Plan document, and this extensive analysis was used to establish the following goals and regulatory modifications to achieve the objective for the Watermark Del Mar Specific Plan:

1. Promote a quality multifamily residential community consistent with the goals and policies of the Del Mar Community Plan.
2. Establish an appropriate land use designation that serves the housing needs of current and future citizens to achieve a density of 20 to 25 units per acre.
3. Provide affordable housing units within the project to help meet the City of Del Mar goals for such units (further defined in Chapter 5, Section 5.9-I).
4. Preserve natural and previously undisturbed bluffs within the Site and protect and preserve on-site wetlands.
5. Establish development standards and design regulations to achieve the multifamily density specified by the Housing Element while addressing the physical site constraints including drainage and flood protection, and providing for visually attractive landscaping, architecture, and site amenities.

6. Create a multi-family residential development with pedestrian linkage and walkability to trails, parks, and beaches, as well as to the businesses and restaurants that serve the local community.

7. Provide parking for all the residential units that screens automobiles from view from the public right of way, minimizes lighting impacts, provides secure off-street parking, and serves to provide a Podium building level safely above the Base Flood Elevation for residential units while minimizing impacts and disturbance to ground water.

8. Provide residential units through the condominium subdivision process with units constructed to for-sale standards. As part of the condominium process, a Homeowner's Association will be established with responsibility to manage common areas and implement CC&Rs for the development.

9. Establish a site and building design that enhances the streetscape and location at one of the important entryways into the City of Del Mar.

3.2 Land Use Distribution

This Specific Plan establishes a new residential land use designation for the property. As shown on Exhibit 3-1, the land use and zoning designations for the Site will be Watermark Del Mar Specific Plan (WDMSP).

The Conceptual Land Use Categories (Exhibit 3-2) and the table below identify the categories that provide the framework for development within the Specific Plan area.

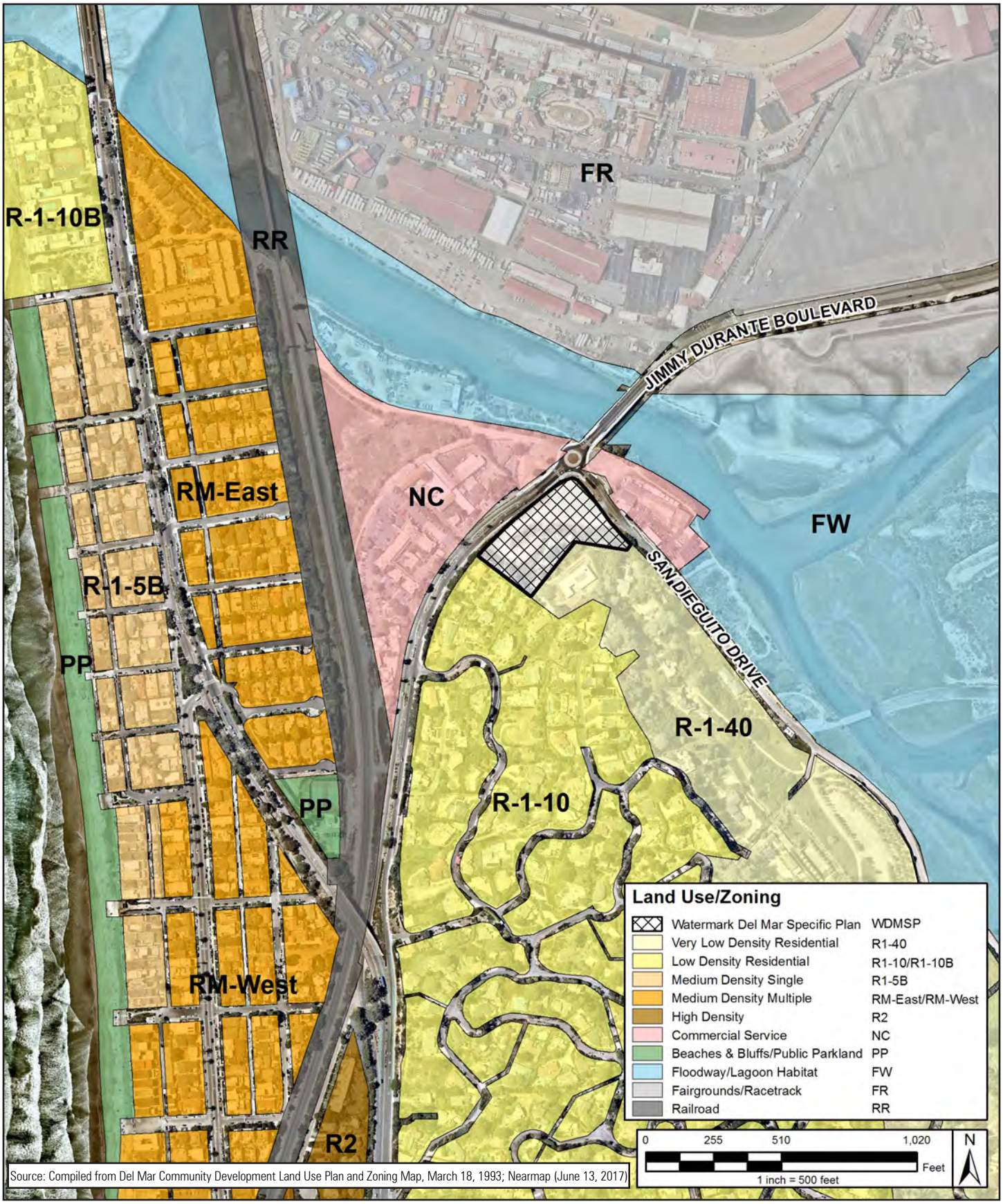
Land Use Category	Acreage
Residential (R-MF)	1.93
Open Space (OS)	0.44
Total Specific Plan Acreage	2.37

Specific uses permitted within each land use category are described in Chapter 5. Development standards and associated regulations and requirements governing development and design for all area within the Specific Plan are set forth in Chapters 5 and 6.

A. Residential (R-MF)

The Residential (R-MF) land use category applies to the site areas available for development of residential units and associated facilities and amenities. This designation is intended to accommodate multi-family residential development.

Exhibit 3-1 Land Use and Zoning Designations



Source: Compiled from Del Mar Community Development Land Use Plan and Zoning Map, March 18, 1993; Nearmap (June 13, 2017)

Exhibit 3-2 Land Use Categories

B. Open Space (OS)

The Open Space (OS) land use category is intended to accommodate permanent natural open space, drainage courses, and to protect natural plant and animal habitats associated with habitat restoration and enhancement areas, buffers, stormwater management areas, and utility, access, and other easements. The OS designation is applied to the onsite wetland and bluff areas.

3.3 Modifications Necessary to Support the Provision of Affordable Units

In order to provide for a multifamily residential project consistent with the City's Housing Element policies, the WDMSP provides individualized development and design regulations to address Site specific conditions. These include new development regulations, including standards for land use, zoning and design in Chapters 5 and 6, which have been crafted to implement the Specific Plan goals and balance the criteria and constraints associated with policy objectives, physical conditions and community desires. These modifications are required to adapt to and address the physical constraints of the Site in order to accommodate higher density development, meet the community character criteria desired by the City of Del Mar and achieve a viable development which will result in construction of affordable housing units.

A. Flood Zone Development

One of key constraints on the site is the location of 100-year floodplain. While it could be possible to achieve the Housing Element's target density at this site without developing in the flood zone, that would require the types of buildings more typically used for the higher densities, with 3-5 stories, and affecting height, bulk and mass in a way that would be inconsistent with Del Mar's desired community character. In order to provide sufficient density at this site AND restrict the buildings to two stories, it is necessary to distribute the units across more of the site. In addition, habitable areas must be located above the Base Flood Elevation (BFE) of 18 feet AMSL. The solution for this was a design concept to create a partially subterranean parking garage that could create a podium level that is above the BFE for construction of the residential units.

In order to regulate this, several new and modified definitions are incorporated into the Specific Plan (Chapter 5), including a definition of "Podium," and a new term, "Established Grade."

The concept for having the garage roof/podium deck serve as the first level for the residential units and as the basis for measuring building height in the flood zone is included in the new defined term Established Grade. The standard provides for a specific elevation measurement standard at the podium of 20 feet AMSL, and also defines that areas outside the podium within the floodplain measure height from the BFE of 18 feet AMSL. Areas outside the flood zone will continue to use existing grade for measurement of height, and this has been added to the new Established Grade definition for clarity.

Other definitions are revised where necessary to incorporate the new Established Grade terminology. This includes: Height, which utilizes the 26 foot/2-story limitation found elsewhere in Del Mar, and Basement, both of which redefine the basis for measurement to be Established Grade.

Other definitions are affected by the introduction of the Podium construction considering that the podium can be viewed as equivalent to ground level. Lot Coverage is modified to exclude open areas above garage podium decks, since these areas will serve as courtyard open space, and Bulk Floor Area is modified to exclude areas below the garage roof/Podium deck. The Bulk Floor Area definition was further revised to exclude Basement areas, and to add a clarification that partially enclosed outdoor areas below a roof are included. A related definition for Floor Area Ratio was added to clarify the method of calculation.

B. Hillside Development

The Specific Plan criteria allow for development on previously graded slopes on the Site to accommodate the proposed Hillside Units. Similar to nearby residential development, these sloped areas can provide opportunities for larger, higher value view units. This allows for a more diverse offering of units within the Site, and such units support the overall economic value of the site. These units also can help to create a more compatible transition from the nearby adjoining hillside terraced single family neighborhood to the multi-family development and supports added value to the community.

Hillside Units have been added as a defined term as used in the Specific Plan. The definitions of Basement, Level and Story have been revised for clarity and internal consistency. The measurement criteria for basement was relocated to be within the Basement definition (instead of Story), to add criteria regarding the number of stories and levels for Hillside Units, and to explicitly state that two basement levels are permitted for Hillside Units. The Established Grade for these units remains Existing Grade, so that there is no change from the DMMC in how height is measured for these units.

The Specific Plan definition for Multiple Family Dwellings has been modified to add specificity and clarify that detached individual and duplex units are included when part of an overall group of units.

C. Density and Intensity

The WDMSP establishes a new, higher density residential category to meet Housing Element provisions, with accompanying standards for lot coverage (45%), floor area ratio (0.62) and minimum street setbacks that vary from most other residential zones within Del Mar. These standards are necessary to accommodate a multi-family development on this Site.

All of the WDMSP regulations are provided to allow development in conformance with the Specific Plan that will meet the stated objective and goals for the Site, and the modifications are justified by exceptional pubic benefits to be provided by such a project.

3.4 Public Facilities, Infrastructure and Services

A. Existing Circulation and Access

Regional access to the City of Del Mar is provided primarily by the I-5 freeway via interchanges with Via de la Valle and Del Mar Heights Road, as well as from Highway 101 (known as Camino del Mar within the City). Primary access to the WDMSP property is via Jimmy Durante Boulevard to San Dieguito Drive, both of which border the property.

Jimmy Durante Boulevard has an existing 80-foot right-of-way adjacent to the WDMSP property. This street is one of the primary North/South routes in Del Mar, and is generally improved with two travel lanes, divided by a raised, landscape median, with turn pockets at driveways and intersections along its length. North of the Site, on the bridge over the San Dieguito River, there is no median. The road has curbs and gutters with on-street bike lanes striped on both sides. On the east side of the street is a continuous sidewalk from south of the San Dieguito River Bridge into the Village, including along the project frontage. The City has recently (2017) constructed a roundabout at the intersection of Jimmy Durante Boulevard and San Dieguito Drive. The new roundabout improvements include curb, gutter and sidewalks with pedestrian crossing access and a raised median to guide traffic within the roundabout.

San Dieguito Drive has an existing 60-foot right-of-way adjacent to the WDMSP property. This street is striped for two travel lanes, with an AC berm on both sides of the street but no curb or gutter along much of its length. Approaching the intersection with Jimmy Durante Boulevard, the street widens at the transition to the new roundabout.

Transit in the City of Del Mar includes bus service by the North County Transit district (NCTD) via Route 101, which currently operates on Camino Del Mar. The nearest bus stop is approximately 0.7 mile from the Site. Seasonally, additional bus service is available to the Del Mar Fairgrounds. Regional rail service is provided by the COASTER commuter rail and Amtrak, with the nearest station in Solana Beach, approximately 2.5 miles from the Site.

Pedestrian and Bicycle Circulation – Del Mar has an extensive system of sidewalks, trails and bike lanes. As noted above there are existing sidewalk and bike lanes on Jimmy Durante Blvd. fronting the Site. Existing trail access is located across San Dieguito Drive from the Site.

B. Water Facilities

Existing public water lines are located in streets adjacent to the Site as shown on Exhibit 3-3. Water service will be provided through a point of connection in Jimmy Durante Boulevard, extended to the property to a new on-site water meter assembly. A private water system will be provided to serve the Site uses for domestic, fire, and landscape irrigation purposes. A new fire

Exhibit 3-9 Water, Sewer, and Storm Drain Infrastructure

hydrant will be provided on Jimmy Durante Boulevard and an additional hydrant will be provided on San Dieguito Drive

C. Sewer Facilities

Existing sewer lines are located in streets adjacent to the Site as shown on Exhibit 3-9. Sanitary sewer service will be provided for Specific Plan development by connecting to the existing sanitary sewer main adjacent to the property at the westernmost portion of the Site's Jimmy Durante Boulevard frontage.

D. Stormwater and Drainage Facilities

Existing drainage facilities in the area include an existing 18" RCP storm drain that currently conveys runoff from the site and nearby areas, that is then discharged to the San Dieguito River via outfall (City of Del Mar Storm Drain DHB 410) just south of Jimmy Duarte Boulevard Bridge. A private storm drain system is required to be incorporated into the design for Specific Plan development that will connect to the existing storm drain outlet on San Dieguito Drive. All runoff shall provide storm water treatment and best management practices that may include a bio-retention basin prior to being discharged to the existing storm drain and outfall. The conceptual drainage plan is shown on Exhibit 3-10.

E. Energy

Gas and electric utility services are provided by San Diego Gas and Electric. There are existing overhead electrical transmission and distribution lines currently along Jimmy Durante Boulevard and San Dieguito Drive. Natural gas lines currently exist to the west and south of the Site. Electrical and natural gas service is available to serve the energy needs associated with the residential buildings and supporting amenities associated with Specific Plan development.

F. Telecommunications

Cable services in Del Mar are provided by Time Warner Cable, with telecommunications services available from AT&T. Satellite services for television, internet and phone are also available from other private providers.

G. Waste Disposal

Trash and recycling services in the City of Del Mar are provided through an exclusive franchise agreement, currently with Waste Management of North County. Multi-family residential services are provided using bins. Multi-family housing complexes of five units or more are required to participate in recycling programs, and the City of Del Mar has a mandatory recycling ordinance that requires all designated recyclable material be separated from other trash.

H. Law enforcement

The City of Del Mar contracts for law enforcement services from the San Diego County Sheriff's Department, including routine patrol of streets by patrol and traffic

deputies, crime prevention services, and other law enforcement services. Del Mar also has a Park Ranger who supplements enforcement within public parks and public spaces.

I. Fire Protection

Fire protection throughout the City of Del Mar is provided by the Del Mar Fire Department. The responsibilities of the department include fire suppression and protection, emergency medical services, vehicle accidents, rescue, and hazardous material incident response. The Del Mar Fire Department consists of one fire station located on the San Diego County Fairgrounds on Jimmy Durante Boulevard, north of the Site across the bridge, and currently serves the fairgrounds as well as the City of Del Mar.

J. Parks and Beaches

The City of Del Mar has over 2 miles of coastline beach, with associated water activities, as well as existing formal park facilities at Powerhouse and Seagrove Parks near 15th Street with informal picnic areas and a children's play area. North Beach (Dog Beach) is located north of 29th Street, and there are a variety of trail opportunities within and immediately adjacent to the City. These include the Scripps Bluff Preserve and the San Dieguito River Lagoon located at the northern end of Del Mar.

The City of Del Mar provides a Lifeguard Department, which patrols and oversees the extensive beach areas. The lifeguards establish and maintain safe swimming and surfing areas, and provide water-related rescues and medical aid. The lifeguards are also certified to issue citations for certain infractions that may occur on the beach.

The City of Del Mar also has a Park Ranger Division comprised of the park ranger and beach and community service officers that works closely with the Lifeguard and Community Services Department to ensure public safety and well-being of the community. They protect the natural resources of the beaches, parks, lagoons, preserves, waterways, and community parkland.

K. Libraries

The Del Mar Library is located at 1309 Camino Del Mar, providing local library services and facilities to Del Mar residents. It is a part of the San Diego County Library system, with access to the resources of its 33 branches.

L. Schools

Public education within the City of Del Mar is provided by the Del Mar Union School District for elementary school (grades K-6) and the San Dieguito Union High School District for middle and high school (grades 7-12).

CHAPTER 4 - EXCEPTIONAL PUBLIC BENEFITS

In order to provide for a multifamily residential project at a density consistent with the City's Housing Element policies, the WDMSP provides individualized development and design regulations in Chapters 5 and 6 to address Site specific conditions as presented in Section 3.3. The Specific Plan process was selected for Watermark Del Mar precisely because it allows for customized regulations that can accommodate residential housing at this Site to implement the Housing Element while establishing certainty for the community regarding the development parameters, limitations for the planned use and specific public benefits. In conjunction with these regulations provided through the Specific Plan, there are public benefits that will be achieved for the City of Del Mar and its citizens, through implementation of the Specific Plan provisions and project development.

4.1 List of Exceptional Public Benefits

The exceptional public benefits associated with the WDMSP include:

1. **Implementation of the Housing Element policies to rezone this property for residential use at a density to allow affordable housing, with the applicant taking on preparation and processing of a Specific Plan in lieu of the City directly rezoning to designate the WDMSP property for residential use. [48 units proposed at a density of 20.5 units per acre].**
   - The Specific Plan process allows for a balancing of public policies, uses and development regulations to establish customized regulations that can accommodate the specified housing density at this Site in a manner that addresses specific site conditions, while establishing transparency and certainty for the community regarding the development parameters, limitations for the planned use, and defined public benefits.
   - Instead of the City incurring public costs and utilizing public resources for processing the legislative changes, including environmental review, those studies and documents are incorporated into the Specific Plan process whose costs are paid by the applicant.
   - The Specific Plan establishes the number, location, and design of residential units to be developed, and incorporates a specific number and mix of affordable housing units to help meet the City of Del Mar goals for such units.
   - The number of total units that the Housing Element policies would allow was voluntarily reduced by the developer to address the priorities and preferences of the community

2. **Construct on-site affordable housing units within the WDMSP property [seven units proposed].**
   - Implementation of the WDMSP provisions will deliver affordable housing units for the City of Del Mar at the Site, as illustrated by the project plans development package in Appendix C.

3. **Restrict on-site affordable housing units to remain affordable for a period of not less than 55 years.**
   - This exceeds the more typical requirement for affordability restrictions to be in place for a term of 30 years, thereby increasing the duration of time the affordable housing units are guaranteed to be available within the City.

4. **Transfer ownership of four on-site affordable housing units to a local non-profit public benefit corporation [transfer four of the seven units proposed].**
   - Providing for this transfer allows an opportunity for the on-site affordable units to meet more restrictive affordability standards to serve the community and further implement Housing Element goals. These units are a substantial financial value that is being eliminated

5. **Off-street parking provided within a parking structure.**
   - Eliminates the need for surface parking, thereby avoiding neighborhood concerns with a surface parking lot such as noise from vehicular activity and vehicle lights from evening use.
   - Hides and minimizes the visual impact of the automobile and service areas.
   - Provides a method to raise habitable areas of the units outside the floodplain, and serve as a podium level to allow residential units with a maximum height of two stories to maintain Del Mar community character.
   - Provides podium that is available for courtyard open space and internal pedestrian circulation for residential units.

6. **Increased setback to existing, adjacent single family residential development to maintain a minimum separation from property line between 15 and 35 feet.**
   - Addresses neighbor concerns regarding bulk and proximity of new development to existing homes.

7. **Reduce total traffic volumes (ADT) anticipated from development of the Site with residential uses versus trips from the existing underlying commercial designation or the currently approved Riverview office complex.**
   - This addresses community concerns regarding increased traffic volumes that would be associated with Site development.

8. **Remove surface, seasonal parking lot use adjacent to existing residences and onsite wetlands.**
   - This will eliminate a use that is perceived to have negative visual, traffic and environmental effects.

9. **Create an architectural and landscape design using high quality materials and community–inspired architecture to enhance one of the northern "gateways" to the City of Del Mar.**
   - Provides enhancements at this "gateway" with streetscape elements that can be replicated for other nearby properties in the area at the time they upgrade or redevelop.

10. **Preserve onsite bluffs that are visible from San Dieguito Lagoon trails as open space.**
   - Establishes building envelopes that will retain the character of the existing on and offsite bluffs.

11. **Provide $10,000 contribution towards trail improvements.**
   - This contribution was provided by the landowner prior to preparation of the Specific Plan in consideration for the opportunity to pursue the residential project and Specific Plan.

12. **Contribution towards intersection improvements at Jimmy Durante Boulevard and San Dieguito Drive, in the form of an up-front payment of $185,000.**
   - The advance payment towards improvement costs provided funds for design studies and improvements in advance of any site development.

13. **Restore onsite wetlands.**
   - Provide removal of invasive plant species and restoration of 4,750 sf coastal brackish marsh on the Site
   - Establish a wetland buffer of 50 feet where none currently exists.

14. **Underground power lines along project street frontages.**
   - Lead a program to underground power lines in conjunctions with Site development along the Jimmy Durante Boulevard and San Dieguito Drive, frontages, in collaboration with the City and SDG&E
   - Fund up to 50% of costs for undergrounding along the project frontage, with cost sharing and/or reimbursement for balance by City.

CHAPTER 5 - ZONING REGULATIONS

5.1 Purpose (WDMSP.010)

The purpose of the WDMSP Zone is to establish development standards to regulate land uses and development of property within the Watermark Del Mar Specific Plan. These regulations implement the goals and policies of the Del Mar Community Plan, including the Housing Element, and the statutes of the State of California regarding the provision of housing for persons of a variety of income levels. This Chapter of the WDMSP specifies regulations for site planning, development standards, and intensity of land use in order to: 1) accommodate the implementation of the residential density called for in this Specific Plan; 2) address flood hazard constraints at the property; 3) maintain community character; and 4) protect natural bluffs and wetland areas within the Site.

5.2 Boundaries (WDMSP.020)

Property within the WDMSP Zone consists of the 103,282 square-foot (2.37-acre) property, located south of the intersection of Jimmy Durante Boulevard and San Dieguito Drive, currently identified by the San Diego County Assessor as Assessor's Parcel Numbers (APNs) 299-100-47 and 299-100-48. Within the parcel boundaries, there are no public rights of way, vehicular access way or private roads or easements serving five or more units, therefore the Net Lot Area and Gross Lot Area are the same (2.37 acres). The WDMSP Zone shall be designated by ordinance to be depicted upon the City Zoning Map.

5.3 Applicability (WDMSP.030)

Unless otherwise specified, the provisions of this Chapter shall be applicable to all property within the geographic boundaries of the WDMSP, and are the controlling provisions of this Specific Plan. Some of the development standards contained in this Chapter supplement or replace those found in other Chapters of the Del Mar Municipal Code (DMMC). Unless specified in this Chapter, the other provisions of the DMMC shall also apply in the WDMSP. Where there is a conflict between the provisions of this and other Chapters of the DMMC, the provisions of this Chapter shall prevail.

The regulations found within this Section are not subject to "relief" otherwise allowed through the Del Mar Variance process (Section 30.74). Exceptions to, or relief from, the requirements found within this Section are limited to those specified within the language of this Section itself.

Questions or disputes relating to a Determination of Allowable Use (Sections 5.5-5.8) or an Interpretation of the zoning provisions in this Chapter 5 of the Specific Plan shall be resolved as provided for in this WDMSP. In addition to otherwise required finding(s),

the authority making such determination shall consider those goals, policies, and objectives that best implement the Community and Specific Plan.

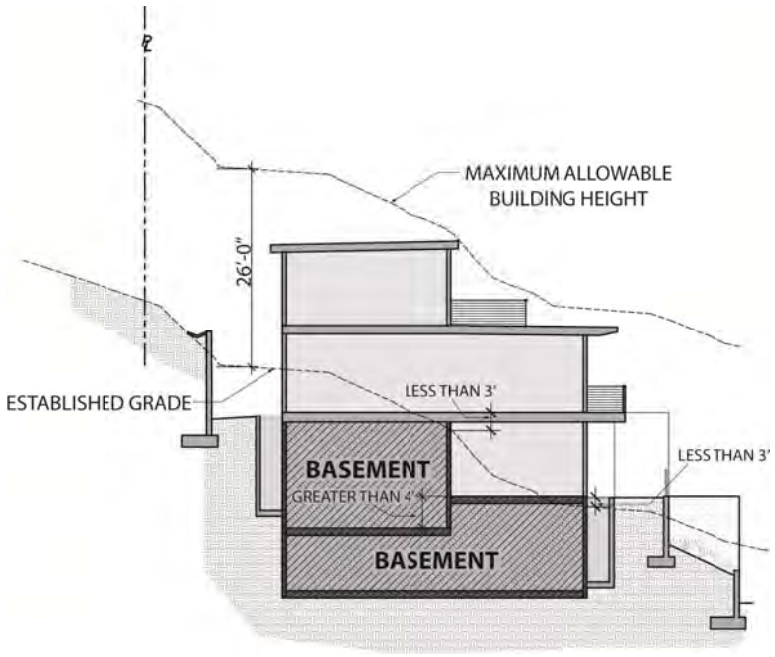
5.4 Definitions (WDMSP.040)

Words, phrases and terms not specifically defined in this Chapter shall have the same definition as provided in the DMMC, or, where not defined in the DMMC, as applied in normal usage.

For purposes of the WDMSP, the following terms shall have the meanings set forth in this Section. The need for and benefits associated with these modifications are discussed in Section 3.3 of Chapter 3.

A. Basement

A level of a building that is fully or partially below the Established Grade adjacent to the floor area, in which the finished floor above is less than three feet above the lowest point of the adjacent Established Grade. Basement levels shall not be considered as Stories. Hillside Units as defined in this Specific Plan are permitted to have two Basement levels per unit.



B. Bulk Floor Area

For purposes of determining compliance with the bulk floor area limitations contained in this Chapter, "Bulk Floor Area" is the total horizontal area, expressed in square feet, of all floors below a roof including enclosed and partially enclosed outdoor areas, measured as defined in DMMC Section 30.72.020 but excluding Basements and all areas within a parking garage. Those areas below the garage

roof/Podium deck shall be exempt from the calculation of a building's Bulk Floor Area, including parking spaces, drive aisles, and rooms/areas provided for mechanical equipment, waste bins, storage, mail, fire risers, stairwells and similar common areas.

C. Dwelling, Multiple Family

A group of residential units, each designed to house individuals or families in separate living quarters, within a single building or in multiple buildings on a single property, that are adjacent vertically or horizontally. These units may be attached or detached, in groups of one, two, or more, may have single or multiple owners, and may be rented or owner-occupied. A property with "Multiple Family Dwellings" will have: 1) multiple individual or family residents, each with their own title or lease; 2) private areas that are the personal space of each individual or family resident into which no one else has right of access; 3) separate entrances for each individual or family resident; 4) common areas that all residents have the right to use.

D. Established Grade (for Measurement of Height)

Where any portion of a habitable structure is built over a Podium, such as structured parking, the "Established Grade" shall be 20 feet above MSL. This Established Grade elevation includes a safety factor of two feet (2'-0") above the Base Flood Elevation of the San Dieguito River.

Where habitable structures are built on grade within the flood zone, the Established Grade shall be 18 feet above MSL, which is the Base Flood Elevation of the San Dieguito River.

Where habitable structures are built on grade outside the flood zone, the Established Grade shall be the existing grade of the Site, prior to the start of any current or proposed Site preparation, grading, or construction. Existing grades of the Site are shown on Exhibit 2-3.

E. Floor Area Ratio (FAR)

A number which indicates how many square feet of enclosed building area may be constructed on a property. FAR is determined by dividing the Bulk Floor Area of all buildings on a lot, as defined in this Chapter, by the net area of that property. In circumstances where a building spans two or more parcels owned by the same entity, or where the City allows the parcels to be developed as a combined project, several parcels may be treated as a single building site for the purpose of calculating the building's allowable Floor Area Ratio.

F. Height, Building or Structure

Building or structure Height shall be the greatest vertical dimension computed by using the vertical distance from any point of the roof or structure to the Established Grade directly below.

G. Hillside Units

The five residential townhome buildings built on grade outside the flood zone, adjacent to the southeasterly property line.

H. Level

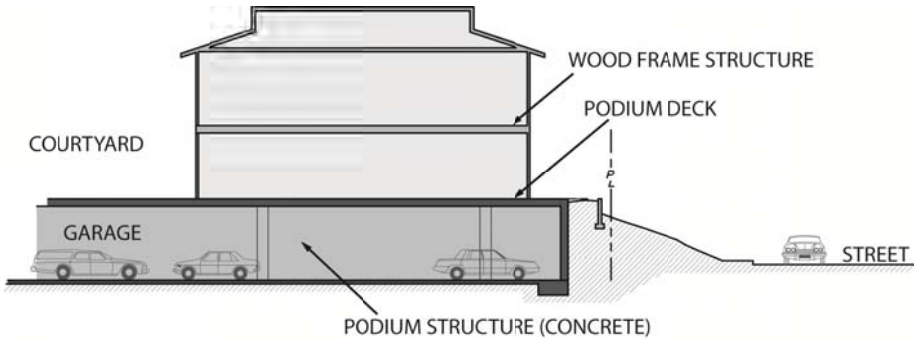
A horizontal division of a building extending from a floor to the next floor above, or if there is no higher floor, to the ceiling directly above. If the finished floor of one portion of a building lies no more than 4 feet above that of an adjacent finished floor, it shall be considered as being the same level as that of the adjacent floor. A level may or may not be a Story.

I. Lot Coverage

That percentage of a lot which, when viewed directly from above, would be covered by a structure or structures, or any part thereof, including any area under roofs, cantilevered decks, balconies, roof overhangs, and eaves, but not including Podium deck areas above a parking garage that are open to the sky. Paved areas, swimming pool decks, planters and other similar structures open to the sky shall not be considered as "Lot Coverage."

J. Podium

"Podium" construction is a concrete structure that forms the base level(s) of a building, such as a subterranean or first level garage. The concrete lid of the structure allows the construction above to be classified as a separate and distinct building type. The WDMSP project features two stories of residential wood frame construction above a concrete garage structure which includes uses such as mailboxes, waste bins, mechanical equipment, and storage rooms. The horizontal separation and building base for the residential units and courtyards above is also referred to as the "Podium deck" or "Podium level."



K. Story

That portion of a building included between the upper surface of any floor and the upper surface of the floor next above it. If any part of any level of a building is considered a Story, that entire level shall be considered a Story. If there is no floor above, then the space between such floor and the highest point of the finished ceiling next above it shall be considered a Story. A Story shall include:

1. An attic with a vertical dimension of five feet six inches or more between the floor and the level of the finished roof immediately above.
2. Any space with a vertical dimension of five feet six inches or more between the floor and the finished floor above or, where there is no floor above, the level of the finished roof immediately above; and
3. A mezzanine when such mezzanine exceeds one-third of the total floor area of the larger space in which it is located.

Hillside Units within this Specific Plan, are allowed to have multiple levels tiered with the site topography. In no place shall these units exceed two stories or the Height limit, whichever is lower. The multiple building levels for Hillside Units may include up to two Basement levels per unit, as defined above, which do not count as Stories.

5.5 Allowable Uses (WDMSP.050)

The uses allowed in the WDMSP Zone are based on land use category as listed below.

A. Residential Multi-Family (R-MF)

1. Multiple-family Dwellings in attached or detached unit configurations.

2. Office uses attendant to the operation of an on-site multifamily residential development with the cumulative area of such office use areas limited to a maximum total of 1,000 sq. ft.

3. Recreation areas and amenities including but not limited to swimming pools and spas, community rooms.

4. Infrastructure facilities including but not limited to those necessary for drainage and flood control, water recharge and percolation areas, retention or detention of flood waters, and other facilities necessary to provide water quality improvements and reduce water runoff pollutants; public communications; ingress/egress road; lighting; and other facilities necessary to provide for public safety or health.

5. Access roads, utilities, and infrastructure (such as landscaping, lighting, and signage).

6. Rental of residential units on a Long Term or Short Term basis, only as allowed by and in accordance with the DMMC. Units within Watermark Del Mar shall

comply with the DMMC regulations as applicable to rental of multi-family residential units, as may be amended. To the extent the DMMC is modified or amended to allow for additional short-term rental opportunities subject to the provision of affordable housing, the affordable housing provided as part of Watermark in accordance with the Specific Plan shall satisfy any such future requirement.

B. Open Space (OS)

1. Conservation and enhancement (protection of sensitive species, environmentally sensitive habitat areas, waters, wetlands, riparian, and water quality).

2. Infrastructure facilities including but not limited to those necessary for drainage and flood control, water recharge and percolation areas, retention or detention of flood waters, and other facilities necessary to provide water quality improvements and reduce water runoff pollutants; and other facilities necessary to provide for public safety or health.

3. Trails for access as minimally necessary for maintenance of habitat, buffers, utilities and infrastructure (revegetation, landscaping, fencing and signage for educational or restrictive management purposes) but excluding trails for motor vehicles.

4. Accessory or related uses that support the permitted passive open space uses, such as signage, fencing, open air classroom/education

5.6 Accessory Uses (WDMSP.060)

The following accessory uses are allowed in the WDMSP Zone:

1. Those uses, amenities and facilities customarily incidental to any use allowed in the WDMSP Zone. Examples may include but not be limited to: a leasing office, a security office, a business center, and storage facilities.

2. Off-street parking for motor vehicles and bicycles serving any allowed use.

3. Recreational uses and facilities intended for use by residents of on-site dwelling units, including but not limited to indoor and outdoor fitness facilities, swimming pools, spas, saunas, and common area patio spaces.

4. Home occupation as authorized by the DMMC.

5.7 Temporary Uses (WDMSP.080)

The following temporary uses are allowed in the WDMSP Zone:

1. Seasonal Parking is allowed to continue as an interim use until the property is developed. Such parking shall be located within areas of the Site historically used for such parking.

2. Construction trailer and/or information trailer up to 12 feet x 56 feet is allowed. Any trailer shall be located only within previously disturbed areas of the Site and may be located in areas historically used for seasonal parking.

5.8 Site Development Standards (WDMSP.090)

A. Density

The maximum density shall be 20.5 dwelling units per acre based on the net area of the Specific Plan boundaries (2.37 acres).

B. Lot Dimensions

Minimum lot size and dimensions are not applicable in the Specific Plan area as the Site is to be developed as a condominium project for multi-family residential uses.

C. Setbacks

The following are the minimum setbacks to all structures on the Site, including parking structure/Podium levels. Fences and walls may be located beyond the setback line. Architectural projections (such as cornices, belt course, sills, eave projections, footing, fireplaces/chimneys and awnings) without enclosing walls or screening may project beyond the minimum setback line by not more than two feet.

Boundary Location		Minimum Structure Setback
From San Dieguito Drive ROW		0 feet
From Jimmy Durante Blvd ROW		0 feet
From external, non-street property boundaries	Southwest (Heather Lane)	15 feet
	Southeast	15 feet
From wetland boundary		50 feet*

* The limits of the Open Space land use category incorporate this 50-foot building setback from the wetland boundary. The standard is included in this table to reinforce this requirement.

D. Height

1. The maximum Building Height shall be twenty-six feet (26′-0″) above the Established Grade as defined in this Chapter. This height limit applies to all buildings regardless of the number of levels within a structure.

2. All habitable space shall be at or above the BFE (Base Flood Elevation).

3. Specified rooftop structures, such as chimneys, vents, and solar equipment may exceed this Height in accordance with Chapter 30.86.110.B of the DMMC.

E. Floor Area Ratio:

The maximum Floor Area Ratio (FAR) shall be 0.65. The total Bulk Floor Area used to determine the FAR shall be calculated as defined in this Chapter.

F. Lot Coverage

The maximum Lot Coverage shall be forty-five percent (0.45). Lot Coverage shall be calculated as defined in this Chapter.

G. Parking Standards

Location
All on-site parking shall be provided in a parking garage, which shall be designed in a manner so that the roof also serves as the Podium level for habitable structures at an elevation above the 100-year Base Flood Elevation of the San Dieguito River.

Parking Garage Access
All vehicular access to the parking garage shall be from San Dieguito Drive.

1. Parking shall be for the use of residents and their guests only.

2. The garage shall be secured by a gate with access control at the private driveway to enhance the security of the parking structure and control vehicle access to the structure. The access control design shall provide for adequate room to enable a vehicle to turn around and exit if unable to enter the gate.

Size of Parking Spaces
Standard parking spaces shall be a minimum of 9 feet wide by 18 feet deep with 24-foot drive aisles when using 90-degree parking spaces.

1. Compact parking spaces shall be a minimum of 7.5 feet wide by 15 feet deep with 24-foot drive aisles when using 90-degree parking spaces, and may be provided for up to 10% of the total number of required parking spaces.

2. Tandem parking spaces shall be a minimum of 9 feet wide by 36 feet deep with 24-foot drive aisles when using 90-degree parking spaces, and may be provided for up to 20% of the total number of required resident parking spaces.

Accessible Spaces
All required accessible (disabled) parking spaces shall be constructed in a manner required by the most current editions(s) of the State of California Uniform Building Code (Title 24) as amended.

Number of Spaces Required
The required number of parking spaces within the parking structure shall be based upon the cumulative total required for residential units within the project as follows:

Studio or 1 Bedroom Unit	1 space per unit
2 or 3 Bedroom Unit	2 spaces per unit
4 or more Bedroom Unit	3 spaces per unit
Guest Parking	0.25 space per unit

When the calculation of the requirements for guest parking per this Chapter results in a fractional portion of a parking space, a fraction of one-half or greater shall be construed as one required space and a remaining fraction of less than one-half shall be disregarded from the calculation of required spaces.

Use of Parking Spaces

1. Guest parking spaces shall be designated and reserved for guest parking only, and identified through signage as "Guest Parking."

2. All parking spaces within the parking structure shall be prohibited from use for the storage of recreational vehicles, boats, trailers or other items that would prohibit parking by motor vehicles and motorcycles.

H. Use of Public Right-of-Way

Adjacent public rights-of-way, outside the WDMSP project boundaries, may be used for grading, landscape and hardscape to provide for an integrated streetscape, screening of the parking structure, and pedestrian and/or bicycle connections, subject to compliance with applicable provisions of DMMC Chapter 23.38, Encroachment Permits.

I. Requirement for Provision of Affordable Dwelling Units

1. When the number of residential units approved for development at this Site is at the maximum WDMSP density of 48 units (20.5 dwelling units per acre), seven of the total dwelling units shall be constructed and reserved for use as affordable dwelling units. Fewer total units may result in a proportional reduction in the number of affordable units.

2. Density calculations resulting in a fraction of one-half or greater of a residential unit shall be rounded up to the next whole number and a remaining fraction of less than one-half shall be rounded down.

3. The affordable dwelling units required or developed per this Section shall include a mixture of unit sizes. Based on seven units being reserved as affordable, this will include two studio units, one one-bedroom units, and four two-bedroom units.

4. The rental rates or purchase price for all affordable dwelling units required pursuant to this Section shall be calculated in accordance with affordability levels for moderate income households [120% of the Area Median Income ("AMI")] as defined by the State of California Department of Housing and Community Development (HCD), and the San Diego County Office of Housing and Community Development for San Diego County, and as adjusted and published annually.

5. The affordable dwelling units required or developed per this Section shall be subject to the recordation of a deed restriction committing the property owner and successors in interest to limiting rental rates or purchase prices to the affordability rates to families with income levels at 120% of AMI or less as specified in this Chapter for a period of not less than 55 years from the date of issuance of the Certificate of Occupancy for such residential unit(s).

6. In lieu of a deed restriction required to ensure affordability as provided in this Section, all or part of the affordable dwelling units may be sold, deeded, or otherwise transferred to the City of Del Mar or to any other managing agency acceptable to the City of Del Mar or local non-profit public benefit corporation ("Local NP"), approved by the City of Del Mar. Any affordable dwelling units that are sold, deeded, or otherwise transferred to the City of Del Mar or other managing agency or Local NP pursuant to this section shall remain in full compliance with all codes and provisions for providing the required percentage of affordable dwelling units. If the units are transferred to a Local NP, as a condition of the transfer, the Watermark property owner. would receive a charitable contribution receipt from the Local NP for the appraised value of the donated units. Any such proposed transfer would be subject to acceptable contract provisions. At its option, the Local NP may elect to provide the Affordable Units on a more restrictive basis (as low, very-low or extremely-low income units) through its own internal policy(ies).

J. Design Review

1. Development in the WDMSP shall be subject to compliance with the applicable standards of review and review processes contained in the DMMC Chapter 23.08, the Del Mar Design Review Ordinance, and any amendments thereto, and Council Policy 112 regarding Specific Plan processing.

2. In addition to compliance with the Design Review Ordinance, development in the WDMSP shall be in compliance with the Design Guidelines in Chapter 6 of this Specific Plan.

K. Special Regulations - Bluff, Slope and Canyon Overlay Zone

Notwithstanding the applicable provisions of Chapter 30.52 of the DMMC (Bluff, Slope, and Canyon Overlay Zone) for purposes of this Chapter, the terms "natural slope," "steep slope," "substantial slope," "substantial steep slope," and/or "sensitive slope" shall mean slopes that meet all of the following criteria:

1. Have a gradient of 25% or greater;

2. Are part of a continuous landform with a vertical rise of 20 feet or more either on-site or extending off-site;

3. Have not been previously graded or otherwise disturbed; and

4. Contain predominantly native, natural plant species/habitat.

The existence of the above conditions shall be demonstrated to the satisfaction of the Planning Director.

The criteria listed above are a modification from the DMMC and are included in this Specific Plan to accommodate the proposed hillside townhome units. These units will be located within portions of the site documented to have been previously graded. These provide for more diverse offering of units within the Site, with larger, higher value view units. Such units support the overall economic value of the site to allow the exceptional public benefit of donating four units to a designated non-profit to assure long-term affordability. These modified regulations of the BSC overlay help to create a more compatible transition from the nearby adjoining hillside terraced neighborhood to the multi-family development and support added value to the community.

L. Special Regulations – Lagoon Overlay Zone

Development within the WDMSP Zone shall comply with all applicable provisions of Chapter 30.53 of the DMMC (Lagoon Overlay Zone). Specific provisions for the onsite wetland and buffer within WDMSP are as follows:

1. The Coastal Brackish Marsh wetland shall be enhanced by removal of invasives and restoration of additional native species, with an enhanced wetland buffer of 50 feet provided. Based on the very small size and marginal condition of the existing wetland, a 50-foot buffer would serve to protect the environmental and functional habitat values of the restored wetland, and lands which are integrally important in supporting the full range of the wetland and adjacent upland biological community through their function as upland transitional habitat.

2. Improvements associated with the wetland buffer shall include fencing, signage and may include a bio-retention basin, which are necessary to provide protection, preservation, and enhancement of adjacent wetland areas. The areas southeast of the wetland shall remain in place with removal of exotics and revegetation with native Coastal Bluff Scrub species for enhanced upland vegetation. The area of the existing unpaved parking area shall be re-graded to create a buffer to the development edge. The access driveway and residential areas shall be raised above existing grade, such that the buffer area will provide a physical transition between the development and the marsh using slopes, the basin and native plantings to function as a buffer to the marsh. This area shall be protected via fencing and signage (DMMC 30.53.110).

3. Runoff from the project development that is directed into the bio-retention basin shall not be directed into the marsh. Project drainage shall be segregated from the marsh so that the marsh itself will continue to function and flow as it currently does.

4. The 50-foot buffer area shall include restoration and long-term maintenance for the buffer and any bio-retention basin bmp along with a Land Conservation Easement (in accordance with DMMC 30.53.130) to assure long term to ensure future protection of the designated area(s) from encroachment, disturbance, or degradation, and protection of the restored ecological function of the habitats.

The Lagoon Overlay Zone requires a buffer no less than 50-feet from wetlands, and the WMDMSP regulations are consistent with that provision for the onsite Coastal Brackish Marsh area onsite. The replacement of the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer will be subject to approval from the California Department of Fish and Wildlife (CDFW) as required of any wetland buffer proposal of less than 100-feet (DMMC 30.53.100). A wetland buffer width of 50-feet from this small marsh area was previously determined appropriate with the approved Riverview Office Project at this site. The 50-foot buffer width is still appropriate at this location given the very small size of the wetland, the improvement in the existing area adjacent to the wetland from an unvegetated dirt parking lot to an area that will be enhanced with native vegetation, and the addition of fencing and signage, all of which will combine to decrease existing edge effects to the marsh by limiting public use and creating additional native habitat to buffer the marsh.

M. Special Regulations – Floodplain Overlay Zone

Development within the WDMSP Zone shall comply with all applicable provisions of Chapter 30.56 of the DMMC (Floodplain Overlay Zone).

N. Condominium Form of Ownership

Nothing in this Chapter shall preclude a condominium form of ownership in accordance with DMMC Title 24 (Subdivisions). Construction in accordance with this Specific Plan shall be to "for-sale" standards. It is anticipated that this Site will be developed as a single development project, and will have an HOA with CC&Rs incorporating property management responsibilities.

Market rate units that are adjacent (horizontally or vertically) may be combined in accordance with this paragraph; combining of affordable housing units is prohibited. In the event that adjacent market rate condominium units are held in the same ownership, such units may be consolidated/combined into a single unit, subject to issuance of a building permit in compliance with building code requirements in effect at the time of permit issuance. To the extent that such consolidation affects only the internal configuration of each affected unit, no additional City review is required. Parking for such combined units shall be based on the original unit configuration as shown in the condominium plan and shall not be reduced. A unit that is combined under this provision may be modified to return to separate units per the original condominium plan, also subject to compliance with current building code requirements, and the parking shall be reassigned to each unit as originally specified.

CHAPTER 6 - DESIGN GUIDELINES

6.1 Purpose and Intent

The following guidelines and standards address site planning and design elements applicable to the overall Specific Plan property. Objectives of the Watermark Del Mar Design Guidelines are to:

- Establish a high quality, cohesive design concept to create an image for Watermark Del Mar that reflects the broader community character and will enhance this northern gateway into the City of Del Mar.
- Provide the City of Del Mar with assurance that the Specific Plan area will develop in accordance with the design quality and character proposed herein.
- Serve as a reference for Staff, the Design Review Board, Planning Commission, and City Council in the review and evaluation of development within the Specific Plan.

These Design Guidelines will ensure that the Specific Plan area reflects the vision embodied in the following concepts:

- Establish common features in site planning, architecture, landscape architecture and other design details to create a highly livable multi-family residential development that provides a range of housing sizes, ensures lasting value for the residential units, and seamlessly incorporates affordable housing units as part of the development.
- Materials and methods of construction should be specific to the regional area and climatic zone, exhibiting continuity of history and culture and compatibility with local character and community identity.
- The architectural image of the Specific Plan will be perceived primarily from the public streets adjacent to the property. Therefore, building scale and roof forms, as the primary design components, require careful articulation in their architectural expression as they relate to the public realm.
- Enhance the streetscape and appearance along the site frontage by creating visual interest and variety that maintains an appropriate scale and pattern of development.
- Provide adequate, usable, safe, and high-quality common courtyards and private amenity areas for residents.

Creativity and innovation, as well as consistent quality, are encouraged in the implementation of these guidelines.

6.2 Site Design Guidelines

A. Circulation

This section provides the standards for Site access and improvements to streets adjacent to the Site. Access to Watermark Del Mar is from Jimmy Durante Boulevard to San Dieguito Drive.

1. Vehicular access to Watermark Del Mar shall be from a single driveway on San Dieguito Drive. The location of the driveway should be in approximately the same location as the existing driveway currently in use for fairground, racetrack, and event parking, a minimum of 175 feet from the intersection with Jimmy Durante Boulevard.

2. The driveway curb cut shall access onto a private drive ramp to enter the secured parking facility for residents and guests.

3. A Fire Access Plan shall be prepared and approved by the Fire Marshall in conjunction with Site development plans.

4. A variety of pedestrian/cyclist access points to Watermark Del Mar shall be provided. In addition to access adjacent to the main parking structure ramp, additional pedestrian/cyclist entry points should be provided at a second location on San Dieguito Drive and at 2-3 locations along Jimmy Durante Boulevard to provide convenient access to the walking route to the Plaza and the downtown area to the south, and to the San Dieguito Lagoon and riverside trail opportunities to the north.

B. Parking

1. Parking for residents and guests shall be provided in a common parking structure designed to screen parking areas from the view of adjacent properties and public rights-of-way.

2. The parking structure may be constructed partially below ground. The structure shall be screened from view from adjacent properties or rights-of way through the use of low decorative walls, earth mounding, landscaping, and/or a combination thereof.

3. Access to the parking structure shall be secured, and controlled by gates, card key access system or other controls that will enhance the security of the parking structure and control vehicular access to the structure.

4. Bicycle parking/storage areas should be provided in the parking garage and at the Podium deck level. Storage may also be included within individual units to accommodate cyclists.

C. Pedestrian & Streetscape Improvements

San Dieguito Drive Frontage

1. Watermark Del Mar shall provide new sidewalk improvements extending from the existing roundabout improvements along the full length of the Site's frontage on San Dieguito Drive. Within the parkway, streetscape landscaping shall be provided in accordance with Section 6.4.C.

2. ADA Access shall be provided from the San Dieguito Drive public right-of-way into Watermark Del Mar.

3. An on-street loading zone space shall be provided along the San Dieguito Drive frontage, southeast of the planned driveway access into the Site. This loading zone space shall be designed to provide space for truck deliveries, including loading/unloading of furniture and appliances typically associated with the move-in and move-out of residents. The loading zone area shall include provisions for a pedestrian ramp at the sidewalk. This will link with pedestrian access to the Site, which in turn will provide access to the Podium level and elevators.

Jimmy Durante Boulevard Frontage

1. The recent roundabout installation has altered this gateway entry to Del Mar, and the design for Watermark and the adjacent parkway can enhance this streetscape appearance. Streetscape landscaping shall be provided in accordance with Section 6.4.C.

2. Sidewalk improvements were installed in 2016 along the entire property frontage of Jimmy Durante Boulevard, and extended around the corner at the intersection with San Dieguito Drive as part of the roundabout construction in 2017. Development on the Site shall repair/replace sidewalk improvements within the right-of-way along the project frontage if required to repair any damage as a result of new construction.

3. Jimmy Durante Boulevard may include special landscape treatments in the right-of-way to screen the parking garage Podium, including include sloped fill with landscaping. Further details are provided within the Landscape Design Guidelines (Section 6.4).

Utility Undergrounding

There are currently overhead utility lines for both distribution and transmission along the Site frontage on Jimmy Durante Boulevard and San Dieguito Drive. In conjunction with development of the Watermark Del Mar project, the developer shall lead a program to underground power lines along the property frontage, and shall be responsible for 50% of the costs for undergrounding adjacent to the Site. The undergrounding shall be planned in conjunction with the City of Del Mar and SDG&E.

6.3 Architectural Guidelines

A. Architectural Character

Watermark Del Mar is situated at a key intersection leading into the Village area of Del Mar and provides an opportunity to transform what is now a vacant lot into a welcoming northern gateway. To accomplish this, the design character the architecture should use timeless, coastal-inspired architecture that joins and enhances the architectural tradition established in Del Mar. The architectural elements specified in the WDMSP have been selected to achieve a distinctive identity, expressing a thoughtful integration of building structures with the distinctive coastal Del Mar vernacular that has evolved over time. Utilizing the elements that give the town its special casual coastal character as part of the project design will help the new development integrate harmoniously with the broader, established architectural fabric of Del Mar.

The Coastal vernacular is characterized by an eclectic mix of style elements and materials that reflect traditional and natural materials, and incorporate contemporary interpretation of classic features with simple forms and details. Buildings are architecturally distinguished by their low to moderate pitched roofs, projecting eaves, wood details, open porches and balconies.

The architectural image for Watermark Del Mar will be perceived primarily from the adjacent public streets and the design approach for Watermark Del Mar is to suggest a collection of beach homes when viewed from Jimmy Durante Boulevard. Providing articulation of building massing, scale and roof forms will be important elements to establish the desired variation and visual separation between the buildings. The intent of the Specific Plan is that both setbacks and individual building elevations will vary to contribute to an aesthetically pleasing and unique streetscape. Using varied finishes, colors, and material details from building to building can further distinguish them to create visual separation and interest. Within that variation, the elements for each should maintain integrity of the design style.

B. Building Massing and Scale

1. Building facades and rooflines shall provide a variety of architectural elements along Jimmy Durante Boulevard and San Dieguito Drive.

2. Building massing shall avoid a monolithic, repetitive pattern, and instead, units should be grouped in different configurations, with multiple buildings to create varied form and massing on the property.

3. Articulation (projections and recesses) of wall planes should be used to provide shadow and depth for elevations that are highly visible from Jimmy Durante Boulevard and San Dieguito Drive.

4. Variation to the number and mix of unit sizes (studio, one-bedroom, two-bedroom, and three or more bedrooms) is encouraged to provide more opportunities for variety in the building sizes, configurations, and

resulting form and details such as placement of window and doorway openings.

5. Large expanses of flat wall planes, both vertically and horizontally are prohibited. Long unbroken facades and box-like architecture elements should be avoided.

6. Building massing should maintain important vistas towards the bluffs along San Dieguito Drive.

C. Exterior Materials and Finishes

A combination of materials, textures, and colors should be used to help articulate the building design and achieve greater variety, visual interest, and richness in the architectural character. Exhibit 6-1 illustrates examples of stone, brick, plaster, and wood elements that are representative of the Del Mar palette and the coastal architectural elements found throughout Del Mar that are appropriate for Watermark Del Mar, including the following:

1. Natural materials with rustic texture such as brick, stone and wood.

2. Architectural siding including horizontal clapboard, vertical board and batten, and shingle elements.

3. Smooth, sand, or other light finish texture on exterior plaster or stucco.

4. Coursed stone or brick, stone laid in a random texture of rounded cobblestones, rubblework, brick or quarry stone foundations.

5. Contrasting trim using semi-transparent stain or accent painted wood.

6. A seaside inspired color palette shall be incorporated into the design, with color differentiation used within the overall project to reduce monotony and avoid repetitiveness within the building facades. Building colors should be predominantly natural tones, generally light colors with darker or lighter accents to highlight the character of the structure, particularly for balcony rails and awnings.

7. Material and finish changes should occur at logical break points on the structure.

8. Contrasting materials between first and second floors are encouraged when complementary to the design.

D. Roofs and Roof-Mounted Equipment

1. A variety of roof forms should be used on buildings within Watermark Del Mar, that may include low-sloping pitched, gable end, hip, shed, and/or flat roofs.

2. Roof materials may include concrete "shingle" tile and dimensional asphalt/composition shingles that mimic the appearance of natural slate or natural shake roofing shingles, or standing seam metal. Based on fire concerns, wooden roofs are not permitted, and shingle roof forms should be those designed to recall the ambiance of wooden roofs.

3. Different roof styles, materials, and colors should be used on adjacent structures to enhance the visual distinction between buildings.

4. Where used, solar panels are to be integrated into the roof design, flush with the roof slope. Frames should be colored to complement the roof, whenever feasible.

5. Any roof decks and associated rooftop penetrations (e.g. access stairs, handrails, etc.) shall be architecturally integrated into the design of the structures.

6. Any roof appurtenances including mechanical equipment shall be shielded, noise attenuated, and architecturally screened from view from surrounding properties and public rights-of-way. Roof-mounted A/C units are not permitted.

E. Architectural Details

Architectural elements including balconies, decks, and chimneys should be integrated with building elevations to provide articulation and avoid large uniform wall masses. Specific architectural details consistent with the coastal theme may include the following types of elements:

1. Patio trellises, pergolas, or shed roof elements.

2. Decorative beams at eaves, exposed rafter tails, or projecting eaves to create shadow lines and contrast.

3. Square or cylindrical columns supported by a low pier base.

4. Where chimneys are used as architectural features, materials that contrast from the adjacent wall surface are encouraged to add visual texture and articulation.

5. Chimneys may include decorative metal caps that match trim colors.

6. Windows are important to the timeless coastal-inspired design, incorporating expansive light and connection to the outdoors. Window elements may include tall French doors, transom windows, double-hung or casement windows which may incorporate different sized window panes, horizontal banks of windows, or window mullion patterns.

Exhibit 6-1 Architectural Character Imagery

F. Trash Enclosures and Mailboxes

1. Waste receptacles, including adequate areas for both trash and recyclable bins, shall be provided internally within the parking structure or be adequately screened from view from surrounding properties or public rights-of way. Scout service, where a low-profile truck is used to pull bins to the collection truck, is available in Del Mar for accessing bins within parking garages. The size of bins, their location, and collection frequency necessary to serve the residents shall be coordinated with the waste removal provider, which is currently Waste Management.

2. Common mailboxes and storage areas shall be provided internally within the parking structure.

3. All utility and mechanical equipment shall be screened from view.

G. Exterior Lighting

1. Exterior lighting shall be provided to illuminate outdoor areas including Podium deck level courtyards and walkways, residential entries, and recreational areas. Energy conservation, safety, and security shall be emphasized when designating any lighting system.

2. All exterior lighting should be designed and incorporated into the building schemes to provide illumination appropriate for the level of activity and to avoid glare and spillover. Gradual reduction of light intensity between major points of activity should provide the desired modulation of light without sacrificing safety and utility.

3. Lighting fixture types, quantities, and locations should be carefully considered in order to best enhance the residential environment, support and protect a Dark Sky night environment, and ensure consistency with the lighting policies of the City of Del Mar.

4. All fixtures shall be designed to prevent light spillover, with illumination directed downward to minimize the spread of the beam, and all lighting standards should be hooded or shielded. Light sources should also minimize blue light emissions. No uplights are permitted in any areas of the Site.

5. Pedestrian lighting may be incorporated with interior paths and walkways.

6. Parking area lighting shall be confined and contained within the enclosed parking structure.

7. Lighting of all areas adjacent to the natural slope and wetland areas onsite should be directed away from the open space. Where necessary, development should provide adequate shielding to protect the open space areas from unnecessary night lighting.

H. Walls and Fences

Walls and fences contribute to the character of the overall project appearance and should be used to help establish and reinforce the character of Watermark Del Mar. They provide for various edge conditions to establish enclosure, delineate Site areas, offer visual and physical privacy, provide for views in and out of the Site, and provide security. The design concept for fences and walls within the WDMSP is to incorporate a variety of materials to create interest and avoid monotony, while establishing specific design elements and materials to be used throughout the property to have consistency and unifying elements. Exhibit 6-2 illustrates examples of the styles and materials appropriate for Watermark Del Mar. Design criteria for on-site walls and fences are as follows:

1. Perimeter Retaining and Accent Walls – Includes retaining walls located within the property facing Jimmy Durante Boulevard and San Dieguito Drive that are a component of the planted yard areas between the street and building or Podium setback areas. These walls may vary in height to account for grade conditions, but shall not exceed 48 inches of visible height. Wall materials shall have a consistent, decorative finish and coloration such as decorative masonry or smooth exterior plaster over CMU with a natural stone cap. Shrub massing and cascading plantings over walls will be utilized to soften and provide additional textural variation to wall facades. Perimeter Retaining and Accent Walls shall maintain a minimum separation from any Private Patio and/or Pool Fencing of not less than 3 feet, and such area shall be landscaped.

2. Private Patio and Pool Fencing – Where private patio and community pool areas are located facing Jimmy Durante Boulevard, the limits shall feature fencing parallel to the street using materials consistent with the architectural style and materials of the primary structures. Patio fencing may be solid or semi-transparent and shall not exceed 60 inches of visible height. Pool fencing may be solid or semi-transparent, and shall not exceed 72 inches of visible height. Screening vegetation will be utilized to reduce visibility of patio and pool fencing from Jimmy Durante Boulevard. Appropriate fencing materials can include stucco, picket or other wood fencing, with separation between units provided by planters. Private Patio and/or Pool Fencing shall maintain a minimum separation from any Perimeter Retaining and Accent Walls of not less than 3 feet, and such area shall be landscaped.

3. Internal Retaining Walls – On-site retaining walls internal to the Site (not visible from the street), shall be either decorative masonry, textured block or stepped, plastered walls similar to the perimeter retaining walls. Where safety fencing is necessary atop retaining walls because of grade differential, such fencing shall be 3.5 feet high, and an open view material shall be used, such as cable rail fencing or tubular steel.

4. Cast in Place Retaining Walls – This style of wall may be utilized for construction of the walls flanking the entry ramp to the garage and may extend to approximately 12 feet high at the garage gate entry. In order to provide visual interest for the cast in place concrete, such walls shall incorporate a design using a combination of colors and/or textures.

5. Open Space Fencing – The fencing at the wetlands and buffer along San Dieguito Drive shall be provided to define the area and discourage unauthorized access, while promoting openness and views into the area. The San Dieguito River Trail fencing has established a theme fence recognized in this area as delimiting open space. A similar fence design with natural round wood posts and rails should be used for consistency.

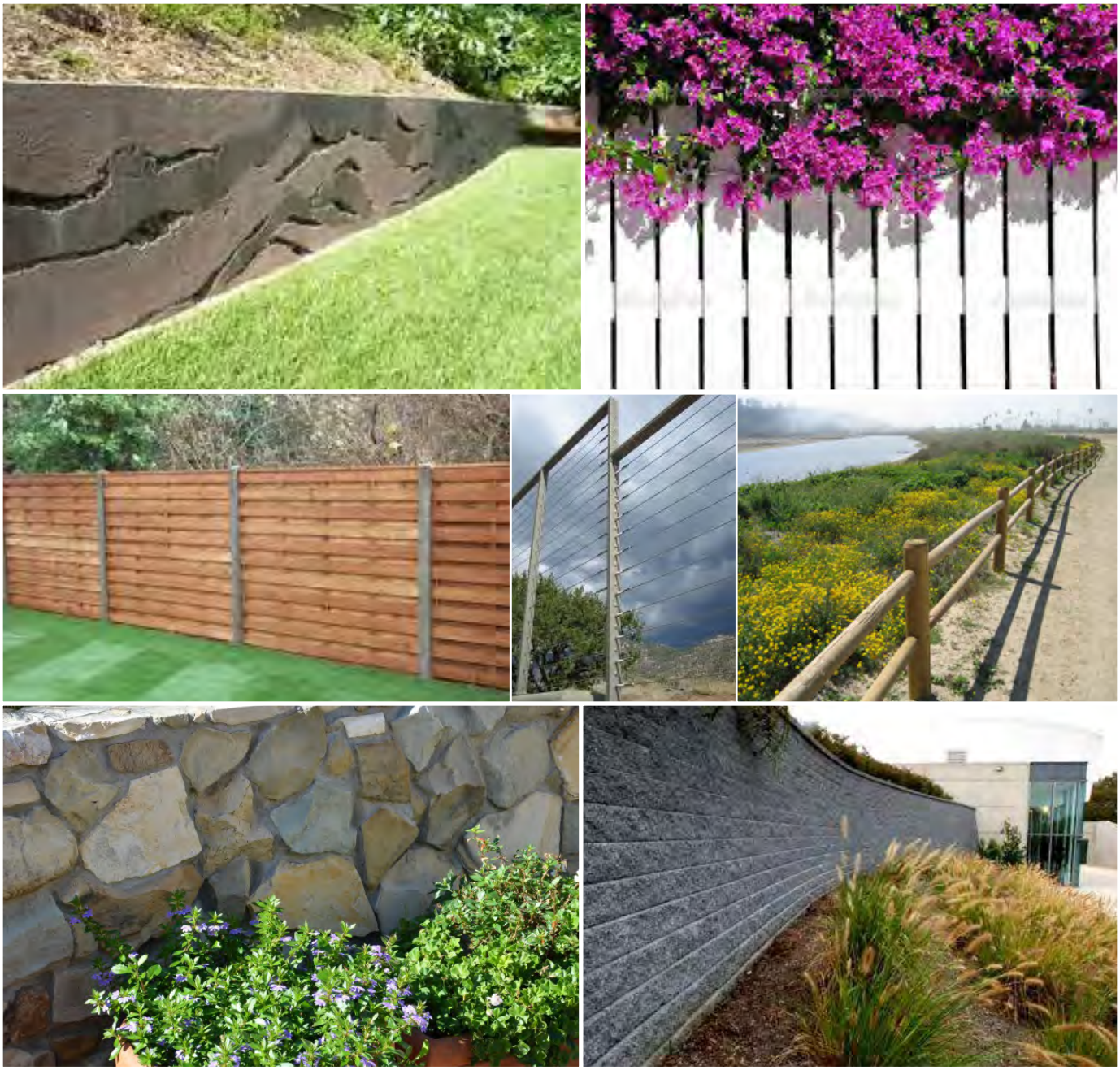
6. Residential Property Line Fencing – Fencing shall be provided along the boundaries with the adjacent southwestern and southeastern residential properties. Fencing may be 6 feet high. Materials for the solid or semi-transparent fence shall be uniform where located along the boundary, and should include durable materials such as wood, masonry or tube steel. Materials and screening vegetation should be consistent with community character and provide aesthetic value to the edge condition. Vegetation will also be utilized to further soften the fence aesthetic and interface with adjacent residential properties. As part of the community outreach with adjacent neighbors, design options were reviewed, and the landscape plan reflects the selected designs. Along the southeastern property line, the fencing shall be a solid wood fence, with a vertical shrub planting (*podocarpus*) on the inside of the fence for added screening. Along the southwestern properties/Heather Lane, a tiered option shall be used with a fence design using solid pilasters and wood rails to be set back approximately 3 feet, with planting on the outside of the fence adjacent to the offsite properties, including low shrubs (*dietes*) accented by *bougainvillea*, and a vertical shrub planting (*podocarpus*) on the inside of the fence for added screening.

6.4 Landscape Architectural Guidelines

A. Overview

Watermark Del Mar is situated at the northern edge of the Del Mar coastal hillsides, near the southern edge of the San Dieguito River and Lagoon. While there are a number of urban edge conditions, including streets, commercial and residential development nearby, the Site location provides a unique opportunity to integrate the natural beauty of the surrounding environment into the project's design vernacular, to create a landscape that blends with the natural elements and hillside background while providing the refined aesthetic quality for which Del Mar is known.

Exhibit 6-2 Wall and Fencing Design Concepts



Landscape materials and plant palettes have been selected to accentuate the coastal-craftsman style of the planned architecture while introducing the natural character of the adjacent wetlands and native landscape. A Mediterranean and coastal California plant palette is specified for use throughout the Site in order to combine drought tolerance with aesthetic impact. The overall landscape palette features native plant species to unify the Site with the surrounding landscape. The WDMSP regulations provide distinct landscape divisions including: street frontage, Podium deck level courtyards, coastal brackish marsh, and southern coastal bluffs. Each landscape type should be designed to unify the Site's coastal character while addressing the climatic requirements of each area.

B. Landscape Objectives

These landscape design guidelines establish regulations and general requirements for landscaping of the project. The goal of these guidelines is to integrate the landscape elements of the Site within the existing setting, while establishing the project's own individual identity. A transition between the existing adjacent uses, including both developed and natural areas shall be provided utilizing trees, shrubs and groundcovers.

General Guidelines include:

1. The Site landscape shall use predominantly drought-tolerant plants, native and/or non-native, that require minimal irrigation and maintenance.

2. Color and texture from plant foliage, bark, and flowers shall be utilized to create a visually interesting environment, particularly in areas adjacent to pedestrian activity.

3. Plant selection near sidewalks, pathways and paved areas, including streets, shall also be based on preventing unreasonable damage to paving and pathways.

4. Tree species with invasive root systems should be oriented away from utility infrastructure.

5. All landscaping within public areas and rights of way shall have an automatic irrigation system to maximize irrigation efficiency and eliminate overspray on the adjacent hardscape surfaces. If reclaimed water becomes available, it may be considered for irrigation use in parkways and on slopes.

6. The project landscaping should consider the existing landscape of adjacent properties, particularly at the interface with natural slopes and wetlands, to create a visually harmonious environment.

C. Street Frontage

The street frontage describes the area directly adjacent to Jimmy Durante Boulevard and San Dieguito Drive. This area is of particular importance as it establishes the first impression of the project and is highly visible to residents, the local community, and visitors to Del Mar.

San Dieguito Drive

1. Vehicular access to the Site will be from San Dieguito Drive, and the landscaping along this street frontage should be used to provide visual interest and way-finding for the Site entry.

2. A sidewalk contiguous with the new curb is required along the frontage, and suitable landscaping should be located between the sidewalk and building areas, incorporating a pattern of street trees along with accent shrub and tree plantings to mark entries.

3. Beyond the driveway access (southeast), the street is adjacent to the open space wetland and buffer area with landscaped bio-swale basin, therefore the frontage landscape should provide a transition between those open areas and the street.

4. Buffer plantings should also extend between the project driveway and open space areas.

Jimmy Durante Boulevard

1. The primary public streetscape view of the property is from and along Jimmy Durante Boulevard. Street trees shall be provided to create a strong landscape form along this gateway street. There will be only pedestrian/bicycle access from the future residences along this street, no vehicular access, and the landscaping along this street frontage should be used to reinforce the residential character of the development.

2. A sidewalk contiguous with the curb was recently constructed along the property frontage and linking into the Village area. The parking garage will be partially subterranean, with the Podium deck level ranging between approximately four and eight feet above street grade. Landscaping between the new sidewalk and structures associated with the parking garage and building areas should be used to soften the grade change from the street level to the Podium deck level. This can be accomplished with a combination of low decorative walls on the Site and sloping landscape in the public right-of-way. Where the Podium wall is exposed, decorative surface treatment shall be provided and vines may also be used. Sloping landscape is allowed to be constructed in the existing public ROW subject to compliance with applicable provisions of DMMC Chapter 23.28 regarding Encroachment Permits.

D. Podium Deck Level Courtyards, Common and Recreational Areas

The Podium deck level will provide the primary pedestrian circulation to and between the residences, and the social gathering areas for residents and visitors within Watermark Del Mar. Landscape of the Podium deck level courtyards and recreational areas should be designed to soften structural facades and enhance the residents' experience of these outdoor spaces.

1. Planting areas shall be provided between units and around private patios to provide privacy.

2. Raised planters may be utilized to provide architectural accent, further define the various courtyard spaces, and create opportunities for specimen trees. Planters should showcase a blend of Mediterranean and California coastal plant material in accordance with the plant palette.

3. Irrigation at the Podium deck level should maximize irrigation efficiency and eliminate overspray on adjacent structures and hardscape, such as through use of an in-line drip system.

4. The Podium deck level should feature various accents to enhance the landscape experience and maintain a pedestrian-oriented scale at main entry points.

5. Raised walkways may be used above the Podium deck to provide second level access to the flats and townhomes.

6. Vined trellises may be used to create a soft aesthetic and sense of entry.

7. Hardscape within the central courtyard should be selected to relate to the architectural character of the structures, and is anticipated to be comprised of precast concrete pavers or integral colored concrete or enhanced paving.

8. Hardscape within private patios may use alternate materials to provide additional detail and personalization to these spaces, such as modular hardwood deck tiles.

9. A common recreation facility shall be provided for the residents, which may include amenities such as a pool, spa, and recreation center.

10. The pool area shall be fenced for safety and security, and screening plantings should be provided if necessary to provide privacy for pool users.

E. Open Space

The southeastern portion of the property includes the previously undisturbed areas of the Site, and these areas will be retained as open space, preserved in a natural condition to protect habitat and existing drainage courses. A buffer to the wetland will also be provided in this area to create additional separation between the sensitive Site areas and future development as shown on the site plan.

Wetlands and Buffers

The coastal brackish marsh area is a wetland located at the southeast comer of the Site.

1. Invasive plant material shall be removed and appropriate native plant material shall be utilized to enhance the wetland area. The removal of invasive species and planting per the wetland plant palette will be monitored by the Watermark Del Mar team's project biologist based on final plans as approved by the Resource Agencies.

2. A temporary irrigation system may be provided in the wetland area during native plant establishment period, subject to any final conditions of the Resource Agencies.

Slope Interface

The Site is located adjacent to the northern edge of the Del Mar coastal hillsides. Where previously disturbed areas are re-graded for development, there will be an interface with adjacent slope areas. between landscaped slopes and retaining walls.

1. Landscaped slopes shall be designed to utilize appropriately scaled plant material that unifies the Site with surrounding natural slopes while softening wall facades.

2. Retaining walls used on the interior of the Site to transition from the lower Podium deck level to the upper development terrace shall have decorative treatment and be planted with a combination of vines and shrubs to soften their appearance.

3. Invasive plant material shall be removed and appropriate native plant material retained. If supplemental plantings are needed when invasive species have been removed, replacement plants should incorporate southern coastal bluff scrub species that may be accented with Torrey Pine trees.

4. Irrigation of native slope plantings shall be provided by systems designed with low precipitation rates to reduce runoff.

F. Signage

All project signage shall be regulated in accordance with the provisions of DMMC Chapter 30.84. Project identification may be provided at the project driveway entrance. This may be provided on monument signage, in accordance with the provisions of DMMC Chapter 30.84, including verification that adequate vehicular and pedestrian sight distance is maintained. Signage is subject to DRB review and approval.

G. Plant Palette

A preliminary plant palette selected for the various functional areas of the Site are specified in the following table. In accordance with provisions of the Lagoon Overlay Zone (DMMC 30.53.160), the selected species include non-invasive, drought tolerant species, many of which are native to the San Diego coastal region and which are compatible with adjacent wetland habitat species. These are illustrative of the size, form, and water use characteristics intended for the Site. Specific plant materials may be substituted in final design if they provide similar characteristics.

In order to ensure that invasive, exotic plant species are not inadvertently planted, plant palettes for final landscape plans and revegetation plans shall be cross referenced with the California Invasive Plant Inventory Database maintained by the California Invasive Plant Council (Cal-IPC). No plants in the California Invasive Plant Inventory Database shall be used in the landscaping or the revegetation area. As an added crosscheck, the California Department of Fish and Wildlife (CDFW) shall be provided copies of the landscape plans for their review prior to issuance of grading permits.

LANDSCAPE PLANT PALETTE		
Plant Type	**Botanical Name**	**Common Name**
Street Frontage & Transition		
Trees	*Cassia leptophylla*	Gold Medallion Tree
	Arbutus x 'Marina'	Arbutus Multi-Trunk
Shrubs	*Agave attenuata 'Nova'*	Blue Clone
	Aloe striata	Coral Aloe
	Bulbine frutescens	Stalked Bulbine
	Furcraea foetida 'Mediopicta'	Mauritius Hemp
	Leucadendron x 'Safari Sunset'	Conebush
	Muhlenbergia capillaris	Pink Muhly
	Phormium tenax 'Dusky Chief'	New Zealand Flax
	Rosmarinus officinalis 'Prostratus'	Dwarf Rosemary
	Salvia leucantha 'Santa Barbara'	Mexican Bush Sage
	Senecio mandraliscae 'Blue Chalk Sticks'	Senecio
Podium Deck Level		
Trees	*Lagerstroemia indica*	Crape Myrtle
	Howea forsteriana	Kentia Palm Multi-Trunk
Shrubs	*Agave attenuata*	Agave
	Asparagus densiflorus 'Myers'	Myers Asparagus
	Bulbine frutescens	Stalked Bulbine
	Coleonema pulchrum 'Compacta'	Compact Breath Of Heaven
	Dietes iridioides	Fortnight Lily
	Distictis buccinatoria	Blood Red Trumpet Vine
	Furcraea foetida 'Mediopicta'	Mauritius Hemp
	Liriope spicata	Creeping Lily Turf
	Phormium tenax 'Yellow Wave'	New Zealand Flax
	Pittosporum tenuifolium 'Kohuhu'	Tawhiwhi
	Salvia leucantha 'Santa Barbara'	Mexican Bush Sage
	Trachelospermum jasminoides 'Star'	Star Jasmine
Slopes		
Tree	*Pinus torreyana*	Torrey Pine
Shrubs	*Artemisia californica*	California Sagebrush
	Baccharis pilularis	Coyote Brush
	Cneoridium dumosum	Bush Rue
	Corethrogyne filaginifolia 'Incana	San Diego Sand Aster
	Corethrogyne filaginifolia 'Linifolia'	Common Sand Aster
	Dudleya edulis	Fingertips
	Dudleya pulverulenta	Chalk Lettuce
	Encelia californica	California Encelia
	Eriogonum fasciculatum	Common Buckwheat

LANDSCAPE PLANT PALETTE (cont.)		
Plant Type	**Botanical Name**	**Common Name**
Slopes (cont.)		
Shrubs	*Eriophyllum confertiflorum*	Golden Yarrow
	Hesperoyucca whipplei	Chaparral Yucca
	Heteromeles arbutifolia	Toyon
	Isocoma menziesii	Coastal Goldenbush
	Lotus scoparius	California Deer Weed
	Malosma laurina	Laurel Sumac
	Mimulus aurantiacus	Sticky Monkey Flower
	Opuntia littoralis	Shore Cactus
	Opuntia prolifera	Coastal Cholla
	Rhus integrifolia	Lemonade Berry
	Salvia apiana	White Sage
	Salvia mellifera	Black Sage
Bio-Retention Basin		
	Atriplex californica	California Orach
	Atriplex canescens	Four-Wing Saltbush
	Baccharis sarothroides	Broom Baccharis
	Isocoma menziesii	Coastal Goldenbush
Wetland Enhancement		
(Existing Coastal Brackish Marsh Species To Be Used For Enhancement Plantings Within The Existing Wetland)		
	Distichlis spicata	Saltgrass
	Jaumea carnosa	Salty Susan
	Juncus acutus ssp. leopoldi	Southwestern Spiny Rush
	Salicornia pacifica	Pickleweed
	Typha latifolia	Broad Leaved Cattail

CHAPTER 7 - PLAN IMPLEMENTATION

7.1 Construction Sequence

Construction is anticipated to commence following completion of entitlement efforts and completion of building design and associated permits and last for approximately two years, at which point building occupancy would occur. Construction equipment would include equipment typical of this type of construction such as rollers, rubber tired dozers, scrapers, water trucks, pavers, paving equipment, cranes, forklifts, and tractors/loaders/backhoes. Concrete and delivery trucks would also be used. Construction equipment would be used intermittently depending on construction phase.

The key construction phases would consist of parking structure construction, disturbed slope grading, residential structures over the parking structure Podium, and the balance of the residential structures. Construction trucks and equipment would operate within the limits of the construction hours identified in the City's Noise Ordinance. Construction logistics, including parking for on-site workers, materials storage and equipment staging will be considered in preparing construction phasing plans.

Prior to construction, a Storm Water Pollution Prevention Plan (SWPPP) would be prepared to identify Best Management Practices (BMPs) to minimize off-site sediment transport for the duration of the project. In addition, the grading plans would be subject to City approval, and would require measures to comply with the City's municipal storm water permit. The City's Municipal Code requires project compliance with National Pollutant Discharge Elimination System (NPDES) for storm water discharges and general construction activities; regular cleaning or sweeping of parking lots and impervious areas; and implementation of storm water BMPs. The project would implement erosion and sediment control measures required by the City Ordinance, and other pertinent regulations and conditions. A traffic control plan would be prepared and made a standard condition of approval. The plan would include provisions for construction times and control plans for allowance of bicyclists and pedestrians along Jimmy Durante Boulevard and San Dieguito Drive throughout construction. This plan would also include provisions for allowance of emergency vehicle passage at all times.

7.2 Financing Mechanisms

Several types of financing strategies and tools are available for financing development and necessary infrastructure improvements. Since this Specific Plan area is located at an infill location, no major off-site improvements are necessary, and limited financing mechanisms are needed.

For development within this Specific Plan area, funding for on-site facilities shall be provided directly by the project. This includes improvements within or across adjacent public rights-of-way provided concurrent with the project development, such as local

street improvements, utility connections from the main trunk lines, and drainage facilities.

The construction of all public street ROW and utility improvements, private on-site improvements including buildings, parking areas, landscape and hardscape, and amenities serving the project will be the responsibility of the developer/property owner. These improvements will be privately financed directly and through capacity and connection fees.

The recurring maintenance costs for infrastructure and improvements will be provided as follows:

Public Maintenance

Roadways

Maintenance of vehicular travel ways, curbs, gutters and concrete sidewalks within the public rights-of-way will be provided by the City of Del Mar and funded by the City's tax revenue.

Utility Infrastructure

Maintenance of public utilities and facilities will be the responsibility of the City of Del Mar (water, sewer, storm drains).

Private Maintenance

Roadways

Landscape frontage improvements, including any walls, stairs, and connections to the public sidewalk from the Site, will be maintained by the property owner. The private driveway into the Site will be maintained by the property owner.

Utility Infrastructure

The owner(s) of the property will contract for services such as solid waste disposal, and private utilities, such as electric, gas, telephone, cable television and internet service, which will be maintained by the respective individual private utility company.

Landscaping

Maintenance of all landscaping and hardscape on the Site, in addition to landscaping in the public rights-of-way as noted above, will be the responsibility of the property owner.

7.3 Specific Plan Administration

A. Specific Plan Interpretations

In instances where any section, subsection, sentence, clause, phrase, portion, or word contained within this Specific Plan is undefined, unclear or vague, then the Planning and Community Development Director shall make a determination as to its meaning and intent. The Planning and Community Development Director may elect to forward interpretations to the Planning Commission for consideration and

determination (appealable to the City Council) for final determination at his or her discretion.

B. Enforcement of the Watermark Del Mar Specific Plan

The City of Del Mar Planning and Community Development Director shall have authority to review development proposals and activities for compliance with the WDMSP. Compliance with the Specific Plan as adopted, and with any environmental mitigation measures, shall be monitored at these stages, as appropriate:

1. During the review and approval of development entitlements and other permits as appropriate.

2. During the review of construction documents, and prior to the issuance of grading or building permits.

3. Prior to the issuance of a certificate of occupancy for any building within the Specific Plan area.

Enforcement of the WDMSP shall be in accordance with the Enforcement and Penalty provisions of the DMMC.

C. Process for Amendment to the Watermark Del Mar Specific Plan

This document attempts to be comprehensive, but it is understood that not all things can be envisioned, and there may be situations where modifications in the Specific Plan may be necessary. The procedures to amend this Specific Plan shall be by ordinance or resolution as specified by State of California Government Code 65456 through a public hearing before the City Council pursuant to the Del Mar Municipal Code. The applicant shall be required to submit a completed application with graphics, statements, or other information as may be required to support the proposed amendment. Said amendment or amendments shall not require a concurrent general plan amendment unless a land use change is involved.

There are two different categories of potential amendments to the WDMSP, Tier-One or Tier-Two Amendments, and this Section sets forth the processes for submittal, review and determinations on such requests for amendments. The review process for WDMSP amendments varies, depending on the degree of modification proposed.

Approval Requirements for Tier-One and Tier-Two Amendments

1. Approval of a Tier-One Amendment shall require an affirmative super majority (4/5) vote of the City Council.

2. Approval of a Tier-Two Amendment shall require an affirmative simple majority (3/5) vote of the City Council.

3. The Planning Commission shall review and make a written recommendation to the City Council on all proposed amendments to the WDMSP.

Categories of Amendments to the WDMSP

Tier-One Amendments:

1-1. An increase in the density specified in Chapter 5 of the WDMSP.

1-2. An increase in the allowable Floor Area Ratio specified in Chapter 5 of the WDMSP.

1-3. An increase in the allowable Building Heights specified in Chapter 5 of the WDMSP.

Tier-Two Amendments:

2-1. A change in any development standard specified in Chapter 5 of the WDMSP other than those listed above under Tier-One.

2-2. A material modification in any component of the Exceptional Public Benefits associated with the project.

2-3. A change to the geographic boundaries of the WDMSP.

2-4. Modifications required to satisfy those changes to Federal and/or State law that require a corresponding amendment to local ordinances and would result in increases in FAR, lot coverage and/or height.

2-5. Modifications required to satisfy Coastal Commission requirements for certification of the LCP amendments that accompanied the preparation of the WDMSP if they would result in increases in FAR, lot coverage and/or height.

D. Public Noticing Requirements for Amendments to the WDMSP

All amendments to the WDMSP shall be subject to the applicable public noticing requirements of State law and of the DMMC, in effect at the time of the amendment request.

E. Exemptions from WDMSP Amendment Requirements

1. Corrections of typographical or administrative errors found in the WDMSP document shall not require an Amendment to the WDMSP.

2. Minor deviations shall be deemed to be in conformance with the Specific Plan by the Planning and Community Development Director if they comply with the requirements identified in this section and are not detrimental to the public health, safety, and welfare. Such deviations to the adopted Specific

Plan must be consistent with the purpose and intent of the originally approved Specific Plan. To classify as a minor deviation, the following requirements must be met:

a. The total residential density within the Specific Plan area shall not exceed 20.5 units per acre.

b. The public health, safety, and welfare shall not be jeopardized by the proposed modifications.

c. No additional or increased potentially significant adverse environmental impacts are expected to occur as a result of the proposed modifications, except as evaluated in a certified EIR for the project.

3. The following deviations constitute examples of "minor changes" that are in substantial conformance with the approved Specific Plan and shall be approved without amending the Specific Plan.

a. Minor modifications to the Specific Plan area boundaries that respond to more accurate or recent data or actual on-site conditions.

b. Minor modifications to the architectural or landscape design guidelines. Where modifications to the architectural or landscape design guidelines are more substantive, they are also allowed without amending the Specific Plan, subject to review and approval by the Design Review Board.

c. Minor modifications to the grading plan subject to review and approval of the City Engineer.

d. Minor modifications to the water, sewer and/or drainage plan(s) that improve efficiency or are necessary to respond to actual Site conditions.

e. Minor modifications in intensity such as building size, Lot Coverage, FAR, setbacks or separation between buildings, or extent of landscape areas, as long as they remain within the parameters of the Specific Plan standards, and the building volume shown on the project plans in Appendix C (Exhibits C-1 to C-7) are not substantially changed.

f. Minor changes in the building footprint shown on the project plans in Appendix C (Exhibits C-1 to C-7) that do not materially affect the design and do not exceed the maximum FAR of the Specific Plan.

g. Minor changes in, or reallocation of, square footage between units, or between enclosed HOA common area and residential units,

shown on the project plans in Appendix C (Exhibits C-1 to C-7), as long as the change or reallocation does not result in a net increase in total square footage or overall FAR.

h. In the event that the project shown in Appendix C is not implemented, a new project design is allowed without amending the Specific Plan, subject to conformance with the WDMSP, with review and approval by the Design Review Board.

i. Addition of new information or data to the Specific Plan maps, exhibits and/or text which does not change the effect of any concepts or regulations.

j. Modifications required to satisfy those changes to Federal and/or State law or to satisfy Coastal Commission requirements shall be permitted unless they would result in increased FAR, lot coverage or height (which would require a Tier II amendment).

CHAPTER 8 - CONSISTENCY WITH THE DEL MAR COMMUNITY PLAN

The Del Mar Community Plan sets forth a series of goals, objectives, and policies for the attainment of the community's collective vision of the City. A summary of how this Watermark Del Mar Specific Plan achieves or helps to implement the goals, objectives, and policies of the Community Plan, and therefore is consistent with the applicable goals and policies of the Community Plan, is presented in this Chapter. To reduce the length of this General Plan Consistency Analysis, this Chapter does not assess Specific Plan consistency with every goal or policy included in the adopted Community Plan. Instead, it focuses on the goals and policies relevant to the land uses and development within the Specific Plan area.

Overall Goal: Preserve and enhance the special character of Del Mar, the elements of which are a village-like community of substantially single-family residential character, a picturesque and rugged site, and a beautiful beach.

The Watermark Del Mar Specific Plan establishes development and design standards to enhance the special character of Del Mar, including development and design regulations for a new multi-family use that preserves sensitive areas on the property and provides for homes that blend with and enhance the community's overall character with an architectural statement established to create timeless costal-inspired homes.

8.1 Environmental Management

Goal 1: Establish without delay a comprehensive program to preserve and acquire permanent open space sufficient to meet the long-range needs of the community, preserve and enhance natural resources, and protect areas and people susceptible to seismic and flooding hazards.

The Watermark Del Mar Site includes a wetland area and a scenic sandstone bluff. The WDMSP includes regulations regarding the siting and orientation of the uses and structures to retain the wetlands with appropriate buffer setback and the previously undisturbed sand stone bluff, in order to preserve and protect these sensitive resources. There are also development and design requirements that provide for a partially underground parking structure which allows for structures to be safely maintained above the floodplain areas where they occur on the Site.

8.2 Transportation

Goal 2: Minimize the impact of the automobile on the character of Del Mar and emphasize a more pedestrian-oriented environment, safer sidewalks, landscaped buffer zones, and alternate means of transportation.

The WDMSP requires multiple pedestrian /cyclist access points along Jimmy Durante Boulevard and San Dieguito Drive that will facilitate future residents' ability to connect to existing sidewalks and scenic walkways along the San Dieguito River, in addition to accessing potential work locations and services without utilizing an automobile.

8.3 Community Development

Goal 3: Preserve and enhance Del Mar's special residential character and small town atmosphere with its harmonious blending of buildings and landscape in proximity to a beautiful shoreline.

The design standards of the WDMSP are provided to enhance the northeastern gateway to the City of Del Mar and provide a uniquely Del Mar architectural statement to residents and visitors alike. The architectural elements reflect those found throughout existing residential and commercial structures: the use of brick similar to the Del Mar library, siding found throughout the community on residential and commercial structures alike, liberal application of trellis work and architectural carpentry, and a mixture of stone and plaster wall materials found throughout the coastal community. Landscaping criteria has been established to combine drought tolerance with aesthetic impact and emphasize the Site's coastal character while addressing the climactic requirements of the various Site conditions.

Goal 5: Preserve the economic integrity of the community.

The WDMSP provides for residential uses that are designed to be an economic success that can enhance the property values of the surrounding residences and the surrounding commercial properties in addition to providing an incentive and catalyst to underutilized vacant parcels to meet or exceed the quality of the Watermark Del Mar development. Development in accordance with the Specific Plan would be one of the first significant developments in Del Mar in some time and would represent a significant economic investment in the Jimmy Durante corridor. Property values and property tax revenues are anticipated to significantly increase with implementation of the Specific Plan, which will also provide the community with residents that will enhance the supporting economic base of the community.

Goal 6: Assure continuing public participation in city planning by developing procedures in which citizens can participate in updating general plan goals and policies and help in implementing programs including consultation and advice on enabling legislation.

One of the key reasons for using a Specific Plan process for this property was to incorporate formal public outreach in addition to Watermark Del Mar's informal extended public outreach, to support the community's goal to enhance public participation. The Specific Plan outlines the enhanced public participation process used to initiate, evaluate, and ultimately implement the City of Del Mar's stated

objective to provide residential uses and an affordable housing component on the Site.

8.4 Housing Element (2013-2021)

A. Housing Goals

Housing Goal 2: To encourage and support the provision of a wide range of housing opportunities by location, type, and sales and rental rates in order to meet the existing and future needs of Del Mar.

In order to implement the Housing Element goal to provide affordable housing opportunities within the City, the Del Mar City Council supported and authorized the use of a Specific Plan process for the Watermark Del Mar property to comprehensively address and define the legislative and discretionary actions, as well as the community benefits of WDMSP.

Policy 2.1: Provide a variety of residential development opportunities to fulfill the City's share of regional housing needs, including single-family residences, townhomes, condominiums, apartments, mixed residential/commercial projects, and second-dwelling units on properties otherwise zoned for single-family use.

The WDMSP creates a new land use designation and zone that will allow for multifamily residential uses within the 20-25 du/ac range specified in the Housing Element that will accommodate a variety of product types including townhomes and flats.

Policy 2.2: Encourage and support the construction of housing for all segments of the community, including those with special needs; and:

Policy 2.3: Encourage and support the development of affordable housing by offering incentives for housing projects that provide housing at established affordable sales and rental rates with such incentives to include, but not be limited to: density and floor area ratio bonuses; reduced processing fees; expedited permit processing and reduced parking requirements.

In order to facilitate the exceptional public benefits associated with the construction of affordable housing at the Site, the WDMSP provides for the legislative changes needed to authorize appropriate residential density, and incorporates modifications of certain development regulations from the Del Mar Municipal Code to achieve the density at this site. Details of the modified regulations are listed in Chapter 5 of this Specific Plan, and serve as incentives that are necessary to support the provision of affordable units.

Housing Goal 3: To promote equal opportunities for all residents to reside in the housing of their choice and capabilities; and

Policy 3.2: Continue to implement fair housing choices by actively expanding City programs to support a range of housing affordability and by removing impediments to the construction of and access to fair housing; an;

Policy 3.3: Continue operating existing programs and add new programs that create incentives for the development of housing in general, and for affordable housing in particular.

In accordance with the WDMSP, a total of seven affordable dwelling units would be subject to the recordation of a deed restriction committing the property owner and any successors-in-interest to affordable restrictions on rental rates or purchase prices to families with income levels at 120% of the Area Median Income ("AMI") or less for a period of 30 years from the date of issuance of the Certificate of Occupancy for such residential units.

In addition, the WDMSP provides that a portion of the affordable dwelling units may be sold, deeded, or otherwise transferred at a nominal price to a local non-profit public benefit corporation ("Local NP") approved by the City of Del Mar. Such transfer would provide opportunities for those particular units to be available at even lower affordability rates.

B. Housing Programs

Objective #2 - Provide adequate sites to achieve a variety of housing types.

Program #4: Implement the Community Development Element and Zoning Ordinance (includes land use re-designations and modification of zoning standards to accommodate higher density residential development.

2-G: Within 12 months of City Council adoption of the 2013-2021 Housing Element, the City will assign a new land use designation to two adjacent vacant parcels, (APNs 299-10-47, -48) roughly 2.3 acres in size and currently zoned as North Commercial (NC) Zone, to allow, by right, residential development of the properties at a density of 20-25 du/ac. with such density allowance to include a requirement for a percentage of the residential units to be available, long term, at affordable rates, either through dedication to a nonprofit housing advocacy organization or through deed restrictions for no less than the minimum duration required under state housing law applicable to affordable dwelling units.

The WDMSP provides for multifamily residential uses at a density within the specified density range of 20-25 du/ac. The proposed 48 units will include seven of the units to be available, long term, at affordable rates, implementing the goal to accommodate new residential units and ultimately deliver affordable units to the marketplace. This would help implement the City of Del Mar Community Plan Housing Element.

The WDMSP has been prepared as an alternative process to the City applying new land designations to the parcels directly. The Specific Plan process was chosen to ensure that opportunities were provided for the involvement of citizens, public agencies, public utilities, civic education, and other community groups, as the Specific Plan was prepared to encompass the legislative actions to assign a new Community Plan, Zoning Map, and Local Coastal Program designations in addition to the accompanying CEQA documentation. The Del Mar City Council affirmed the use of a Specific Plan for the Watermark Del Mar property. The Specific Plan establishes development standards and design regulations to achieve a multifamily density to implement the Housing Element while addressing the physical site constraints including drainage and flood protecting, and providing for visually attractive landscaping, architecture, and site amenities.

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APPENDIX A – LCP AMENDMENT

Local Coastal Program
Land Use Plan Amendment
Summary of Policy Compliance

The Del Mar Local Coastal Program (LCP) sets forth a series of policies for the community. The LCP Land Use Plan would be amended for Watermark Del Mar, as described by the Specific Plan. A summary of how this Watermark Del Mar Specific Plan achieves or helps to implement the policies of the LCP is presented below, followed by a summary of compliance with the Chapter3 policies of the California Coastal Act. To reduce the length of this analysis, this Chapter does not assess Specific Plan compliance with every goal and policy included in the adopted LCP. Instead, it focuses on the policies relevant to the land uses and development within the Specific Plan area. Selected goals and policies relevant to the proposed LCP amendment are listed, with numbering following the LCP.

Land Use Designations/Allowed Uses Table

Add new category for Watermark Del Mar:

WDMSP – Multiple Family Residential Dwellings at a density up to 20.5 du/net acre

Discussion of Coastal Policies for Watermark Del Mar Specific Plan
(From Local Coastal Program – Land Use Plan)

Section II-B Land Use Development Goals and Policies – General

Goal II-A: Preserve and enhance Del Mar's small town atmosphere with its harmonious blending of architecture, landscape and natural landforms in proximity to a beautiful shoreline.

Policy II-1 *Maintain the existing small-scale character of the community and permit only one- and two-story, low intensity development with a maximum allowable height of 26 feet.*

The WDMSP maintains the standard for one- and two-Story development with a maximum allowable Height of 26 feet. The basis for measuring this Height is defined for the Specific Plan using the Base Flood Elevation to assure compliance with Goal III-A regarding flooding hazards, balancing the need for hazard protection and limited building height. The intensity of development specifies a maximum permitted density of 20.5 du/acre, which is at the low end of the range specified by the current Housing Element (20-25 du/ac) as being necessary to achieve the City's housing goals at this site.

The design guidelines of the WDMSP further regulate the appearance of the multi-family structures. They include a specification that the buildings adjacent to streets have the character of separate structures as found throughout the community, and prohibit a single, large, monolithic building.

Policy II-2 ***Insure that future development, whether commercial or residential, retains the aesthetic quality of the community by protecting and preserving public views to the ocean and other significant natural resources; and by minimizing the disturbance of natural topography and vegetation.***

The WDMSP property is located such that there are no public views to the ocean. However, there are public views of the undisturbed coastal bluffs on the northeastern portion of the site, which comprise part of the overall background visible from and across the San Dieguito River. Based on the building area allowed by the Specific Plan, these existing views will be retained from and across the San Dieguito River. These bluff areas can also be seen from the streets approaching the site from the north and west. There is a small area of wetland marsh vegetation (4,750 square feet) at the toe of this bluff area, and both the undisturbed bluffs and the wetland area will be preserved in open space in accordance with the WDMSP. The development footprint of the residential structures will be limited to the areas of the site that have been previously graded and disturbed.

Section III B Shoreline Hazards – Goals and Policies

Goal III-A: Establish a comprehensive program to protect shoreline areas susceptible to storm/flooding hazards.

Policy III-2 ***Conserve the natural character of land, water, vegetative and wildlife resources within the community by ensuring that future development minimizes the disturbance of existing or natural terrain and vegetation, and does not create soil erosion, silting of lower slopes, slide damage, flooding problems and/or cutting or scarring, through application of the following policies:***

a. Regulate development in accordance with the specific Beach (BOZ), Floodway (FW) and Floodplain (FP) Overlay Zone regulations contained within this chapter.

The WDMSP property is located within the Floodplain Overlay Zone, and includes provisions for development consistent with the FP Overlay regulations. This includes protection for all habitable spaces, which must be at or above the Base Flood Elevation.

In developing the Specific Plan regulations, consideration was given to planning for future flood hazard avoidance. Based on recent experience in other communities where flooding has exceeded projected levels, and acknowledging the potential for future sea level rise, a safety factor was used of 2 feet above BFE as the criteria for structures to be located on Podium construction. Structures being built on-grade at the corner adjacent to the intersection would be located at the BFE, to assure flood hazard avoidance, while balancing the community interest in minimizing building height at this corner.

b. Review all proposed drainage and irrigation systems for their ability to control runoff and seepage into downstream areas and to ensure that no significant erosion or the associated siltation of downstream resources will occur.

The WDMSP landscape design standards specify the use of low-volume and drip irrigation, to minimize the use of irrigation water. The Specific Plan also has requirements for controlled runoff from the site, incorporating a bio-retention basin that will further limit the potential for any adverse effects on downstream resources.

c. In addition to the requirements of the Coastal Bluff regulations of this chapter, require the use of drought-tolerant plants in new and redevelopment projects throughout the City in order to minimize potential erosion impacts from irrigation systems and to reduce water consumption.

The WDMSP landscape design standards specify the use of low-volume and drip irrigation, with drought-tolerant plant materials to limit the use of irrigation water which will minimize potential erosion impacts from irrigation systems and reduce water consumption.

Policy III-3 Control the development of properties within the Bluff, Slope and Canyon (BSC) Overlay Zone to protect the health, safety and general welfare and to preserve scenic sandstone bluffs, related canyons, steep slopes and their downstream resources. The regulations of the BSC Overlay Zone are cited in Chapter VI of this Land Use Plan entitled, Sensitive Lands.

The WDMSP property includes an area with undisturbed, scenic sandstone bluffs on the northeastern portion of the site. These are visible from areas to the north, and comprise part of the overall background visible from and across the San Dieguito River. They can also be seen travelling south on Jimmy Durante Boulevard as one approaches the intersection of San Dieguito Drive. These bluff formations, and the small area of wetland marsh vegetation at the toe of this bluff area, will be preserved in permanent open space in accordance with the WDMSP. The development footprint of the residential structures is being limited to the areas of the site that were previously graded (prior to 1973) or otherwise disturbed.

Section III-D Runoff and Erosion Control

Goal III-C: Protect resources and property located downstream from hillside and bluff areas from damage due to uncontrolled runoff.

Runoff from the property will be controlled by drainage improvements, including a bio-retention basin so that there is no uncontrolled runoff leaving the site that could impact resources and property located downstream.

Policy III-10 Minimize damage from runoff from all projects within the City by:

a. Ensuring that storm drains are designed and provided in such a manner to carry the entire amount of intercepted storm runoff estimated to occur during a storm having a return period of ten years;

Runoff from the developed areas of site will be into new, onsite storm drain pipes and drainage systems, adequately sized to accommodate the flows. Site storm runoff will be directed into a bio-retention basin prior to discharge to an existing public storm drain in the area. A hydrology study and preliminary drainage design plans will be prepared by a licensed civil engineer, and all reports and plans are subject to City Engineer review and approval.

b. Ensuring the provision of adequate storm drain inlet capacity for the anticipated storm runoff from developed areas within the identified watersheds of San Dieguito and Los Penasquitos Lagoons.

Storm runoff from the WDMSP property flows to an existing storm drain on the south side of San Dieguito Drive, with adequate capacity for runoff from site development. Post-development runoff will be routed through a bioretention basin, prior to discharge to a new storm drain pipe that will connect to that existing storm drain.

c. Ensuring that new development is accompanied by the provision of drainage control measures which control and direct storm flow runoff into existing storm drain systems or into natural drainage courses when approved by the City Engineer and provide new storm drains as necessary to protect from unrestricted flows and runoff.

The project storm runoff will be collected and routed through a bio-retention basin, prior to discharge to a new storm drain pipe that will connect to an existing storm drain on the south side of San Dieguito Drive. The sizing of the storm drain system, including the inlets, bio-retention basin and all storm drain lines will provide adequate capacity for runoff from site development.

d. Applying the grading, erosion, and sedimentation control regulations of the Lagoon Overlay Zone and the Bluff, Slope and Canyon Overlay Zone of Chapter VI of this Land Use Plan to those projects located within such overlay zones.

The WDMSP property is located within the Lagoon Overlay Zone and the Bluff, Slope, and Canyon Overlay Zone. The grading, erosion, and sedimentation control regulations associated with those Overlay Zones will be applied to development in the WDMSP without modification.

Section III-E Flood Hazards

Goal III-D: Minimize risks to life and property associated with flooding and flood waters.

As noted previously, in developing the Specific Plan regulations, consideration was given to planning for future flood hazard avoidance to minimize risks to life and property associated with flooding and flood waters. Based on recent experience in other communities where flooding has exceeded projected levels, and acknowledging the potential for future sea level rise, a safety factor was used of 2 feet above BFE as the criteria for structures to be located on Podium construction. The WDMSP includes provisions for development consistent with the FP Overlay regulations, including protection for all habitable spaces, which must be at or above the Base Flood Elevation. Structures being built on-grade at the corner

adjacent to the intersection would be located at the BFE, to assure flood hazard avoidance, while balancing the community interest in limiting height of structures closest to intersection.

Policy III-12 …The following Floodplain (FP) Overlay Zone policies shall be applied to all applications for a Floodplain Development Permit. A Floodplain Development Permit shall be required…Applications for Floodplain Development Permits shall be reviewed for consistency with the following requirements to be assured that new development will:

a. Be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
b. Be constructed with materials and utility equipment resistant to flood damage;
c. Use methods and practices that minimize flood damage;
d. Have the lowest floor (including basement) of any residential structure elevated to or above the base flood elevation;
f. When located in an area of shallow flooding (Zones AO and VO on the community's FIRM), have the lowest floor (including basement) elevated to or above the depth number indicated on the most current FIRM; or if there is no depth number on the most current FIRM, be elevated at least two feet above the highest adjacent grade.
g. When located in Zones AO and AH on the FIRM, have adequate drainage paths around structures situated on sloping ground, to guide floodwaters around and away from said structures;
h. Where a non-residential structure is to be flood-proofed, have the design and methods of construction in accordance with accepted standards of practice for flood-proofing or include the specific elevation in relation to mean sea level to which such structures are flood-proofed;
i. Have all new and replacement water supply and sanitary sewage systems designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters;
j. Have on-site waste disposal systems located to avoid impairment to them, or contamination from them, during flooding;
k. Have all electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

The project development is required to comply with all of the above Floodplain (FP) Overlay Zone policies, which shall be verified through design plans prior to issuance of a Floodplain Development Permit.

Section IV-B Coastal Access

Goal IV-B: Give priority to pedestrian and bicycle traffic as opposed to automobile traffic through application of the following policies and pursue the increased use of alternate transportation modes to regionally significant areas within Del Mar. Examples of "alternate transportation modes" include: bicycle, pedestrian, bus, shuttle service, and railroad.

Policy IV-15 Retain and maintain existing bikeways including those along Coast Boulevard, Camino del Mar, Jimmy Durante Boulevard and Via de la Valle.

The WDMSP will not change or affect the existing bikeways along the project frontage of Jimmy Durante Boulevard. Bicycle amenities are required for future site development including storage areas for resident bicycles, and connection points to the existing public bikeways, per standards of the Specific Plan.

Policy IV-30 ***The City shall apply the following Off-Street Parking Regulations to new projects and redevelopment projects to assure that the parking needs generated by new development are provided on site.***

Off Street Parking Regulations for Multiple Family Dwelling Units:	
For each studio or one bedroom unit	Garage parking for one automobile
For each two or three bedroom unit	Garage parking for one automobile with on-site parking for one additional automobile, or garage parking for two automobiles
For each four or more bedroom unit	Garage parking for two automobiles with additional on-site parking for one automobile, or garage parking for three automobiles.

The WDMSP parking standards implement these Off-Street Parking Regulations, with the addition of requirements for guest parking. All required parking spaces are to be within the parking garage structure, to include a cumulative total for residential units within the project as follows:

Studio or 1 Bedroom Unit	1 space per unit
2 or 3 Bedroom Unit	2 spaces per unit
4 or more Bedroom Unit	3 spaces per unit
Guest Parking	0.25 space per unit

Section VI-B Steep Slope Preservation

Goal VI-A: Preserve Del Mar's steep sloping hillsides and downstream resources.

Policy VI-1 ***Preserve and protect sensitive slopes and associated bluff and canyon areas and, their downstream resources through the application of the following Bluff, Slope and Canyon Overlay Zone Regulations.***

C. Allowable Uses. Unless specified herein, allowable uses in the BSC Overlay Zone shall be those uses and accessory uses allowed by the underlying land use designation and zone specified in Figure II-A, subject to the regulations and restrictions of this Land Use Plan.

The underlying land use designation and zone are being modified with this LCP Amendment to allow for multi-family residential uses rather than professional commercial uses on the WDMSP property. Sensitive undisturbed bluff and wetland areas onsite are designated in the WDMSP as permanent open space.

E. Development Review. Within the BSC Overlay Zone, no building, improvement, structure, or portion thereof shall be erected, constructed, converted, established, altered or enlarged, nor shall any lot or premises be excavated or graded for any purpose, including but not limited to in-ground structures such as swimming pools or spas, or cleared of vegetation, unless in accordance with this Land Use Plan and the following:

1. ***In order to preserve viewsheds and the open space appearance of the area from a distance, no structure shall exceed a height of 14 feet as measured pursuant to the provisions of the Del Mar Municipal Code unless it is found that scenic viewsheds and the open space appearance of the area will be less affected by structures of a greater height.***

   As noted previously, the WDMSP property includes an area with undisturbed, scenic sandstone bluffs on the northeastern portion of the site that are visible from areas to the north, and comprise part of the overall background view shed from and across the San Dieguito River. The location of the development footprint designated in accordance with the WDMSP will preserve views of these bluffs along with the character and the open space appearance of the area from a distance.

   The undisturbed bluffs can also be seen travelling south on Jimmy Durante Boulevard as one approaches the intersection of San Dieguito Drive. These bluff formations, and the small area of wetland marsh vegetation at the toe of this bluff area, will be preserved in permanent open space in accordance with the WDMSP. The buildings at the intersection corner are limited to a single Story, to have a lower scale and additional visual openness at this intersection.

   The WDMSP allows for additional height up to 26 feet that is needed in order to achieve the affordable housing goals at higher density for this property. The Height measurement from the Podium deck level is necessary to achieve compliance with floodplain safety regulations. The construction of buildings on this site will limit visibility of the slope areas that can currently be seen beyond the vacant property from Jimmy Durante Boulevard. However, this screening effect would exist whether the structures were 14 feet in height or taller, due to the angle of views from the street.

2. ***New development shall be sited and designed to minimize grading and alteration of natural topography and shall be subservient to and complement the natural topography of the area. Protection of the natural values of the surrounding topography and landscape shall take precedence over architectural values.***

   While much of the WDMSP property has been previously graded, the areas of natural topography onsite are designated by the Specific Plan to be outside any site grading, and left undisturbed and preserved. One of the key considerations for the project design was to protect the undisturbed sandstone bluff formation near San Dieguito Drive, in a way that retains its visibility. The Site is located along the lower portions of a much larger bluff/ridge formation that extends offsite. The proposed development is located in a manner that is consistent with development patterns in the area, which includes residential homes stepping gradually up this hillside. The overall form, scale and character of the bluff/ridge landform will be retained with the proposed project.

3. ***Construction, grading or other encroachment of any kind on substantial slopes exceeding twenty-five percent grade, or within twenty feet of the top and ten feet of the bottom of substantial slopes exceeding twenty-five percent grade or the***

construction of structures which overhang such slopes or slope setbacks, shall be prohibited, except when specific encroachments are allowed in accordance with the following policies.

The development footprint will be located within previously disturbed and graded areas of the property. Discussion of the encroachments and their conformance to specific allowances are presented below. The development area is necessary to accommodate the density per the Housing Element, and to provide public benefits associated with the project, including affordable housing, while preserving the most sensitive areas of the site.

4. ***Encroachments within the slope areas and steep slope setbacks specified above shall be allowed only when it is found that there is no feasible alternative siting or design which eliminates or substantially reduces the need for such construction or grading, and it is found that the bulk and scale of the proposed structure have been minimized to the greatest extent feasible commensurate with preserving the physical characteristics of the site.***

The bulk and scale of the project have been minimized with consideration for the density goals for the site, along with the desire to preserve the overall physical characteristics of the site. The location and layout for the units in the slope areas supports the ability to provide both affordable housing units and provide for building separation and character. If these units were eliminated, in order to achieve the density specified by the Housing Element, it would be necessary to add them onto the Podium deck level, which would increase bulk and scale of those buildings, creating the appearance of more monolithic structures.

5. ***Run-off from impervious surfaces shall be discharged directly into existing or new and adequately designed publicly-owned discharge and drainage systems which can be shown to have sufficient capacity to handle all anticipated drainage flows associated with the proposed project. In the event that no public discharge or drainage systems are available in the immediate vicinity, an alternate system may be allowed if it is found by the Planning Director in consultation with the City Engineer that such alternative will serve to convey such drainage and run-off to a clearly defined legal natural drainage course which can be shown to have adequate capacity to handle all anticipated drainage flows without adverse impact. All design and plans for drainage improvements shall be prepared by a licensed civil engineer and shall be subject to the review and approval of the City Engineer.***

Runoff from the developed areas of site will be into new, onsite storm drain pipes and drainage systems, adequately sized to accommodate the flows. Site storm runoff will be directed into a bio-retention basin prior to discharge to an existing public storm drain in the area. A hydrology study and preliminary drainage design plans will be prepared by a licensed civil engineer, and all reports and plans are subject to City Engineer review and approval.

6. ***Construction, irrigation and landscaping shall harmonize with the natural as well as the man-made environment.***

The building architectural design uses earthen tones, natural materials, and design elements found elsewhere in the Del Mar community. Landscape materials use native materials in all interface areas with natural slopes, and naturalized, drought-tolerant plant materials throughout the site.

8. ***In order to maximize and preserve natural open space, natural landforms and views, projects involving more than one dwelling unit on a lot shall be clustered on the flatter portions of the site, if determined to be practicable and desirable.***

   The residential homes of the WDMSP will be located on previously graded and disturbed portions of the property, in order to allow protection of the natural, undisturbed sandstone bluffs and the wetland marsh area at the toe of the bluff slope. While some of these previously graded areas include sloping topography, the overall design of the project accommodates the hillside residential development pattern in the area, preserves views and natural open space resources of the property.

9. ***Temporary and/or permanent erosion control measures shall be provided in order to control erosion both during and after project implementation.***

   Erosion control measures are required by the grading ordinance, and will be implemented at the WDMSP property during construction. The bio-retention basin as designed will assist in providing long-term sediment control from the Site.

10. ***The removal of native vegetation, when allowed pursuant to the findings required in this policy, shall be limited to the minimal amount necessary to implement projects and shall be indicated on erosion control plans.***

    As previously noted, the WDMSP development footprint is limited to areas of the site that have been previously graded and disturbed. Where vegetation has regrown in those areas, the removal of native vegetation will be limited to the footprint of the development.

11. ***The protection of areas or vegetation designated for retention in their natural state shall be accomplished through the installation of protective temporary and/or permanent fencing around such designated areas prior to the commencement of grading and/or development activities on site. For protection of designated trees or other major vegetation, said fencing shall be placed so as to protect the root zones of the vegetation to be protected.***

    Protective fencing will be provided during construction activities.

12. ***All native vegetation approved for removal shall be replaced with drought tolerant, fire retardant, native or naturalizing substitute vegetation of sufficient size and quantity to provide soil stabilization.***

    The WDMSP landscape design guidelines establish regulations and general requirements for project landscaping. As part of these requirements, it is specified that the Site landscape shall use predominantly drought-tolerant plants, which require minimal irrigation and maintenance. The specific size

and planting specifications on final landscape plans will be reviewed for conformance with this standard.

16. *To protect the visual resources of hillside areas, the City shall encourage the undergrounding of all new utility lines and new utility line extensions for projects within the Bluff, Slope and Canyon Overlay Zone when such undergrounding would not be detrimental to the sensitive hillside areas or to themselves.*

    All onsite utility line service extensions for the site development will be installed underground. Additionally, the developer will lead a program to underground existing overhead utility lines along the project frontage in collaboration with the City and SDG&E.

F. Grading Methodology and Practice. All development within the BSC Overlay Zone shall observe the following grading and landscaping policies:

1. *All projects involving grading shall be subject to the submittal of an erosion and sedimentation control plan.*

2. *All erosion control measures shall be subject to detailed maintenance arrangements.*

3. *For projects involving a total of more than 25 cubic yards of cut and/or fill grading operations, no grading shall occur from November 15 to March 31.*

4. *All grading and cut and fill areas shall be landscaped either during or immediately after construction to prevent erosion and to increase slope stability.*

Development within the WDMSP will be required to comply with these policies. No modification in these policies is proposed.

G. Retained Open Space/Conditions of Development. Areas to be retained in their natural state pursuant to the application of these Bluff, Slope and Canyon Regulations shall be subject to conditions to ensure the protection of the designated area(s) from future encroachment, disturbance or degradation. Said conditions shall include the recordation of an open space deed restriction, conservation easement or open space easement to assure protection of the designated area and" to serve notice to the property owner, subsequent owners or interested parties of the restrictions in effect on such property.

Natural open space areas to be permanently preserved will be subject to an open space deed restriction, conservation easement or open space easement to assure protection of the designated area.

Section VI-D Wetland Preservation

Goal VI-B: Preserve, protect and, where feasible, enhance the wetland areas of Del Mar.

The WDMSP property includes a wetland marsh area which will be enhanced by removal of invasives and restoration of additional native species. This area will be included as part of the permanent open space associated with project development, along with a fenced buffer area.

Policy VI-3 Ensure the protection of the wetlands of the Los Penasquitos Lagoon and San Dieguito Lagoon and their sensitive upland habitat by requiring that all development activities taking place in lagoon and uplands areas, designated on the Lagoon Overlay Zone Map (Figure VI-B), conform to the wetland preservation regulations of this chapter. In addition, the City shall implement the Bluff, Slope and Canyon Overlay Zone regulations of this Land Use Plan to protect sensitive wetland habitat from the impacts of upland development which lies outside of the Lagoon Overlay Zone but within the watershed of San Dieguito and Los Penasquitos Lagoons.

Wetland Preservation Regulations

2. Permitted Uses in Wetland Buffer Areas. Permitted uses in wetland buffer areas shall be limited to:

a. Passive recreational access paths and viewpoints within the upland half of the buffer, only when designed to assure no adverse impacts to adjacent wetland areas.

5. Provision of Wetland Buffers

a. To protect wetland areas, all new construction projects which are located on property which includes or lies in proximity to wetland habitat, as shown in Figure VI-B, shall include the provision of a continuous wetland buffer. The buffer shall be l00-feet in width with permitted uses in the wetland buffer limited to those cited in Wetland Regulation #3 of this Chapter. The buffer shall be measured landward from the boundary of wetlands as delineated pursuant to the requirements of this chapter.

b. A wetland buffer of less than 100 feet in width shall be allowed only when, due to physical constraints such as the size and dimensions of the property, such buffer of a lesser width will protect the resources of the adjacent wetlands, based on site-specific factors. Such factors shall include, but not be limited to, the type and size of the development proposed; mitigation measures provided (such as planting of vegetation or construction of fencing); elevation differentials between the proposed development and wetland boundaries; or other similar factors which will serve to contribute to the purposes of a wetland buffer area. Proposals for mitigation measures for wetland buffers less than 100 feet in width shall be referred to representatives of the California Department of Fish and Game for a recommendation. In no event shall the wetland buffer be less than 50 feet in width.

The WDMSP property includes a small Coastal Brackish Marsh, a wetland habitat that contains one sensitive plant species (Southwestern Spiny Rush), but otherwise has a low diversity of vegetation species. This wetland is proposed to be avoided, protected in place, and buffered from the proposed development by the replacement of the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer.

This buffer width is consistent with the 50-foot buffer authorized for the Riverview Office project on this Site. For this Specific Plan it is considered appropriate at this location given the small size and limited diversity of the wetland along with the design parameters for the buffer. The existing wetland buffer area is an unvegetated dirt parking lot that will be enhanced with native vegetation. The design of the project will include fencing to limit human access, and includes an

access road (rather than residential units) at the edge of the new buffer providing additional separation between residential uses and the wetland.

6. *Retained Open Space/Conditions of Development. Areas to be retained in or restored to their natural state pursuant to the application of these wetland preservation regulations shall be subject to conditions to ensure the future protection of the designated area(s) from encroachment, disturbance or degradation. Said conditions shall include the recordation of an open space deed restriction, conservation easement or open space easement on wetland buffer areas and an irrevocable offer to dedicate open space easement to assure protection of the designated wetland area and to serve notice to the property owner, subsequent owners or interested parties of the restrictions in effect on such property.*

7. *Siting and Construction Practices. All buildings or other improvements proposed to be placed or erected, and all grading activities proposed to be undertaken adjacent to wetland or wetland buffer areas shall be located so as not to contribute to increased sediment loading of the wetland or wetland buffer, cause disturbance to its habitat values, or otherwise impair the functional capacity of the wetland or wetland buffer.*

8. *Drainage and Erosion Control. All development activities on project sites within the Lagoon Overlay Zone shall be subject to conditions for the provision of measures to minimize and control runoff and the associated erosion and sedimentation of downstream areas. Runoff from developed sites shall be either directed towards existing storm drain systems or retained on-site in settling ponds or other drainage/erosion control measures.*

All development within the Lagoon Overlay Zone shall comply with the following erosion control measures:

Each of the following measures is required to be incorporated into the project, and will be documented through conditions of development, with final plan review in accordance with City of Del Mar regulations.

a. *The applicant shall provide a grading plan prepared by a registered civil engineer that incorporates runoff and erosion control procedures to be utilized during all phases of project development.*

b. *The grading plan shall be designed to assure that there will be no increase in the peak runoff rate from the fully developed site over the greatest discharge that would occur from the existing undeveloped site as a result of the intensity of rainfall expected during the six-hour, ten-year design storm.*

c. *Runoff control shall be accomplished by establishing on-site or at suitable locations nearby, catchment basins, detention basins, and siltation traps along with energy dissipating measures at the terminus of storm drains, or other similar measures of equal or greater effectiveness.*

d. *Sediment basins (debris basins, desilting basins, or silt traps) shall be installed in conjunction with the initial grading operations and maintained through the development process as necessary to remove sediment from runoff waters draining from the land undergoing development. Areas disturbed but not completed prior to November 15, including graded pads and stockpiles, shall be suitably prepared to prevent excessive soil loss during the rainy season.*

e. The use of vegetation as a means to stabilize soils and control site erosion shall be accomplished pursuant to plans and specifications prepared by a licensed landscape architect or other qualified professional.

f. All graded slopes shall be stabilized prior to November 15, by the planting of vegetation. Vegetative erosion control may include but is not limited to, seeding, mulching, fertilization, and irrigation within sufficient time prior to November 15 to provide landscape coverage that is adequate to achieve the provisions of this policy.

g. For projects involving a total of more than 25 cubic yards of cut and/or fill grading operations, no grading shall occur from November 15 to March 31.

h. Temporary erosion control measures, shall include the use of berms, interceptor ditches, sandbagging, hay bales, filtered inlets, debris basins, silt traps, or other similar means of equal or greater effectiveness.

9. Where the provision of erosion and/or drainage control measures is required pursuant to the policies of this section, the responsibility for maintenance for such measures shall rest with the applicant unless such responsibility is assumed by another agency or party found acceptable by the Planning Director. The responsibility for maintenance and a detailed maintenance program shall be included in an agreement(s) recorded against the deed for the property. The arrangements shall provide for the on-going repair and maintenance of approved control measures to assure continued effective erosion/drainage control. The agreements, and any associated cash deposits, bonding or letters of credit deemed necessary to assure on-going maintenance shall be secured prior to the release of permits.

Maintenance of all erosion and drainage control measures will be in accordance with these provisions, and documented in the required agreement(s).

10. Runoff from the projects within the Lagoon Overlay Zone shall be controlled and directed to ensure that neither toxic materials nor excess nutrients flow into lagoon areas.

Site runoff from the WDMSP property will be controlled through the new storm drain system onsite, which incorporates a filtration of storm water from parking areas, and use of a bioretention basin prior to discharge to the existing storm drain.

11. New or redevelopment projects within the Lagoon Overlay Zone shall include the retention of the maximum amount of native vegetation on the site. Revegetation of sites within the Lagoon Overlay Zone shall include the use of non-invasive, drought tolerant species native to the San Diego coastal region and which are compatible with adjacent wetland habitat species. Landscape plans including their associated berms, planters and fences shall also be designed to minimize the disruption of view corridors from public roadways and parks.

The WDMSP landscape design guidelines establish regulations and general requirements for project landscaping. As part of these requirements, it is specified that the Site landscape shall use predominantly drought-tolerant plants, which require minimal irrigation and maintenance. Plant species for distinct areas of the Site are listed in the Specific Plan. The specific size and planting specifications on final landscape plans will be reviewed for conformance with this standard.

The interface with natural open space areas is specifically addressed by the WDMSP guidelines.

For the coastal brackish marsh area at the southeast comer of the Site, they call for removal of invasive plant material within this existing wetland, with supplemental planting of appropriate native plant material to enhance the wetland area.

Within the remaining slope areas, invasive plant material is required to be removed and replanting is to include appropriate native plant material, including southern coastal bluff scrub that may be accented with Torrey Pine trees.

Policy VI-4 ***To protect the biological and visual resources of wetland areas, the City shall encourage the undergrounding of all new utility lines and new utility line extensions for projects within the Lagoon Overlay Zone when such undergrounding would not be detrimental to the wetlands or to the sensitive resources located in the upland areas adjacent to such wetlands.***

All onsite utility line service extensions for the site development will be installed underground. Additionally, the developer will lead a program to underground existing overhead utility lines along the project frontage in collaboration with the City and SDG&E.

California Coastal Act of 1976
Chapter 3

The following discussion presents the findings to support that the WDMSP and development permitted by the Specific Plan is in conformity with Chapter 3 of the California Coastal Act of 1976 (commencing with Section 30200 of the California Public Resources Code).

As stated in Section 30001, future developments that are carefully planned and developed consistent with the policies of this division, are essential to the economic and social well-being of the people of this state, and especially to working persons employed within the coastal zone, within the backdrop of the permanent protection of the state's natural and scenic resources, and protection of the ecological balance of the coastal zone.

The proposed WDMSP (LCP Amendment) and associated development is designed to comply with the legislative findings and declarations of Section 30001, and has at its core the goals presented in Section 30001.5 in that it does take into account the social and economic needs of the people of the state providing for a variety of public benefits associated with affordable housing in a community with limited opportunities to meet such demand. It also makes provisions to protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and resources, including undisturbed coastal bluffs and the Coastal Brackish Marsh, a wetland habitat area on-site.

As specified in Section 30602(g), it is important for the Commission to encourage the provision of new affordable housing opportunities for persons of low and moderate income in the coastal zone. The WSMSP provides for the construction of affordable housing at this site, which also

implements other state requirements for housing in accordance with the City of Del Mar's adopted Housing Element (Section 30007).

ARTICLE 2 – PUBLIC ACCESS

Watermark Del Mar is located at the southeastern corner of the intersection of Jimmy Durante Boulevard and San Dieguito Drive, which is not adjacent to the shoreline. Development in accordance with WDMSP will not interfere with any existing or potential public access to the sea (Section 30211). Adequate access exists nearby (Section 30212). There are public sidewalks and trail opportunities in the immediate project area. The developer has made a contribution through a development agreement toward Riverpath Del Mar, to enhance public access in the area that exists directly across the street from this property. Development in accordance with WDMSP complies with Sections 301210 through 30214 as they would apply to the property.

ARTICLE 3 – RECREATION

Sections 30220 through 30224 do not apply. The property does not include areas suited for water-oriented recreational activities, oceanfront land, upland areas necessary to support coastal recreational uses, or opportunities for facilities that would increase recreational boating use. The property has existing approvals for general commercial (office) development, which has no higher priority than the proposed residential use. The WDMSP provides for public benefits through its affordable housing provisions.

ARTICLE 4 – MARINE ENVIRONMENT

The WDMSP property includes a very small (0.10 acre) Coastal Brackish Marsh, a wetland habitat that contains a sensitive plant species (Southwestern Spiny Rush). This wetland is proposed to be avoided, protected in place, and buffered from the proposed development by the replacement of the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer. A permanent fence with signage will be erected along the edge of the wetland buffer. Invasive vegetation species within this wetland area will be removed, with replanting of the area using compatible natives to further enhance the wetland area (Section 30230).

The quality of this coastal wetlands and its opportunity for biological productivity will be enhanced through the project implementation. The runoff from the project will be controlled and directed into a bioswale within the wetland buffer area adjacent to the marsh. The marsh itself will continue to function and flow as it currently does. No runoff from the project will be directed into the marsh, and the buffer area will be revegetated with compatible, non-invasive native species. (Section 30231)

Sections 30232 through 30236 do not apply as there is no development or transportation of crude oil, gas, petroleum products, or hazardous substances; no diking, filling, or dredging of open coastal waters, wetlands, estuaries, or lakes; no effect on commercial fishing and recreational boating industries; no construction that alters natural shoreline processes; and no channelizations, dams, or other substantial alterations of rivers and streams.

ARTICLE 5 – LAND RESOURCES

To the extent that ESHA is identified on the project site, the WDMSP will provide for protection of environmentally sensitive habitat areas against any significant disruption of habitat values. (Section 30240)

Development in areas adjacent to environmentally sensitive habitat areas has been sited and designed to prevent impacts which would significantly degrade those areas, and is compatible with the continuance of those habitat areas. WDMSP requires the provision of a buffer adjacent to the existing marsh habitat with control of stormwater runoff, water quality, and siltation effects, where no buffer currently exists, and will fence these areas to limit potential for impact to the habitat areas onsite.

Sections 30241 through 30243 do not apply as the property does not have timberlands, prime agricultural land, existing agricultural uses, and is not suitable for agricultural use.

There are no known archaeological or paleontological resources as identified by the State Historic Preservation Officer on the property. In recognition that many properties in coastal areas have the potential for subsurface archaeological resources, a program of monitoring during grading activities will be implemented for the WDMSP property. (Section 30244)

ARTICLE 6 – DEVELOPMENT

The WDMSP property is located within, and contiguous with existing developed areas able to accommodate it with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. (Section 30250)

The WDMSP property includes an area with undisturbed, scenic sandstone bluffs on the northeastern portion of the site that are visible from areas to the north, and comprise part of the overall background viewshed from and across the San Dieguito River. The location of the development footprint designated in accordance with the WDMSP will preserve the scenic and visual qualities of these bluffs along with the character and the open space appearance of the area from a distance. (Section 30251)

The undisturbed bluffs can also be seen travelling south on Jimmy Durante Boulevard as one approaches the intersection of San Dieguito Drive. These bluff formations, and the small area of wetland marsh vegetation at the toe of this bluff area, will be preserved in permanent open space in accordance with the WDMSP. The buildings at the intersection corner are limited to a single Story to have a lower scale and additional visual openness at this intersection.

The WDMSP defines a development footprint that is necessary to accommodate the density per the Housing Element, and to provide public benefits associated with the project, including affordable housing, while preserving the most sensitive areas of the site. The development is to be located within previously disturbed and graded areas of the property. The WDMSP allows for a modified height measurement from the Podium deck level, necessary to achieve compliance with floodplain safety regulations. The resulting building height will not affect views

of the ocean or scenic coastal areas, but will allow for the area needed in order to achieve the affordable housing goals at higher density for this property.

While much of the WDMSP property has been previously graded, the areas of natural topography onsite are designated by the Specific Plan to be outside any site grading, and left undisturbed and preserved. One of the key considerations for the project design was to protect the undisturbed sandstone bluff formation near San Dieguito Drive, in a way that retains its visibility. The Site is located along the lower portions of a much larger bluff/ridge formation that extends offsite. The overall form, scale and character of the bluff/ridge landform will be retained with the proposed project.

The WDMSP development will maintain and enhance public access to the coast by providing non-automobile circulation and amenities for pedestrians and cyclists within the development, including connectivity to existing, adjacent sidewalks and bicycle routes that link with trails and other coastal access. The WDMSP requires adequate parking facilities onsite for residents and guests, and incorporates onsite recreational facilities to serve the recreational needs of new residents within the development. (Section 30252)

The WDMSP provides standards to minimize the potential for adverse impacts. (Section 30253)

(a) The property is situated partially within the 100-year floodplain of the San Dieguito River. In order to minimize risks to life and property in these areas, the Specific Plan regulations were established for flood hazard avoidance. Based on recent experience in other communities where flooding has exceeded projected levels, and acknowledging the potential for future sea level rise, a safety factor was used of 2 feet above BFE as the criteria for structures to be located on Podium construction. Structures being built on-grade at the corner adjacent to the intersection would be located at the BFE, to assure flood hazard avoidance, while balancing the community interest in minimizing building height at this corner.

(b) The WDMSP will assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The residential homes of the WDMSP will be located on previously graded and disturbed portions of the property, in order to allow protection of the natural, undisturbed sandstone bluffs and the wetland marsh area at the toe of the bluff slope.

(c) The WDMSP will be consistent with any requirements imposed by an air pollution control district or the State Air Resources Board.

(d) The construction and amenities of Watermark Del Mar are designed to minimize energy consumption and vehicle miles traveled. The project construction will comply with CalGreen standards with energy efficient components; will locate new homes in an infill location, in proximity to the Village area and recreational amenities; and will provide pedestrian and cyclist amenities for future residents to encourage non-vehicular transportation.

(e) The WDMSP property is not a visitor destination points for recreational uses.

Sections 30254 through 30255 do not apply as the property does not involve public works facilities, sewage treatment plant development or a coastal-dependent development.

ARTICLE 7 – INDUSTRIAL DEVELOPMENT

Sections 30260 through 30265.5 do not apply as the WDMSP does not involve any industrial development.

APPENDIX B – COMMUNITY OUTREACH PROCESS

This section will need to be updated to reflect the process as it occurs. An outline of the planned outreach is provided for this draft. This Appendix will be modified to incorporate the input received during the community outreach process.

The Specific Plan process requires that opportunities for the involvement of citizens, public agencies, public utilities, civic education, and other community groups must be provided. For this Specific Plan both formal and informal methods of outreach and participation have been used, including the Citizens' Participation Program (CPP) as required by the Del Mar Municipal Code (DMCC).

Initially, informal methods of outreach and participation were used to facilitate interested parties' ability to obtain information about the project, provide an opportunity for the public to provide comments and input throughout the project review process, including input regarding specific project design, alternatives, environmental review and any issues of concern. Methods used include:

- Interactive website.
- List-serve for interested parties.
- Meetings with neighbors and stakeholders.
- Internal advisory group meetings.
- Meetings with coastal commission staff.

The formal community participation process includes:

- The implementation of the Citizens Participation Program per the Del Mar Municipal Code.
- CEQA Scoping Meeting.
- Three public workshops for community engagement during project processing.
- Planning Commission and Design Review Board interim presentations and review to elicit early feedback.
- Public hearings at the Planning Commission, Design Review Board and City Council.

Interactive website

The Watermark Del Mar project website, www.WatermarkDelMar.com, was launched on March 27, 2015. This website allows interested people to access detailed project information, view the project video and images, review project documents, sign up to receive project updates via the project e-newsletter, public notices, and submit comments and questions.

The Watermark Del Mar video showcases what the completed project will look like. Using computer imaging, this video shares several "before and after" views of the property to illustrate how the project's timeless, coastal-inspired architecture will complement the adjacent residential area. The images reflect the accurate design and scale of the project overlaid on photography of the existing Site.

List-serve for interested parties

Watermark Del Mar established a list serve on its website to allow members of the public to sign up to receive the project e-newsletter. This e-newsletter will provide regular project updates, as well as notices about public meetings and other opportunities for public participation. Anyone interested in the project is encouraged to visit and sign-up at the website.

Meetings with neighbors and stakeholders

The Watermark Del Mar team has offered personal meetings with interested community members to share information about the project and answer any questions. The vision of the Watermark Del Mar team is to create an exceptional residential community that reflects the high quality and beauty of the Del Mar community. Meeting with interested residents to gather public input will help to ensure that this will be a project the community will be proud of.

The opportunity for such meetings has been noted on the project website, and meetings have also been scheduled through email or phone requests. To date, over 30 meetings have been held with stakeholders and neighbors.

Internal advisory group meetings

The Watermark Del Mar Community Advisory Group was established with seven members. This advisory group met three times during the project design and Specific Plan process between April 2015 and October 2016.

Meetings with Coastal Commission staff

An initial on-site meeting with Coastal Commission staff was held on May 29, 2015 Another meeting onsite was held on August 22, 2017 to update staff, discuss technical coastal requirements, and review project design features..

Citizens Participation Program per the Del Mar Municipal Code

The purpose of the Community Participation Program (CPP) is to ensure that applicants for projects conduct efforts to notify potentially affected parties of proposed developments early in the design phase of a project. The CPP is also intended to give the applicants and their agents the opportunity to understand and respond to concerns raise about the project's potential impacts on the community. The CPP is not intended

to produce complete consensus on all applications but to facilitate dialogue among applicants, neighbors, and the community early in the development review process.

The Watermark Del Mar CPP meetings were held at the project site on Thursday, January 28th and on Saturday, January 30th, 2016. Two meetings were scheduled to provide options for the public to attend at a convenient time. The combined attendance was over 70 people who signed in, as well as several people who stopped by on an informal basis. Comment cards were submitted by 40 participants. The majority of the comments were complementary of the project and many provided good input for the team to consider. A summary of the comments received and responses to those comments were provided to all attendees and to staff.

CEQA Scoping Meeting

The City of Del Mar issued a Notice of Preparation for an Environmental Impact Report (EIR), soliciting input on the content for that document, between March 12, 2015 and April 10, 2015. A Scoping Meeting was held on March 26, 2015.

The scoping meeting was attended by 20 citizens, with input on the issues for evaluation in the EIR provided verbally at the meeting and in written form. A summary of that information is to be included in the EIR.

Three public workshops for community engagement during project processing

1. March 10, 2016, 6:00-8:00 pm: Watermark Del Mar Public Workshop #1; L'Auberge Del Mar, 1540 Camino Del Mar, Del Mar

2. March 24, 2016, 6:00-8:00 pm: Watermark Del Mar Public Workshop #2; L'Auberge Del Mar, 1540 Camino Del Mar, Del Mar

3. December 3, 2016, Open House from 10:00 am – 1:00 pm: Watermark Del Mar Public Workshop #3; Del Mar Plaza, 1555 Camino Del Mar, Del Mar, with information regarding 38-unit Community Response Alternative.

Planning Commission and Design Review Board interim presentations and review to elicit early feedback

1. February 24, 2016, 5:00 pm: City of Del Mar Design Review Board informational presentation; Del Mar Communications Center, 240 10th Street, Del Mar

2. March 8, 2016, 5:00 pm: City of Del Mar Planning Commission informational presentation; Del Mar Communications Center, 240 10th Street, Del Mar

3. April 27, 2016, 5:00 pm: Design Review Board Presentation and Informal Preliminary Review; Del Mar Communications Center, 240 10th Street, Del Mar

Public hearings at the Planning Commission, Design Review Board and City Council

To be provided.

APPENDIX C – PROJECT PLANS

A residential condominium development project for Watermark Del Mar is being processed concurrently with the Watermark Del Mar Specific Plan, and is illustrated on Exhibits C-1 to C-7. This project design provides for a residential development that is consistent with the WDMSP, and is defined by its key location at the northeastern gateway into the City of Del Mar, its proximity to trail systems associated with the San Dieguito River, and its role in creating an opportunity for higher density housing in a transitional location along a major transportation corridor for the City.

The Watermark Del Mar project is a multifamily residential condominium development that would feature 48 residential units in 14 structures. In addition, Watermark Del Mar would include a Recreation Room, a pool and spa area for the use of residents, and associated maintenance and administrative amenities. Watermark Del Mar would provide a secured 108-stall parking structure on the 2.37-acre site. The project includes a single vehicular access point from San Dieguito Drive to this secured parking structure.

The WDMSP project proposes a mix of housing types including townhomes and flats. The individual units will encompass a variety of floor plans and sizes, ranging from three-bedroom to studio units. The WDMSP development is designed to integrate with the common areas and pedestrian circulation, foster connectivity, and promote and facilitate walking and cycling. The size and scale of the residential buildings will vary depending on the number of units attached together (1-10 units per building).

An important component of the project design is to fit with the established character of the City of Del Mar. The use of separate building elements for the multi-family uses, to retain the appearance of single family homes, is a key concept in the Specific Plan that affects much of the overall building form and massing on the site. A figure-ground analysis was performed to help illustrate how the project would relate to the neighborhood and the broader community (Exhibits C-9 and C-10). The figure-ground diagram is a two-dimensional map of urban space that shows the relationship between built and unbuilt areas, as a way of visualizing the plan of the city. The figure ground drawings can help understand the development patterns and relationships of buildings within an area, and how the proposed development fits with the existing fabric of the community or neighborhood, particularly in terms of the mass, proportions and edge conditions. Topographic contours have been included on these figure-ground diagrams, which show that there is a different character and spacing of buildings between the areas with level topography, which have more regular and closely spaced buildings, and the areas with more slope, where buildings are more widely spaced,

In the event that the approvals for this concurrent project design are not implemented, or are proposed to be substantially modified, the Specific Plan regulations remain the controlling standards and guidelines for the property within the WDMSP. Any future changes to the project plans, would need to be consistent with the regulations of the WDMSP, and would be subject to subsequent review of the applicable permits as outlined in the WDMSP and the DMMC.

Exhibit C-1 Illustrative Site and Landscape Plan

Not to scale. Source: Benson & Bohl, Schmidt Design Group

Exhibit C-2 Site Plan (1st Floor)

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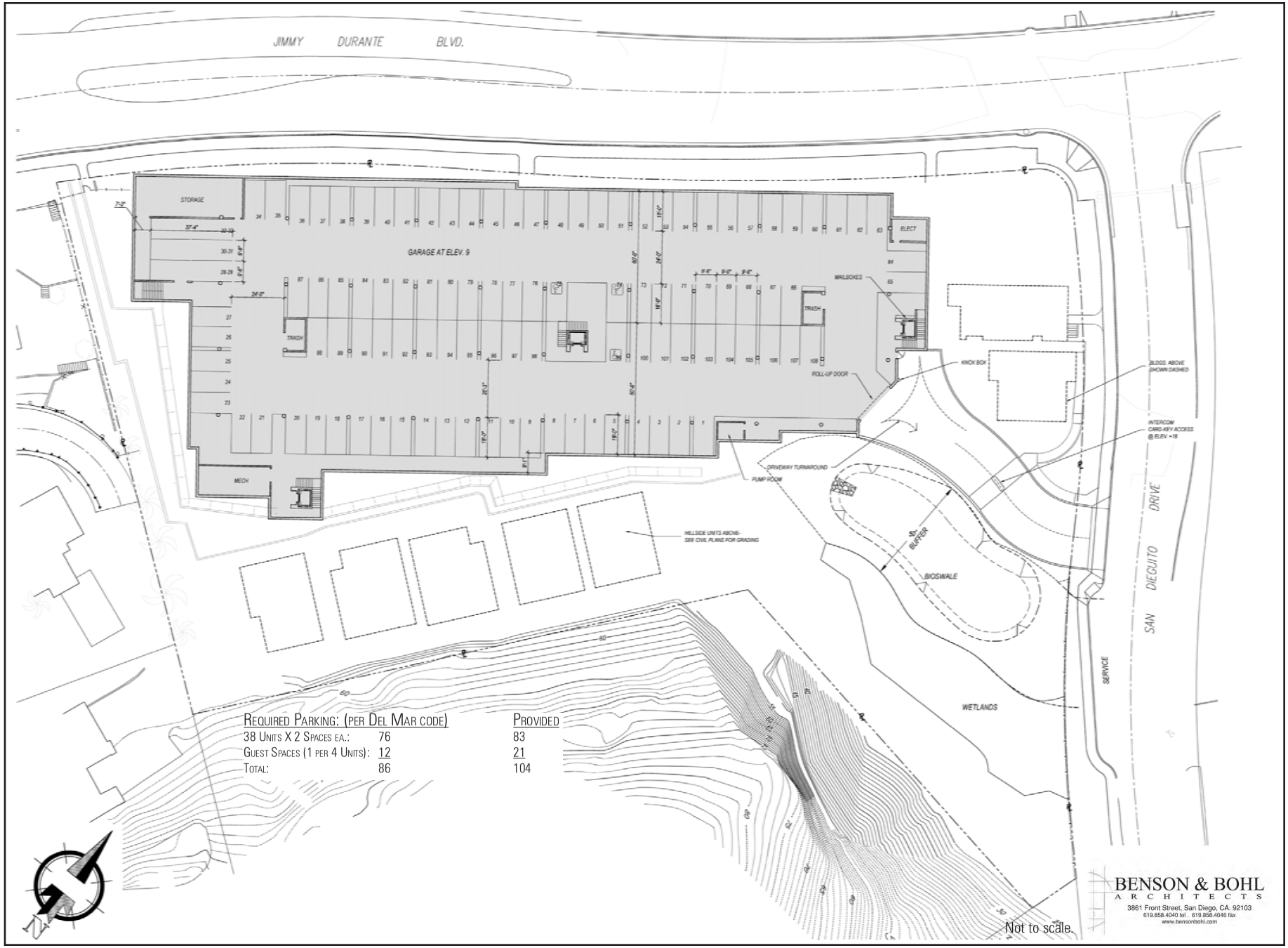
619.858.4040 tel . 619.858.4046 fax
www.bensonbohl.com

Exhibit C-3 Site Plan (2nd Floor)

Exhibit C-4 Circulation, Access and Parking Plan



Required Parking: (per Del Mar code)		Provided
38 Units X 2 Spaces ea.:	76	83
Guest Spaces (1 per 4 Units):	12	21
Total:	86	104

Not to scale.

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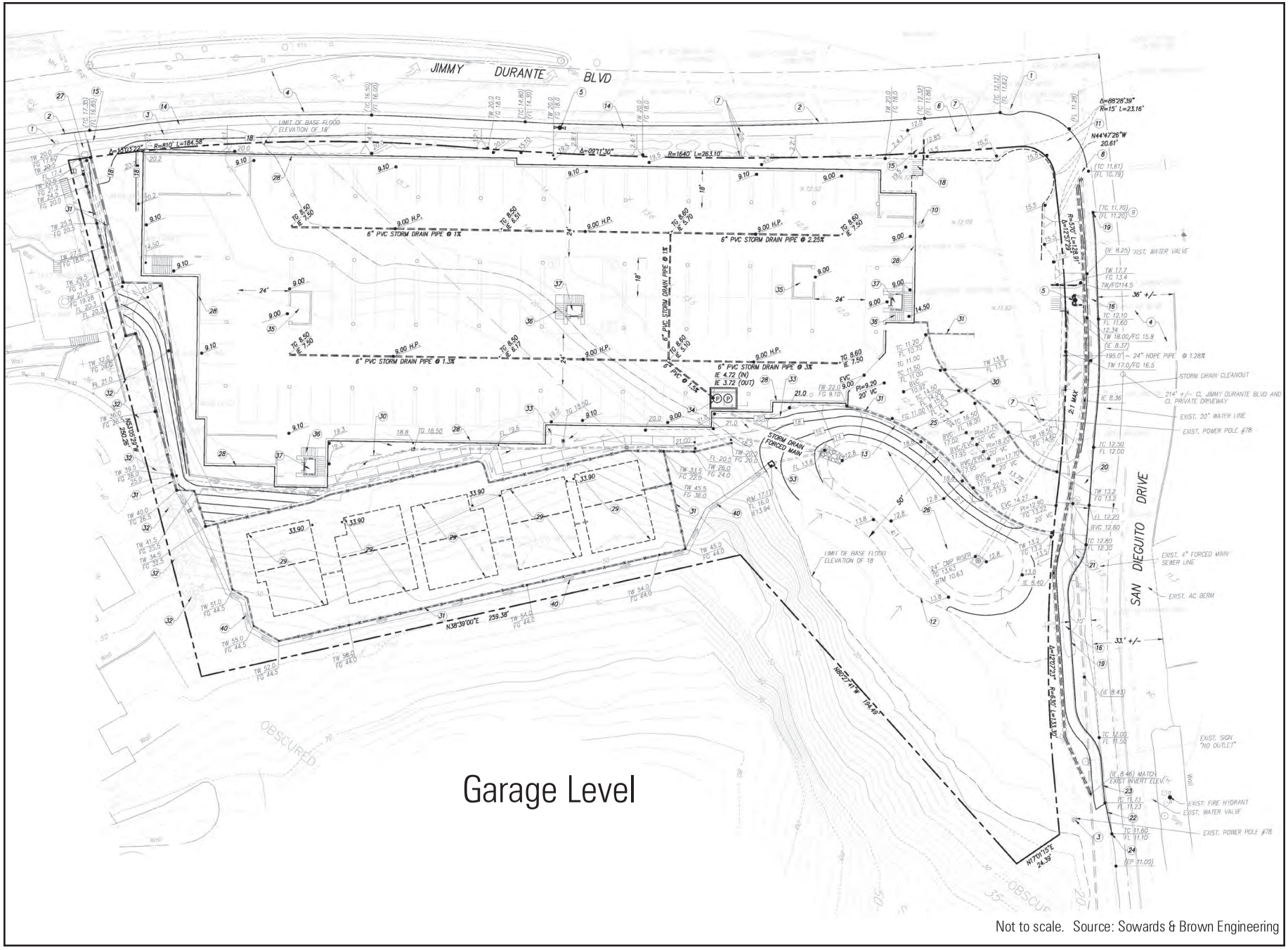
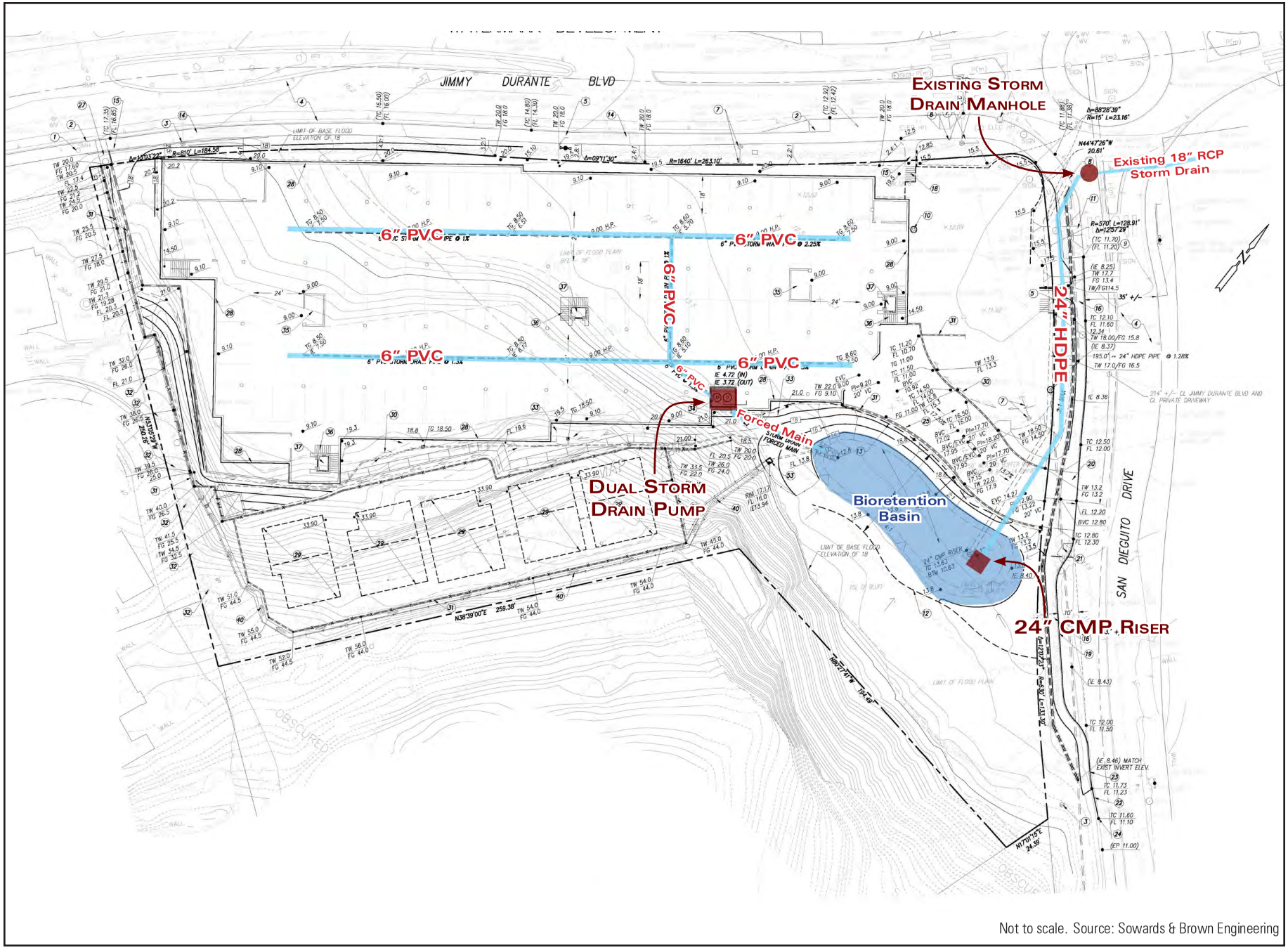
Exhibit C-5 Conceptual Grading Plan



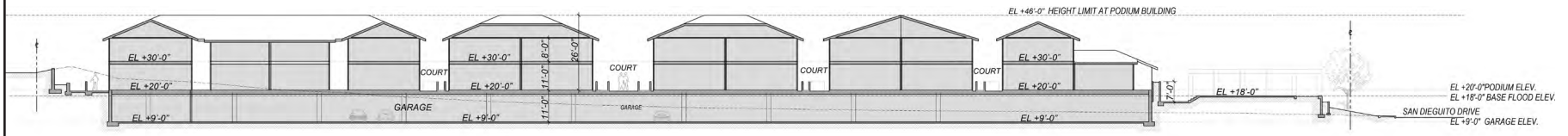
Not to scale. Source: Sowards & Brown Engineering

Exhibit C-6 Drainage Plan

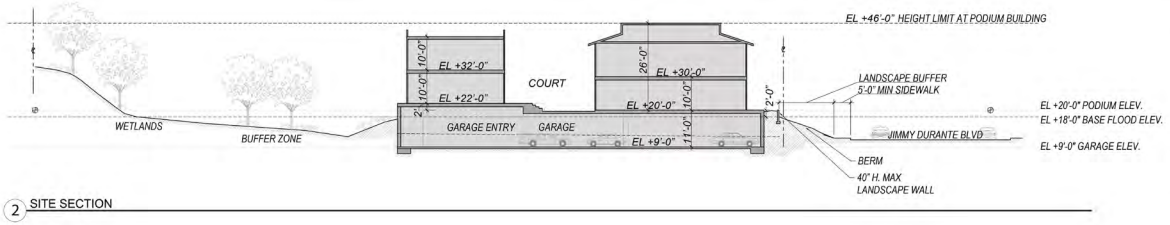


Not to scale. Source: Sowards & Brown Engineering

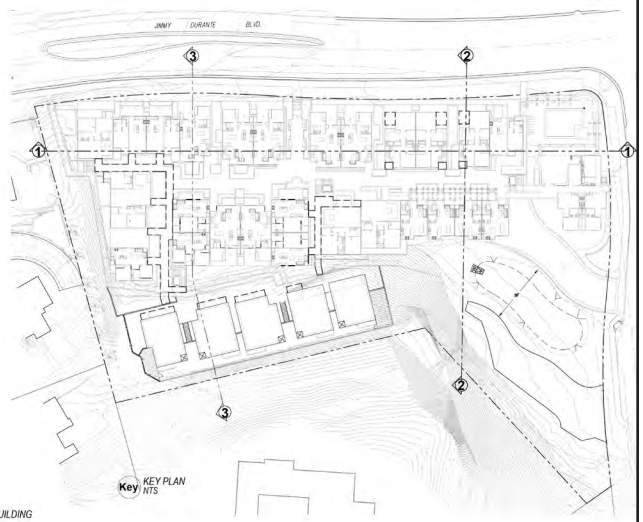
Exhibit C-7 Project Cross Sections

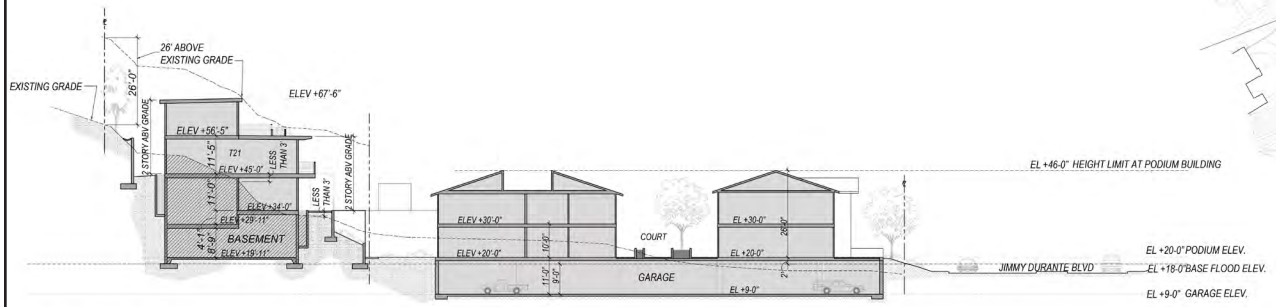


1 SITE SECTION



2 SITE SECTION





3 SITE SECTION

Not to scale.

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Exhibit C-8 Figure-Ground Diagram - Existing

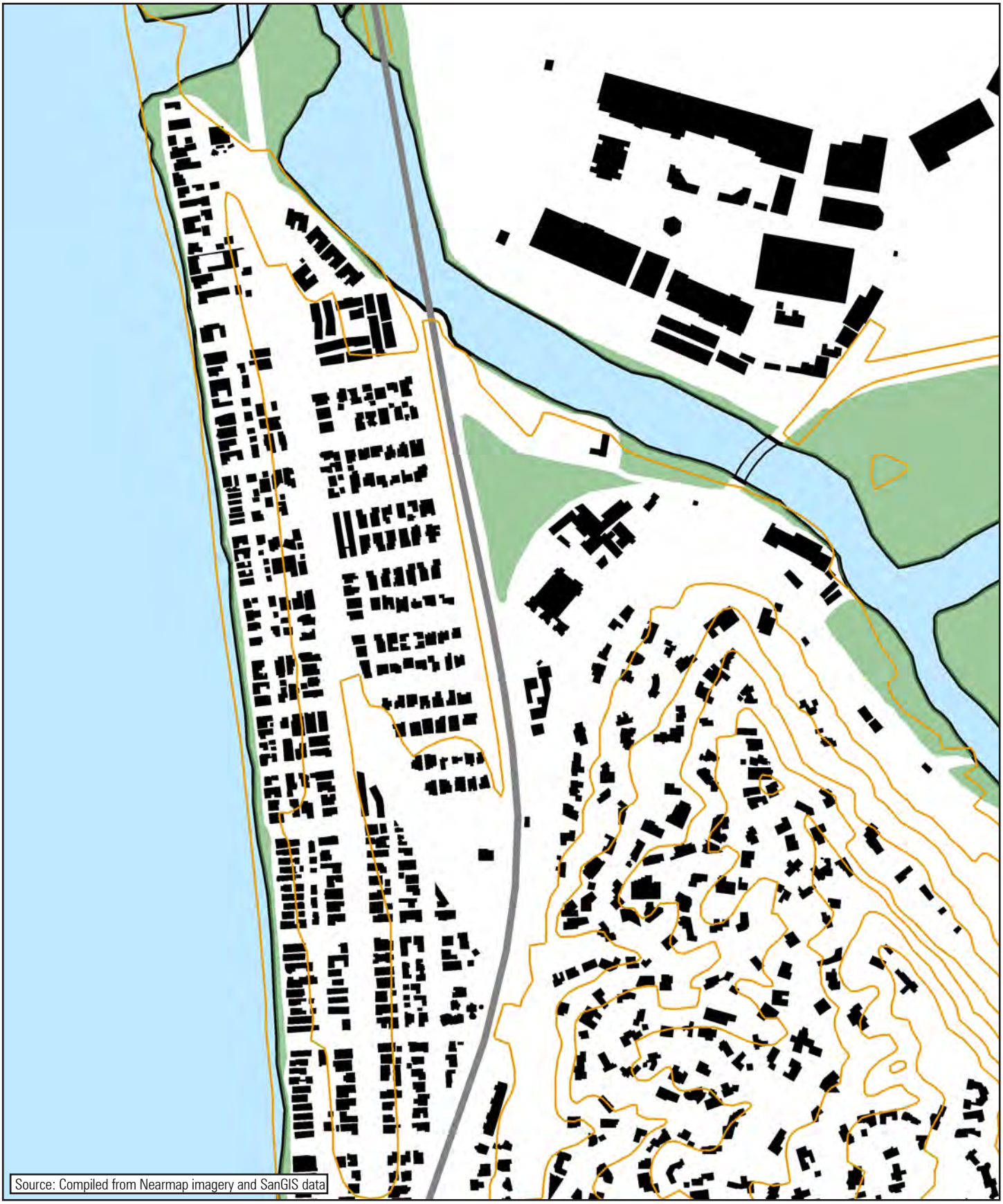
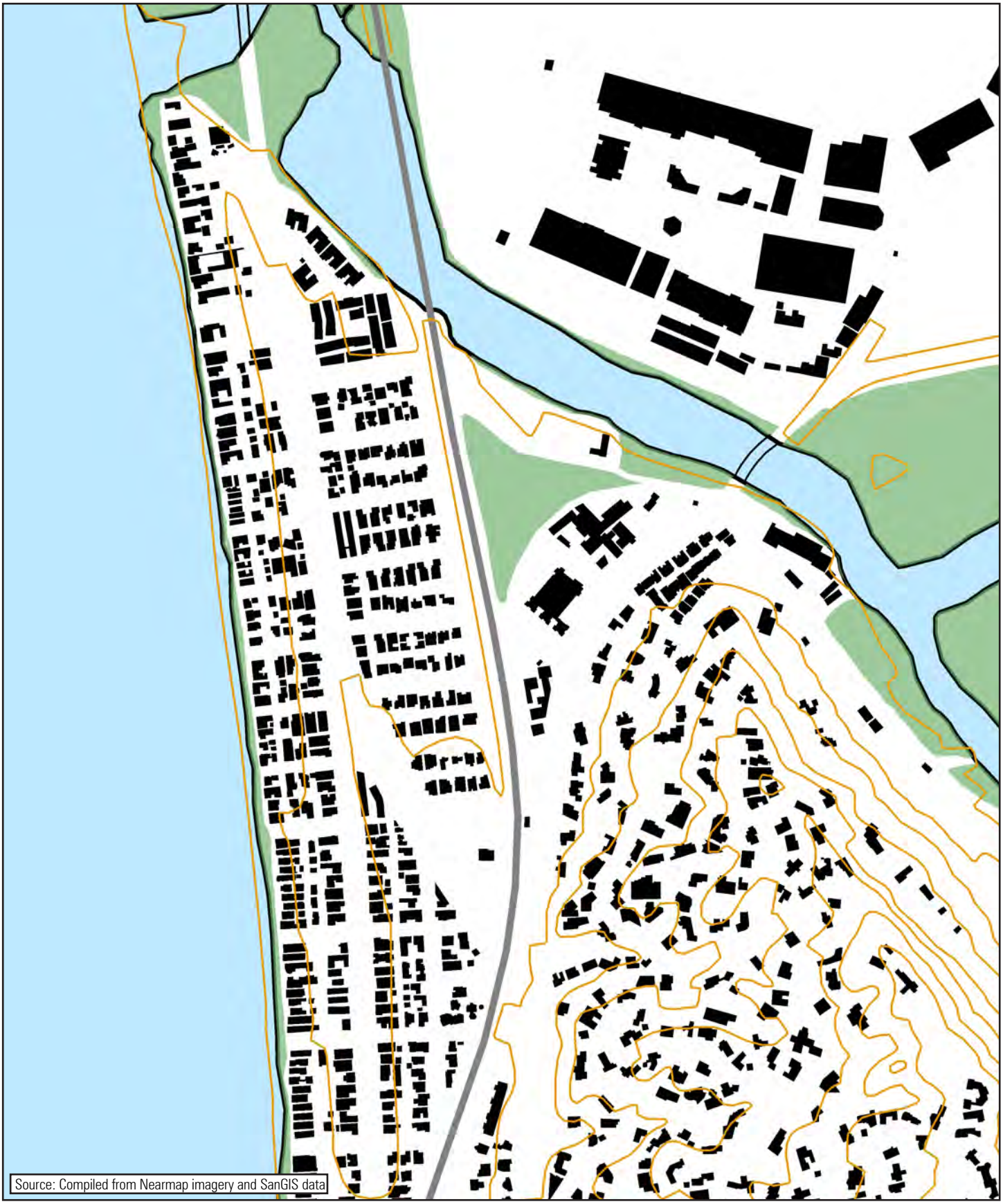


Exhibit C-9 Figure-Ground Diagram - With Project



Source: Compiled from Nearmap imagery and SanGIS data

APPENDIX B

Notice of Preparation and Public Comments

City of Del Mar
Watermark Del Mar Specific Plan
Environmental Impact Report
Notice of Preparation

Date: March 30, 2015

To: State Clearinghouse, Responsible Agencies, Trustee Agencies, Interested Parties and Organizations

From: City of Del Mar, 1050 Camino Del Mar, Del Mar, California 92014

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) and Scoping Meeting for the Proposed Watermark Project

The City of Del Mar (City) will be the Lead Agency under the California Environmental Quality Act (CEQA) as amended [Public Resources Code, §21000-21178 and California Code of Regulations, Title 14, Chapter 3 §15000-15387] and will initiate the preparation of an Environmental Impact Report (EIR) in accordance with CEQA for the proposed Watermark Specific Plan (proposed project).

This Notice of Preparation (NOP) provides information describing the proposed project and its potential environmental effects. The Draft EIR will describe the project need, goals, and objectives, baseline environmental conditions in the project study area, and the potential environmental effects associated with implementation of the proposed project. The City is requesting input from government agencies, other organizations, and private citizens regarding the scope and content of the environmental information to be included in the Draft EIR. Responsible agencies are requested to indicate their statutory responsibilities in connection with the proposed project. Public agencies receiving this NOP may need to consider the Draft EIR if they need to issue permits or other approvals for the proposed project

Project Background

The proposed project involves legislative and development components that would be addressed through a Specific Plan process. The Specific Plan process ensures that opportunities for the involvement of citizens, public agencies, public utilities, civic education, and other community groups are provided. These opportunities are provided through the preparation of the Specific Plan by the Project to encompass the legislative actions to assign a new Community Plan, Zoning Map and Local Coastal Program designations in addition to the accompanying CEQA documentation.

Project Description

The proposed project would be a multifamily residential development consisting of 12 structures that would feature 48 residential units, with a proposed density of 20.24 units per acre. The residential units proposed would consist of a mix of studio, one-bedroom, two-bedroom, and three-bedroom units. The unit mix provides for a variety of options for residents with varying income levels. The proposed project would also include a recreation room, a pool and a spa area for the use of residents and associated maintenance and administrative amenities. The proposed project would provide a secured 105 stall parking structure on the 2.37 acre site. The proposed project includes a vehicular access point from San Dieguito Road to the secured parking structure.

Project Location

The proposed project site is located approximately 0.76 miles west of the Interstate 5 (I-5) and 0.32 miles east of the Camino Del Mar in the City of Del Mar, California. The site is located on the southern corner of the intersection of Jimmy Durante Boulevard and San Dieguito Road. The proposed project site currently consists of two parcels, Assessor's Parcel Numbers (APNs) 299-100-47 and 299-100-48 totaling approximately 2.37 acres. The existing site is vacant and is currently used for paid fairground, race track, and event parking. The site is in the North Commercial (NC) Zone, the Bluff, Slope and Canyon (BSC) Overlay and the Lagoon Overlay Zones.

Topics to be Analyzed in the EIR

Potential environmental effects to be evaluated in the Draft EIR include: aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, recreation, traffic and circulation, public services, utilities and service systems, cumulative impacts, and project alternatives. Potential impacts will be analyzed in the Draft EIR and mitigation measures will be provided as required. In accordance with CEQA Guidelines, the EIR will include other mandated sections including an executive summary, introduction, project description, growth inducement, significant irreversible and unavoidable changes, effects found not to be significant, and a list of organizations and persons consulted. A mitigation monitoring and reporting program (MMRP) will be prepared that will contain a list of the mitigation measures and monitoring programs required for each identified significant environmental issue.

Public Review Period

The City has determined to make this NOP available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). The comment period for the NOP begins on March 12, 2015 and ends April 29, 2015.

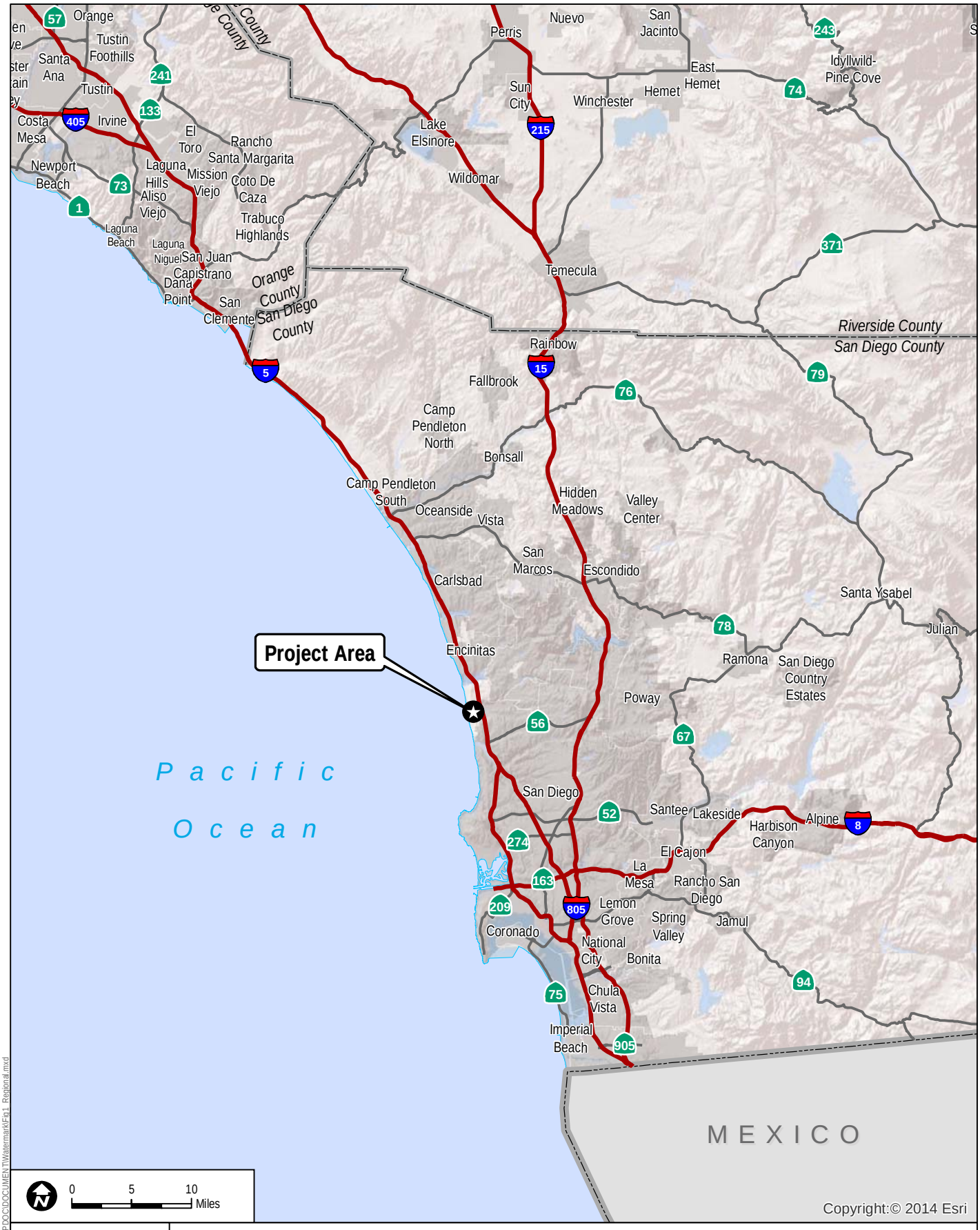
Responses and Comments

Responses and Comments

Please provide your written comments including specific statutory responsibilities of your agency, as applicable. Written comments on the NOP and on the content of the forthcoming Draft EIR should be submitted no later than Wednesday April 29, 2015 at 4:30 PM. Please send your responses and comments to Matt Bator – City of Del Mar, 1050 Camino del Mar, Del Mar, California 92014; or e-mail: MBator@delmar.ca.us.

Public Scoping Meeting

The City held a public scoping meeting that was duly noticed and held on March 26, 2015 at 6:00 PM in the Del Mar City Hall Annex located at, 235 11th Street, Del Mar, California. Oral and written comments will be considered during the preparation of the environmental impact report.



DUDEK

7797

FIGURE 1

Regional Map

PROPOSED WATERMARK DEL MAR SPECIFIC PLAN NOP

Path: Z:\Projects\7797.01\MAPDOC\DOCUMENT\WatermarkKFig1_Regional.mxd

DUDEK

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SOURCE: Bing Maps 2015

FIGURE 2
Vicinity Map

PROPOSED WATERMARK DEL MAR SPECIFIC PLAN NOP

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Watermark Del Mar

Project Summary

Net Site Area 103,282 S.F. (2.37 Acres)

MULTI-FLOOR TOWNHOMES

No.	Unit Type	Sq. Ft.	S.F. (at Grade)	Total Square Footage
4	T1 / 3BD	2,400	4,308	9,600
2	T2 / 3BD	2,400	2,186	4,800
7	A / 3BD	1,950	7,035	13,650
4	A1 / 2BD	1,600	3,200	6,400
3	A2 / 3BD	2,040	3,060	6,120
			19,789 total	40,570 total

1ST FLOOR FLATS

No.	Unit Type	Sq. Ft.		Total Square Footage
3	B / 1BD	800	2,400	2,400
3	B1 / 1 BD	800	2,400	2,400
2	B2 / 2BD	824	1,648	1,648
2	C / 2BD	1,270	2,540	2,540
1	C1 / 3BD	1,500	1,500	1,500
1	C2 / 2BD	1010	1,010	1,010
2	D / 1BR	550	1,100	1,100
1	ST / Studio	520	520	520
1	ST1 / Studio	486	486	486
			13,604 total	13,604 total

2ND FLOOR FLATS

3	B / 1BD	800		2,400
3	B1 / 1 BD	800		2,400
2	B2 / 2BD	824		1,648
2	C / 2BD	1,270		2,540
1	C1 / 3BD	1,500		1,500
1	C2 / 2BD	1010		1,010
1	ST1 / Studio	486		486
				13,184 total
48				65,358
Recreation Room			640	640
Elevators, Covered Hallways, etc..			1135	1135
Total			35,168	67,133
Lot Coverage			42,116*	41%
Garage S.F.			43,700	
F.A.R.			(67,133/103,282)	0.65
Density			20.24du/acre	

UNITS WITH THE SUFFIX '(Af)' ARE AFFORDABLE UNITS (7 total)

*includes eaves & 2nd floor walkways

DUDEK

7797

SOURCE: Benson & Bohl Architects 2014

FIGURE 3

Conceptual Site Plan

PROPOSED WATERMARK DEL MAR SPECIFIC PLAN NOP

Path: Z:\Projects\7797\01\MAP\DOC\DOCUMENT\Watermark\Fig3_ConceptualSitePlan.mxd

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

April 29, 2015

Mr. Matt Bator, Senior Planner
City of Del Mar
1050 Camino Del Mar
Del Mar, CA 92014
MBator@delmar.ca.us

Subject: Comments on the Notice of Preparation for the Watermark Del Mar Specific Plan Draft Environmental Impact Report (SCH#2015031044), City of Del Mar, California

Dear Mr. Bator:

The California Department of Fish and Wildlife (Department) has reviewed the above-referenced Notice of Preparation (NOP) for a Draft Environmental Impact Report (DEIR) for the Watermark Del Mar Specific Plan (SCH#2015031044) (Project) dated March 30, 2015. Comments on the NOP were requested by April 30th, 2015. The comments provided herein are based upon information provided in the NOP for the DEIR (and associated reference materials), our knowledge of sensitive and declining vegetation communities, and ongoing regional habitat conservation planning in the County of San Diego (County).

The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; §§15386 and 15381, respectively) and is responsible for ensuring appropriate conservation of the State of California's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (CESA; Fish and Game Code §2050 *et seq.*) and Fish and Game Code section 1600 *et seq*. The Department also administers the Natural Community Conservation Planning (NCCP) program. The City of Del Mar (City) is included within the South County Subregional Multiple Species Conservation Program (MSCP). The MSCP Subregional Plan, finalized in August 1998, is a comprehensive, long-term habitat conservation plan that addresses multiple species' habitat needs and the preservation of native vegetation in 12 jurisdictions of southwestern San Diego County. The MSCP Subregional Plan is implemented through local Subarea Plans that are approved or in process. According to the Subregional MSCP Plan (County of San Diego 1996 and 1998), the Del Mar Subarea Plan focuses on implementation in six areas with significant resources in the mostly built-out city, with the primary consideration being the northern area of the City, which includes a portion of the San Dieguito Lagoon. The City has not made progress with their Subarea Plan since the MSCP Subregional Plan was completed.

The proposed Project is a Specific Plan on 2.37-acres (APNs 299-100-47 and 299-100-48) to allow for a multifamily residential development consisting of 12 structures that would feature 48 residential units, a recreation room, a pool and a spa area for the use of residents, and associated maintenance and administrative amenities. The proposed Project would also include a secured 105 stall parking structure with a vehicular access point from San Dieguito Road to the parking structure.

The proposed Project site is located on the southern corner of the intersection of Jimmy Durante Boulevard and San Dieguito Road within the City. The proposed Project site is currently vacant and used for paid fairground, race track, and event parking, and is located within the City's North Commercial Zone, the Bluff, Slope and Canyon Overlay and the Lagoon Overlay Zones.

The Department offers the following comments and recommendations to assist the City in avoiding, minimizing, and adequately mitigating Project-related impacts to biological resources, and to ensure that the Project is consistent with ongoing regional habitat conservation planning efforts (i.e., that it would not preclude the preserve assembly or prevent the achievement of the biological goals anticipated under the MSCP Subregional Plan).

Specific Comments

1. Based on a review of our records (including the California Natural Diversity Database ([CNDDB]), various sensitive species have been documented in the Project area including: Orcutt's spineflower (*Chorizanthe orcuttiana*, CESA-listed endangered, 1960's record,); Aphanisma (*Aphanisma blitoides;* historic-1894 record); coast woolly heads (*Nemacaulis denudata var. denudate*; 1989 record); chaparral ragwort (*Senecio aphanactis*; historic-1894 record); Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*; early 1980's record); estuary seablite (*Suaeda esteroa,* 1986 record); cliff spurge (*Euphorbia misera*; historic-1888 record); California least tern (*Sternula antillarum browni*; CESA-listed endangered, late 1970's record); Belding's savannah sparrow (*Passerculus sandwichensis beldingi*; CESA-listed endangered, 2001 record); Ridgway's rail (formerly known as light-footed clapper rail; *Rallus longirostris levipes*; CESA-listed endangered, 2007 record); and, northern harrier (*Circus cyaneus*, 2000 record). Moreover, the following species have been documented within or adjacent to the Project site:

    a) Northern harrier within the proposed Specific Plan area;

    b) Belding's savannah sparrow, Ridgway's rail and California least tern within San Dieguito Lagoon (east of San Dieguito Drive and north of Jimmy Durante Boulevard) within 300-feet of the proposed Specific Plan area; and,

    c) Orcutt's spineflower and coast woolly heads to the west within 500-feet of the proposed Specific Plan area.

The Department recommends the DEIR address the habitat suitability and potential for these previously documented plant and animal species to occur on or adjacent to the Project site and, if present, analyze potential direct and indirect impacts to these (and other) sensitive species from the Project-related construction and operation activities, including loss of habitat, Project construction/staging, and operation of other machinery that could create elevated noise levels. If impacts to any listed species would occur, the Department recommends that the City coordinate with us to determine the degree of impact and appropriate avoidance/mitigation measures. As mentioned previously, the City does not have an approved MSCP Subarea Plan; therefore, impacts to any CESA-listed species would need appropriate take authorization under CESA (see Comment No. 7).

2. Due to the potential presence of woodland and other native habitat within the proposed Specific Plan area, the Department recommends that measures be incorporated into the DEIR (where applicable) to avoid Project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section10.13). Sections 3503, 3503.5, and 3513 of the Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). Proposed Project activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the avian breeding season which generally runs from February 1 - September 1 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, the Department recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). Project personnel, including all contractors working on site, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

3. The DEIR should include sufficient information and analysis to demonstrate how the Project is consistent with the preliminary conservation objectives of the City's MSCP Subarea Plan. A draft of the City's MSCP Subarea Plan was prepared as a part of the MSCP Subregional Plan and included a preliminary list of covered species and habitat areas to be included in the City's MSCP preserve (County of San Diego, 1996 and 1998). Based on a review of the City's draft MSCP Subarea Plan, the Project site is located in proximity to Area 4, San Dieguito Lagoon and Crest Canyon, which contains the lagoon system of channels and marshes, surrounding lowlands and bluffs, and Crest Canyon. The City's draft MSCP Subarea Plan identifies that, where the City's MSCP Multiple-Habitat Planning Area (MHPA) is adjacent to development, this interface area will be designed to include project design standards (i.e., lighting, fencing, setbacks) in such a way so as to limit, to the extent possible, impacts from adjacent development on the MHPA. The evaluation of which design standards need to be incorporated (if any) would be made through the existing environmental review process and design review process. Potential mitigation and design measures to ensure limitation of development impacts will include, but shall not be limited to, the following (County of San Diego, 1996 and 1998):

   - Applying the appropriate development setbacks from the MHPA to the extent possible, to reduce noise and light impacts, acknowledging the existing direct interface between urban development and the MHPA in the City of Del Mar;
   - Landscaping in buffer areas, and re-introducing native species, where deemed appropriate;
   - Installing information signs near public access areas indicating that the MHPA is a protected habitat preserve;
   - Establishing conservation easements when deemed appropriate, on a case by case project basis; and,
   - Control of urban run-off into sensitive habitat areas.

The City's draft MSCP Subarea Plan also identifies various existing City land use regulations intended to protect resources in a manner consistent with the MSCP Plan and are incorporated into the draft MSCP Subarea Plan as implementing policies as follows:

- *Policy VI-1* - Preserve and protect sensitive slopes and associated bluff and canyon areas and their downstream resources through the application of the Bluff, Slope and Canyon Overlay Zone Regulations; and,

- *Policy VI-3* - Ensure the protection of the wetlands of the Los Penasquitos Lagoon and San Dieguito Lagoon and their sensitive upland habitat by requiring that all development activities taking place in lagoon and uplands areas, designated on the Lagoon Overlay Zone, conform to the Wetland Preservation Regulations.

As described in the NOP, the Project is located in the Bluff, Slope and Canyon Overlay and the Lagoon Overlay Zones. The DEIR should analyze how the Project would be consistent with the preliminary conservation objectives of the City's MSCP Subarea Plan as described above, including conformance with the City's existing Bluff, Slope and Canyon Overlay and the Lagoon Overlay Zones regulations (which are intended to implement the City's MSCP Subarea Plan).

4. The proposed Project is located adjacent to various lands that have been or are planned to be conserved for biological resources, including lands owned by the San Dieguito River Park Joint Powers Authority and City of Del Mar located to the west of the Project associated with San Dieguito lagoon and buffer areas. The DEIR should evaluate the direct and cumulative effects that the proposed development would have on the adjacent existing and proposed conservation located in both jurisdictions. The analysis should include effects on these lands from the proposed Project, including direct and indirect impacts from: (a) increased public use of these open space areas from the Project's population; (b) lighting; (c) noise; (e) drainage; (f) landscaping and introducing vegetation, etc.

5. To minimize potential indirect effects from invasive plants used at the Project site to enter (via wind, runoff or other transport) the adjacent San Dieguito lagoon, we recommend that any Project-graded slopes and fuel clearing areas requiring replanting be planted with compatible, low-fuel natives (e.g., cacti and other succulents) to minimize the potential for invasive species to spread into the proposed on-site mitigation/open space areas and into adjacent natural lands.

6. The City should ensure that all development-related landscaping and/or revegetation proposed adjacent to on- or off-site habitat does not include exotic plant species that may be invasive to native habitats or that could be transported into the adjacent San Dieguito lagoon. Exotic species should be removed and replaced with native or non-invasive exotic species based on the California Invasive Plant Council's (Cal-IPC) "Invasive Plant Inventory" (Cal-IPC, 2006) list that can be obtained from Cal-IPC's web site at http://www.cal-ipc.org. This list includes such species as pampas grass, fountain grass, myoporum, black locust, capeweed, tree of heaven, sweet alyssum, English ivy, French broom, Scotch broom, and Spanish broom. In addition, landscaping should not use plants that require intensive irrigation, fertilizers, or pesticides adjacent to preserve areas and water runoff from landscaped areas should be directed away from the biological conservation easement area and contained and/or treated within the development footprint. The applicant should submit

a list of species to be included in the landscaping to the Department for approval at least 60 days prior to initiating Project impacts.

7. The City's MSCP Subarea Plan is still in-progress (see comment 3.). Until the City's MSCP Subarea Plan is completed and permit issued, the Department considers adverse impacts to a species protected by CESA, for the purposes of CEQA, to be significant without mitigation. As to CESA, take of any endangered, threatened, or candidate species that results from the Project is prohibited, except as authorized by state law (Fish and Game Code, §§ 2080, 2085). Consequently, if the Project, Project construction, or any Project-related activity during the life of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, the Department recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from the Department may include an incidental take permit (ITP) or a consistency determination in certain circumstances, among other options (Fish and Game Code §§ 2080.1, 2081, subds. (b) and (c)). Early consultation is encouraged, as significant modification to a project and mitigation measures may be required in order to obtain a CESA permit. Revisions to the Fish and Game Code, effective January 1998, may require that the Department issue a separate CEQA document for the issuance of an ITP unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.

8. The Department has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource. For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream, or use material from a streambed, the project applicant (or "entity") must provide written notification to the Department pursuant to section 1600 *et seq.* of the Fish and Game Code. Where applicable, the DEIR should include a jurisdictional delineation of the creeks/drainages and their associated riparian habitats. The delineation should be conducted pursuant to the Service wetland definition adopted by the Department (Cowardin *et al.* 1979). Based on this notification and other information, the Department then determines whether a Lake and Streambed Alteration (LSA) Agreement is required. The Department's issuance of a LSA for a project that is subject to CEQA will require CEQA compliance actions by the Department as a Responsible Agency. As a Responsible Agency under CEQA, the Department may consider the City's DEIR for the project. We recommend that all wetlands and watercourses on-site, whether ephemeral, intermittent or perennial, should be retained and provided with substantial setbacks to preserve the riparian and aquatic values and maintain their value to on-site and off-site wildlife and plant populations. Moreover, to minimize additional requirements by the Department pursuant to section 1600 *et seq.* and/or under CEQA, the document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of an LSA.[1]

[1] A notification package for a SAA may be obtained by accessing the Department's web site at www.wildlife.ca.gov/habcon/1600.

General Comments

9. To enable the Department to adequately review and comment on the proposed Project from the standpoint of the protection of plants, fish, wildlife, and other biological resources, we recommend the following information be included in the DEIR.
   a) A complete discussion of the purpose and need for, and description of, the proposed Project, including all staging areas and access routes to the construction and staging areas.
   b) A range of feasible alternatives to ensure that alternatives to the proposed Project are fully considered and evaluated; the alternatives should avoid or otherwise minimize impacts to sensitive biological resources, particularly wetlands. Specific alternative locations should be evaluated in areas with lower resource sensitivity where appropriate.
10. To provide a complete assessment of the flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, sensitive, and locally unique species and sensitive habitats, the DEIR should include the following information.
   a) Per CEQA Guidelines, section 15125(c), information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis placed on resources that are rare or unique to the region.
   b) A thorough, recent floristic-based assessment of special status plants and natural communities, following the Department's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (see http://www.dfg.ca.gov/habcon/plant/). The Department recommends that floristic, alliance- and/or association-based mapping and vegetation impact assessments be conducted at the Project site and neighboring vicinity. The Manual of California Vegetation, second edition, should also be used to inform this mapping and assessment (Sawyer et al. 2008). Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.
   c) A current inventory of the biological resources associated with each habitat type on site and within the area of potential effect. The Department's CNDDB in Sacramento should be contacted at www.wildlife.ca.gov/biogeodata/ to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code.
   d) An inventory of rare, threatened, endangered and other sensitive species on site and within the area of potential effect. Species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines, § 15380). This should include sensitive fish, wildlife, reptile, and amphibian species. Seasonal variations in use of the project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures

should be developed in consultation with the Department and the U.S. Fish and Wildlife Service.

11. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the DEIR.

    a) A discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage should also be included. The latter subject should address: project-related changes on drainage patterns on and downstream of the project site; the volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site. The discussions should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary, and the potential resulting impacts on the habitat, if any, supported by the groundwater. Mitigation measures proposed to alleviate such impacts should be included.

    b) Discussions regarding indirect project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a NCCP). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR.

    c) The zoning of areas for development projects or other uses that are nearby or adjacent to natural areas may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the environmental document.

    d) A cumulative effects analysis should be developed as described under CEQA Guidelines, section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

12. The DEIR should include mitigation measures for adverse project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

13. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Studies have shown that these efforts are experimental in nature and largely unsuccessful.

We appreciate the opportunity to comment on this NOP and look forward to further coordination with the City on this Project. If you have questions regarding our letter, please contact Randy Rodriguez at (858) 637-7111 or Randy.Rodriguez@wildlife.ca.gov.

Sincerely,

Marilyn Fluharty for:

Gail K. Sevrens
Environmental Program Manager
California Department of Fish and Wildlife

ec: State Clearinghouse
Janet Stuckrath, U.S. Fish and Wildlife Service (Janet_Stuckrath@fws.gov)

REFERENCES

Cal-IPC. 2006. California Invasive Plant Inventory. Cal-IPC Publication 2006-02.California Invasive Plant Council: Berkeley, CA. Available: www.cal-ipc.org.

CNDDB, 2015. California Natural Diversity Database (CNDDB). Biogeographic Data Branch Department of Fish and Wildlife. http://www.dfg.ca.gov/biogeodata/cnddb/.

County of San Diego, 1996. Draft Multiple Species Conservation Program (MSCP) Subregional Plan. Volumes I and II. Document No. 110921000. Prepared by Ogden. August 1996. Part A-MSCP Subarea Plans; City of Del Mar Subarea Plan.

County of San Diego, 1998. Final Multiple Species Conservation Program (MSCP) Subregional Plan. Document No. *110921000. Prepared by Ogden.* August 1998.

Cowardin, Lewis M., et al. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service.

Sawyer, J. O., T. Keeler-Wolf and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society Press, Sacramento.

From:	tracy Martinez
To:	Matt Bator
Cc:	"Alan Wittgrove"
Subject:	Watermark proposal concerns
Date:	Tuesday, March 24, 2015 3:54:00 PM
Attachments:	image003.jpg

Dear Matt,

My name is Tracy Martinez. My husband and I live at 2152 David Way. We have significant concerns with the Watermark proposed development. With respect of your time I will be brief and highlight our concerns below:

- Increase in traffic congestion on Jimmy Durante. This is already a busy street to try to get in and out of David Way. This is a concern with access and safety issues.
- Our neighborhood (David Way, Christie and Heather Lane) already have more noise than other areas in town, air quality impact from added cars, privacy and parking issues during the two race seasons and the fair. Guests and residents will try to park in our neighborhood because 97 spaces doesn't allow for guest when the average household has two cars. This proposed project has the potential to substantially degrade the quality of the environment.
- Our home is our most significant investment. This high density development will have a huge negative financial impact on our home values in our neighborhood.
- This development is out of character and is non-conforming with the neighborhood.

In summary , this project may have the potential to achieve short-term goals (i.e. affordable housing) to the disadvantage of long-term environmental goals, financial consequences to the existing home owners, increase in noise, traffic congestion that will worsen during race and fair season which is cumulatively considerable and negatively affect our quality of life. These issues have a substantial adverse effect on human beings quality of life, personal financial impact and character of the community. I believe the question should be to all of the decision makers in our community, would you want this development to be approved if you lived on Christie Lane, Heather or David Way? Many communities such as Carmel have made the decision to keep their town quaint and unique by not allowing over development and keeping the character that has maintained a high quality of life, tourism, property values high. I have lived in Manhattan Beach where the high density and over development has taken the sky away because of the all the tall buildings and the ocean views. Once it's done we have to live with it forever, please be thoughtful in this process.

Respectfully,

Tracy Martinez
cell: 619-823-6050.

MEDICAL CONCERNS WILL NOT BE ADDRESSED BY EMAIL. CALL THE OFFICE.

Learn more about how you can help the OAC with our advocacy efforts. Visit www.obesityaction.org

Tracy Martinez, RN, BSN, CBN
Program Director
Wittgrove Bariatric Center
9834 Genesee Avenue Suite 328
La Jolla, California 92037

858-554-1770
www.lapbypass.com
cid:image001.png@01CE138A.5B6FA0E0

From: Anne Farrell [mailto:AnneF@speakupnow.org]
Sent: Friday, April 10, 2015 11:28 AM
To: Matt Bator
Subject: Watermark Project / Citizen's Comment Opposing the Project
Importance: High

Dear Mr. Bator:

I am writing as a nearly 30-year resident of Del Mar to loudly protest and oppose the proposed Watermark project, located at a gateway to our community.

The prior "Riverview" project, already determined by the City of Del Mar to be environmentally sensitive and balanced, addressed important concerns on this sensitive lot: low density (16% building lot coverage); adhering to setbacks; restricting height; avoiding bluff infringements; not obstructing views; addressing traffic concerns.

However, the new proposal for the Watermark Project completely dismisses these concerns. All you have to do is look at the site plan: more than 70% coverage of the lot, and a host of problems that make this project impossible to approve:

- The Watermark design's massive density, which runs contrary the neighborhood and includes buildings that are totally out of character with the surrounding area
- The inappropriately designed and sited buildings
- Watermark's minimal setbacks that violate or infringe upon bluffs AND views, thus impacting the surrounding residential neighborhood
- Watermark's lack of effective mitigating buffers for the adjacent residential neighborhood between them and this 48-family high-density residential compound
- Fire and emergency hazard potential caused by this intense density, with no room for adequate emergency vehicles within this residential compound.
- Danger and threat to the environment and wildlife in this area.
- Disregard for Del Mar's consistent building code height limitations
- Potential for tremendous traffic gridlock; impact by a proposed roundabout; and traffic impact in conjunction with the proposed parking lot, approximately 30 feet directly north of

Watermark. All of these traffic impacts will be heightened during the peak density times of the Del Mar Fair and Del Mar racetrack season—making life very difficult for those of us who are year-round residents.

- Lights that are on day and night, and the light spillage from windows from 48 dwellings
- Unacceptable noise impact that will come from this dense 48-dwelling compound and go into immediate the surrounding neighborhood during the quiet night

Overall, this project exemplifies a lack of sensitivity to the Del Mar Community, our Community Plan, and the need to create a delicate balance as between such a development and our precious environment and community quality-of-life.

The massive Watermark residential compound must NOT be allowed administrative approval by the City Council. The Council should reject it based on our community's planning ordinances. But if that is not possible, a project of this magnitude and permanent and dire impact needs to go to a public vote, to let the citizens of Del Mar decide if this land is to be forever transformed into a La Jolla-like, high-density development, or if there should be stricter regulation and control over what is built there. The profit motive is driving too much of Del Mar's decision making lately—this is true in many of our planning boards and planning processes.

My husband and I strongly urge the Council to be courageous and stand up for community values in this matter.

Anne and John Farrell

Anne and John Farrell
1415 Via Alta
Del Mar, CA 92014
(858) 755-5066 (home)
(858) 750-5615 (mobile)
annefarrell@roadrunner.com

WATERMARK

City of Del Mar

Welcome to the Scoping Meeting for the
Jimmy Durante Boulevard/San Dieguito Drive Intersection Improvement Project
Environmental Impact Report (EIR)

Please use this form to:

1. **Sign up to speak at tonight's meeting and/or**
2. **Provide a written comment(s)**

As a reminder, the purpose of an EIR Scoping Meeting is not to register support or opposition to a project, but to help identify the issues that should be analyzed as part of the EIR process. At the beginning of tonight's meeting staff and the City's environmental consultant will provide an overview of those issues and topics that have already identified for inclusion in the EIR. This is an opportunity to identify other environmental topics that should be studied, or to note particular areas of analysis for an identified topic. **Please note: If you choose to submit this form with your comments to the City of Del Mar Planning Department at a later date, the comment period for the Notice of Preparation (NOP) ends May 14, 2015.**

Name: TERRY KOPANSICI

Address: 1919 ZAPO ST. DEL MAR, CA 92014

Email: E TKOPANSKI@SBCGLOBAL.NET

Please check the following boxes, as applicable:

☑ I would like to be notified of information or events related to the Jimmy Durante Boulevard/San Dieguito Drive Intersection Project.

☐ **I would like to speak at tonight's meeting:**
Please note that speakers will be allotted three minutes to provide oral comment. Donations of time may be allotted for a maximum time of nine minutes of comment by any speaker.

Comment(s) on issues/topics that should be addressed in the Jimmy Durante Boulevard/San Dieguito Drive EIR:

Additional space for written comments

4/30/2015

Matt Bator, AICP
Senior Planner
(858) 755-9313, Ext.158
(858) 755-2794 Fax
mbator@delmar.ca.us

-----Original Message-----
From: Dail Peirce [mailto:dailp@roadrunner.com]
Sent: Wednesday, April 29, 2015 3:45 PM
To: Matt Bator
Subject: Watermark development

Dear Mr. Bator,

Reluctantly, I'm once again writing a letter to the city of Del Mar regarding an issue I consider contrary to the benefit of its citizens.
In the 28 years I've lived here, I've seen most of the citizenry contribute to, develop, and truly enjoy living in this wonderful village.

Now, we are faced with an issue which, if completed, can only be injurious to our community. I refer to Watermark, a project of extensive density, 48 units on one lot, which will no doubt require parking for 75 to 100 cars. The traffic conditions at that location are already a problem, with gridlock occurring whenever there is an event at the fairgrounds, esp during racing season. (which now has been extended).

The potential negative impacts which would come with this development are too numerous to mention. Infractions of zoning that would injure the neighboring single family home owners are myriad.

Respectfully submitted,

Dail Peirce
2124 Heather Lane
Del Mar, CA 92014
858-259-5226

Law Offices of
Julie M. Hamilton

April 29, 2015

Matt Bator
City of Del Mar
1050 Camino Del Mar
Del Mar, CA 92014

Re: Comments on Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the Proposed Watermark Project

Dear Mr. Bator:

I am submitting the following comments on behalf of my clients, the Del Mar Hillside Community Association. My client has significant concerns with the Watermark Project and believes the project will have significant, unmitigated impacts on the surrounding environment that cannot be avoided.

Project Description

The EIR must provide a consistent and stable project description with enough information to allow the decision-makers to take into account the environmental consequences of the project. The graphics provided in the EIR must accurately reflect the plans on file with the Planning Department. The graphics must be internally consistent. The project description must include the project's technical, economic, and environmental characteristics.

Given the proximity of the project site to the Del Mar Fairgrounds and the congestion experienced along Jimmy Durante Boulevard in the vicinity of San Dieguito Road; the project description should include a thorough description of ingress and egress, loading zones, visitor parking, and emergency access to the residential units, including fire access. If the specific plan and development permits are not specifically linked, the project description must include the maximum build-out allowed by the specific plan and future activities that are foreseeable consequences of the proposed project.

2835 Camino del Rio S., Ste. 100 ▪ San Diego, CA 92108 ▪ Ph: 619.278.0701 ▪ Fx: 619.278.0705
www.jmhamiltonlaw.com

Although the project description in the NOP states the project will include a secure parking structure, the secure structure is not shown on the accompanying conceptual plan. The project description in the NOP fails to describe the number of stories proposed for the project site and whether the parking will be underground or above ground. If the parking will be located underground, how much excavation is required?

Environmental Setting/Baseline Conditions

The environmental conditions of the project site and in the vicinity must be described as they exist at the time the NOP was published. The setting must be sufficiently comprehensive to allow the project's significant impacts to be considered in the full environmental context. The environmental setting should fully describe the proximity of the project site to the San Dieguito River and Wetland Restoration Project. The environmental setting should include detailed information on the depth of the water table and a description of the impact of tidal flows on groundwater, including the depth of the water table and the salinity of groundwater.

The environmental setting should also provide an accurate description of surrounding development, including the fairgrounds and adjacent low-density residential development. The proximity of adjacent development should be described in enough detail to compare the proposed project to the existing environmental setting in order to assess the significance of any impacts.

The environmental setting must include any inconsistencies between the proposed project and applicable plans, including but not limited to; the General Plan, Wetland Restoration Project, Master Plan for the fairgrounds, and the Regional Transportation Plan.

Identification of Significant Environmental Effects

The EIR must analyze and describe both direct and indirect effects on the environment that will result from the project. The EIR must consider the impacts on the entire area in which the project will cause significant effects either directly or indirectly. The Del Mar Hillside Community Association believes the project will result in significant impacts to aesthetics and is particularly concerned with impacts to the visual quality of the area and the neighborhood character. In addition, the Del Mar Hillside Community Association believes the project will have a significant and direct impact on traffic and safety, land use and planning, noise, hydrology and water quality, biology, public services, and recreation. As a result of these significant impacts the EIR must include mitigation measures and alternatives that reduce or eliminate these impacts.

Cumulative Impacts

The EIR should include the following projects in the cumulative impact analysis:[1]

- The Fairgrounds Master Plan proposed development.
- Traffic projections and planned improvements on Via de la Valle.
- The possible hotel/condo on the fairgrounds should the Fair Board resurrect it. The litigation settlement agreement took it off the table, but only for 5 years, and that time limitation will soon be over.

Alternatives

In addition to the "No Project" alternative, the EIR should consider the previously approved Riverview Project as an alternative.

The Del Mar Hillside Community Association looks forward to a full and complete environmental analysis of the impacts associated with the proposed Watermark Project. It is incumbent upon the City to provide a reasonable range of alternatives designed to reduce or eliminate significant impacts caused by the project. It is also incumbent upon the City to approve the least environmentally damaging alternative.

Thank you for the opportunity to comment. Please feel free to contact me if you have any questions or need additional information.

Regards,

Julie M. Hamilton
Attorney for
Del Mar Hillside Community Association

[1] This is not meant to be an exhaustive list of projects to be considered in the cumulative impacts; Del Mar Hillside Community Association fully expects the Lead Agency will use its resources to develop a list of all projects that should be considered.

From: Drew Cady
To: Matt Bator
Subject: EIR Comment: Concerns about the proposed Watermark development in Del Mar
Date: Tuesday, April 07, 2015 12:49:56 AM

Dear Matt Bator:

I am surprised to hear that this proposed development has gotten as far as it has given the scope of what they are trying to build in a restrictive location with a myriad of potential negative consequences.

I am opposed to such overdevelopment anywhere in Del Mar, as it is clear that such behaviors can and will destroy the quality of life for everyone in the community. The potential bottleneck on Jimmy Durante Blvd due to this large development, coupled with peak use of the Del Mar Fairgrounds can potentially make it extremely difficult to access Del Mar Village from Jimmy Durante and Via de la Valle. Equally as disturbing is the potential impact that such a dense development might have upon the surrounding neighborhoods. Such a large development with that many residents could potentially disrupt the entire quietude of that neighborhood and wreak havoc upon the politic of Del Mar for decades to come. 48 family units seems excessive for such a small plot of land, particularly with such limited access to this location. Given the intensity of traffic congestion which we have witnessed with the construction on Jimmy Durante these past several weeks, it is easy to imagine that this project could lead to severe traffic congestion. I am also concerned that a roundabout is an ill-conceived idea for the intersection at San Dieguito and Jimmy Durante. To slow every single car that is traveling along Jimmy Durante to accommodate the occasional vehicle entering from San Dieguito seems unwarranted and a dangerous prelude to further traffic congestion.

There is a further consideration given the location of this proposed development. Jimmy Durante is a thoroughfare that is utilized by so many persons; not only residents, but commuters moving north and south along the coastline (and tourists, particularly during high season at the fairgrounds). Rush hour already presents significant traffic along Jimmy Durante, and to introduce so many new residential units along this corridor seems like a disaster in the making. Del Mar may often be depicted as a sleepy little village along the sea, yet we all know that it is also one of the main corridors of traffic during rush hour, to and from north county from all points south in San Diego. We already endure a significant I-5 bypass traffic along Camino del Mar and it seems that creating a populous development along this main connector roadway would be foolish and contribute to our daily challenges with commuter traffic.

Finally,and in many ways the most important consideration is the issue of ecology and the preservation of our wetlands along this coastline. The riverbed between Solana Beach and Del Mar has endured far too much negative impact from man's overdevelopment over these past many decades. To further crowd this delicate land along this river corridor is not only dangerous but the ultimate impact cannot even be verified given the longterm damage which has already been done by overdevelopment of the Fairgrounds.

My sincere hope is that a much more suited, and lower density development can be approved for this relatively small land parcel; one which would be in keeping with the general land use of our small community. We need to protect our open spaces and remain mindful about any further development of lands that are deemed suited for development in our town.

Sincerely,

Drew Cady
Stratford Court, Del Mar, CA

Drew Cady
cadyarts@icloud.com

GEORGIA D. DUTRO
DENNIS SHIELDS
2127 Heather Ln
Del Mar, CA 92014
Dgeorgia9@yahoo.com

April 27, 2015

Mr. Matt Bator
City of Del Mar
1050 Camino del Mar
Del Mar, CA 92014

Re: Watermark Del Mar

Dear Mr. Bator:

We are very concerned with the density and traffic impacts of this proposal. It looks like this is a very large apartment project now proposed for this small commercial lot. No setbacks? No open space? No guest parking? Do we really need a "motel" on this entrance to Del Mar? Please cut this project down to a size that fits the lot, and incorporates all the parking such a residential use needs – or keep the lot for the commercial use it is zoned for.

The previously proposed commercial project was in line with the current zoning and did have a rational coverage of the property, with parking. Why this huge change now? If it is all to get three low income units, it seems we could get at least those three on lots like the old gas station lot or even on the city administration lot if we want a real mix-used for those lots. And I bet that the developer could get a smaller, rational sized project, and still get at least one low income apartment on the property.

We don't have traffic impacts at this intersection EXCEPT for events at the Fairgrounds and when the freeway backs up. I don't see how a roundabout would help here – no matter what the lot is used for. We don't need to **slow down** that traffic; we need to **speed it up** to get out of the area quickly.

Sincerely,

Georgia Dutro Dennis Shields

From: Hershell Price [mailto:htprice@roadrunner.com]
Sent: Thursday, April 02, 2015 2:56 PM
To: dglatthorn@kitchell.com
Subject: Watermark

Don,
I want you to know that it is not your project that I am opposed to. My concerns are about the density you have proposed. I honestly believe it is too dense for that site. I am also concerned about the lack of open space. Under your plan, your residential structures cover the entire usable part of the 2.37 acres. That is 100% usable lot coverage. I am also concerned about protection of the bluffs as an asset presently enjoyed by our community. It also does not appear that you have set the project back enough from the existing homes just above your project. Then there is the traffic congestion that 48 units will impose upon that seriously constrained intersection already. With all of the increasing activities at the Fairgrounds – including the Fall Race Meet and the Kaaboo music event each September – the traffic in and out of that many units will cause even more serious congestion.
If the depictions of the architecture as shown in the Del Mar Times online holds true, with less density the project will be attractive and fit better into the community. This process is just getting started so I hope you keep an open mind as it moves forward. Again, density is you real problem, including all those environmental issues associated therewith. I Just want you to know my thoughts, Don.
Hershell

From: Hershell Price [mailto:htprice@roadrunner.com]
Sent: Friday, March 27, 2015 11:02 AM
To: 'dglatthorn@kitchell.com'
Subject: Boutique Hotel

Don,

It was nice to speak with you after the meeting last evening about your idea of constructing a boutique hotel on your Garden Del Mar property. Pam and I believe that your idea is one that should be pursued further to determine if the community would support it and if it makes sense financially. We would be in support, depending on the final plan put forward.

As for being on a committee to publically support that project, I do not know how that would be possible because of our present position on the Watermark development. How could we be supporters on one project and opponents on the other at the same time? How would the trust factor work?

Just thinking, it might be worth considering a hotel project on the Watermark property instead of what you have planned. I really do not know if that would work but I do know the zoning is there if you were to choose a commercial project.

Anyway, I am sure our paths will cross from time to time as you move forward on the two properties you own here in Del Mar. We respect you but love our community of Del Mar and will always speak out when necessary or required. Thanks, Don.

Hershell

Law Offices of
Julie M. Hamilton

March 26, 2015

Matt Bator
City of Del Mar
1050 Camino Del Mar
Del Mar, CA 92014

RE: Failure to Comply with CEQA Regarding Notice of Preparation (NOP) of Draft Environmental Impact Report (DEIR) and Scoping Meeting for the Proposed Watermark Project

Dear Mr. Bator:

I represent the Del Mar Hillside Community Association ("DMHCA"), an unincorporated association of individuals interested in protecting the community in Del Mar. I have reviewed the Notice of Preparation ("NOP") dated March 12, 2015 for the proposed Watermark Project, and am concerned the NOP does not comply with the requirements of the California Environmental Quality Act ("CEQA").

As an initial matter, we can find no evidence the NOP was posted with the County Clerk as required. (Pub. Res. Code § 21092.3.) The NOP must be posted in the office of the county clerk of each county in which the project will be located and must remain posted for a period of 30 days. *Ibid.*

Additionally, the comment period noted in the NOP is only 28 days. The NOP must provide 30 days after receipt of the NOP for responsible and trustee agencies and the Office of Planning and Research to comment on the scope and content of the environmental information they will need in the EIR in order to review the project. (Pub. Res. Code § 21080.4(a); 14 Cal. Code Regs §§ 15082(b), 15096(b)(2)).

The NOP must provide the responsible and trustee agencies with sufficient information concerning the project and its potential environmental effects to enable them to make a "meaningful response." (14 Cal. Code Regs § 15082(a)(1)). The NOP fails to provide a description of the potential environmental effects of the project. Although the second paragraph states "[t]his [NOP] provides information describing the proposed project and its potential environmental effects," the NOP does not include a description of the potential environmental effects. The NOP should describe the potential environmental effects in some detail. A detailed description of potential environmental impacts that will be evaluated (as well as those that will not) allows the scope and contents of the EIR to be uncovered early in the process. Early discovery allows the draft EIR to identify and address key issues so they will not be raised for

the first time in comments on the draft EIR. (Kostka & Zischke, Practice Under the Cal. Environmental Quality Act (March 2015 Update), § 8.16).

The NOP must be posted with the County Clerk and must be revised to comply with CEQA. Please revise the NOP, post it with the County Clerk, and extend the comment period by 30 days. Thank you for your time and consideration of this matter. Please keep my office informed of any opportunity for public input on this project, and of any further CEQA (or other) notices.

Regards,

Julie M. Hamilton

Watermark

City of Del Mar

Welcome to the Scoping Meeting for the
Jimmy Durante Boulevard/San Dieguito Drive Intersection Improvement Project
Environmental Impact Report (EIR)

Please use this form to:

1. **Sign up to speak at tonight's meeting and/or**
2. **Provide a written comment(s)**

As a reminder, the purpose of an EIR Scoping Meeting is not to register support or opposition to a project, but to help identify the issues that should be analyzed as part of the EIR process. At the beginning of tonight's meeting staff and the City's environmental consultant will provide an overview of those issues and topics that have already identified for inclusion in the EIR. This is an opportunity to identify other environmental topics that should be studied, or to note particular areas of analysis for an identified topic. **Please note: If you choose to submit this form with your comments to the City of Del Mar Planning Department at a later date, the comment period for the Notice of Preparation (NOP) ends May 14, 2015.**

Name: Marc Phillips

Address: 2970 Racetrack View Dr.

Email: marcssub.s@gmail.com

Please check the following boxes, as applicable:

☐ I would like to be notified of information or events related to the Jimmy Durante Boulevard/San Dieguito Drive Intersection Project.

☐ **I would like to speak at tonight's meeting:**
Please note that speakers will be allotted three minutes to provide oral comment. Donations of time may be allotted for a maximum time of nine minutes of comment by any speaker.

Comment(s) on issues/topics that should be addressed in the Jimmy Durante Boulevard/San Dieguito Drive EIR:

There are many cyclists (myself included) and pedestrians who walk/cycle both going eastbound & westbound on San Dieguito Rd. Very concerned about safety on this narrow road if ~~resident~~ new residents, employees & customers are going to be entering & exiting the Watermark property... especially w/ all the double parking & backing up of tow trucks across the street.

Also, concerned that w/ extra Watermark traffic & new roundabout that we won't be able to get out into intersection during race days, esp as the races let out each evening

Additional space for written comments

4/30/2015

From: Reid Westburg [mailto:westburg@gmail.com]
Sent: Tuesday, April 28, 2015 5:59 PM
To: Matt Bator
Subject: Del Mar Watermark proposal

Hello Mr. Bator,

As I brought up in the EIR planning meeting, I would like to reiterate my environmental concern that the Snowy Egret nesting in the Torrey Pines above and back of the proposed area will be impacted negatively, due to both added light and noise pollution.

Thank you,

Reid Westburg
1439 Oribia Rd
858 792-2329

Mr. Richard L. Anglin
2115 Heather Lane
Del Mar, CA 92014-2244
rlanglin@tcg-delmar.com
858.829.2080 mobile

Mr. Matt Bator
City of Del Mar
1050 Camino del Mar
Del Mar, CA 92014

Re: Watermark Del Mar Specific Plan
Traffic and Circulation Impacts

Dear Mr. Bator:

Incorporation of My Previous Letter By Reference

On December 9, 2014, I submitted a letter to the City of Del Mar concerning issues with respect to the proposed streetscape along Jimmy Durante Blvd. and the proposed roundabout at the corner of Jimmy Durante Blvd. and San Dieguito Road. All of those issues remain, but are now magnified by full scope of the Watermark project. That letter is fully incorporated herein by this reference.

Watermark

The City has issued a NOP on the Watermark housing project on the southeast corner of Jimmy Durante Blvd. and San Dieguito Drive. Watermark comprises 48 dwelling units in 12 structures and 105 secured parking spaces with a vehicular entrance on San Dieguito Drive.

One of the most obvious and significant impacts from the Watermark project are traffic and circulation, especially at high traffic times like the Fair, race season(s) and concert and similar events.

When Are the Most Severe Traffic Impacts?

The most severe traffic impacts at the corner of Jimmy Durante Blvd. and San Dieguito Road are during the Fair, race season(s) and concerts. Has the City ever collected traffic counts, including all turning and U-turn movements, during any of these three events? My letter of December 8, 2014, raised a number of issues with respect to the traffic circle before the formal announcement of Watermark. All of those concerns are amplified with the addition of Watermark.

In every traffic study the City always emphasizes "average daily traffic," a concept of marginal meaning even before Watermark. The major traffic impacts in the City are during the Fair, race season(s) and concerts; they are event driven. ADT may be a convenient baseline, but the true impact of the traffic circle (and Watermark) must be measured against these events.

How Much Traffic Will Watermark Generate?

The Institute of Transportation Engineers (ITE) provides trip generation estimation standards. Watermark comprises four-plex units, four apartments in a building. For ITE purposes Watermark may be considered either an apartment building or a condominium/townhouse project.

		Rates		
Land Use	Base Unit	AM Peak	Average Daily Trips	ADT Range
Apartment Building	per dwelling unit	.41	6.63	2.00-11.81
Condominium/Townhouse	per dwelling unit	.44	10.71	1.83-11.79

Based on the ITE standards, Watermark will potentially generate about 20 AM peak trips and 300 to 500 average daily trips (ADT). This being California, I believe the higher number is more appropriate. These daily trips will be directly injected into the intersection of Jimmy Durante Blvd. and San Dieguito Road. The most significant traffic and circulation impacts will occur during the Fair, race season(s) and events like concerts.

Watermark Entrance Proximity to Traffic Circle

The "secured" entrance to Watermark is on San Dieguito Road. Looking at the project diagram, the proposed entrance to Watermark is about where the entrance to the parking lot is today, perhaps 10 feet further east, about 180 feet from the southeast corner of Jimmy Durante Blvd, or about 10 car lengths not counting space between the vehicles. Allowing for spaces between vehicles, perhaps 6 car lengths. The Watermark plot plan shows a driveway of approximately 100 feet, about 6 car lengths without any space between them or 4 car lengths with space in between. Parking gates do not open instantly, in fact, they can take minutes to open. How many cars will queue in front of the security entrance? For how long? Will the queue reach into San Dieguito Road at high traffic (during the Fair, race season(s) and concert nights)?

In the other direction, how many cars exiting Watermark will attempt to travel westbound on San Dieguito Road and queue waiting to enter the intersection during high traffic times? How many movements will be left turns onto southbound Jimmy Durante and how many right turns onto northbound Jimmy Durante? During times of high congestion some of the southbound traffic may clear the intersection if vehicles backed up by the Fairgrounds traffic personnel leave room for the turns.

Watermark Visitor Parking

The number of parking spaces being proposed barely meets the minimum standards for projects such as Watermark. How many visitor parking spots are being provided by Watermark? Where are they on the plot plan?

We have continuing parking problems in the neighborhoods surrounding Watermark during the Fair, race season and especially for concerts and other events at the Fairgrounds. We have to call the tow trucks on a regular basis to be able to maintain access on our streets. What is the impact of Watermark on the streets surrounding the project?

The City-Sponsored Traffic Circle at the Corner of Jimmy Durante Blvd. and San Dieguito Road is a Taxpayer-Paid "Gift" by the City to Watermark

The usual procedure in assessing environment impacts is to identify issues directly associated with a proposed project and then identify measures to either mitigate or remediate the identified environmental impacts. Severe traffic and circulation impacts from Watermark are obvious and have been identified. By proposing the traffic circle, the developers of Watermark may claim, and undoubtedly will claim, that the City has ameliorated any potential traffic and circulation impacts from the Watermark project by building the traffic circle. The City has thus removed *a priori* any responsibility on the part of Watermark to address traffic and circulation impacts from its proposed development, a taxpayer funded procedural and project cost "gift" to the Watermark developers. The City-proposed traffic circle just exacerbates Watermark impacts, not mitigates them.

City Proposed Parking Lot on the Northeast Corner of Jimmy Durante Blvd. and San Dieguito Road

I have been told that the City proposes to turn the former recycling center lot into a City parking lot although I have never received any public notice of the City's intent to do so or to assess the impacts of so doing. Is the proposed parking lot another tax-payer funded "gift" of visitor parking for Watermark? All of the issues raised here and in my previous letter are further amplified by the addition of the proposed parking lot.

The Environmental Analysis Must Necessarily Focus on Cumulative Impacts, and Specifically During the Fair, Race Season and Concerts

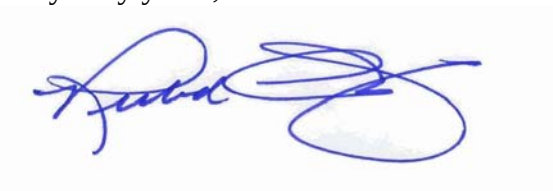
Having stood on the corner during the Fair on a Friday night with a concert scheduled and watching traffic backed up over the bridge blocking turning movements into and out of San Dieguito Road and people trying to make supposedly illegal U-turns, I have seen complete gridlock of Jimmy Durante Blvd. and San Dieguito Road without Watermark.

An Obvious Solution

The City imposed a traffic signal at Jimmy Durante Blvd. and San Dieguito Road as a requirement for approval of the prior Riverview project, which was considerably less dense than Watermark. Furthermore, the City demanded that Riverview pay the costs associated with mitigating its traffic and circulation impacts, specifically any traffic lights. Why has this alternative measure been removed from consideration by the City as a requirement to be imposed on Watermark?

An obvious solution is traffic signals at the corner of Jimmy Durante Blvd. and San Dieguito Road that operate from opening day of the Fair until the last day of the race season in September and for special events … fully paid by Watermark.

Very truly yours,



Richard L. Anglin
California Registered Civil Engineer (retired)

Cc: Al Corti (acorti@delmar.ca.us)
Donald Mosier (dmosier@delmar.ca.us)
Sherryl Parks (sparks@delmar.ca.us)
Terry Sinnott (tsinnott@delmar.ca.us)
Dwight Worden (dworden@delmar.ca.us)

From: Sally Taylor [mailto:sallytaylor.chicago@gmail.com]
Sent: Tuesday, April 28, 2015 10:45 AM
To: Matt Bator
Subject: Watermark project

Ronald and Sarah Taylor
628 Fifteenth Street
Del Mar CA 92014

April 27, 2015

Mr. Matt Bator
City of Del Mar
1050 Camino del Mar
Del Mar, CA 92014

Re: Watermark Del Mar

Dear Mr. Bator:

We are very concerned with the density and traffic impacts of this proposal. It looks like this is a very large apartment project now proposed for this small commercial lot. No setbacks? No open space? No guest parking? Do we really need a "motel" on this entrance to Del Mar? Please cut this project down to a size that fits the lot, and incorporates all the parking such a residential use needs – or keep the lot for the commercial use it is zoned for.

The previously proposed commercial project was in line with the current zoning and did have a rational coverage of the property, with parking. Why this huge change now? If it is all to get three low income units, it seems we could get at least those three on lots like the old gas station lot or even on the city administration lot if we want a real mix-used for those lots. And I bet that the developer could get a smaller, rational sized project, and still get at least one low income apartment on the property.

We don't have traffic impacts at this intersection EXCEPT for events at the Fairgrounds and when the freeway backs up. I don't see how a roundabout would help here – no matter what the lot is used for. We don't need to **slow down** that traffic; we need to **speed it up** to get out of the area quickly.

Sincerely,

Sarah and Ronald Taylor

From: Sheila Sharpe [mailto:sasharpe@yahoo.com]
Sent: Wednesday, April 29, 2015 3:45 PM
To: Matt Bator
Subject: Watermark Project

Dear Mr. Bator:

We are very concerned with the density and traffic impacts of this proposal. It looks like this is a very large apartment project now proposed for this small commercial lot. No setbacks? No open space? No guest parking? Please cut this project down to a size that fits the lot, and incorporates all the parking such a residential use needs – or keep the lot for the commercial use it is zoned for.

The previously proposed commercial project was in line with the current zoning and did have a rational coverage of the property, with parking. We don't understand why this change has been made.

We don't have traffic impacts at this intersection except for events at the Fairgrounds and when the freeway backs up. We don't see how a roundabout would help here – no matter what the lot is used for. We don't need to **slow down** that traffic; we need to **speed it up** to get out of the area quickly.

Sincerely,

Sheila & Michael Sharpe
442 15th Street
Del Mar, CA 92014

From: Susan Schneider [mailto:scs416@outlook.com]
Sent: Friday, April 17, 2015 11:35 AM
To: Matt Bator
Subject: Watermark Project in Del Mar

To all concerned:

As a long-time resident of Del Mar, I would like to register my concern about the proposed Watermark development on Jimmy Durante Blvd.

After reading about the environmental and traffic impacts of the project, I do not want our City Council or any powers to be to approve it. The density of the project and it's close proximity to environmentally sensitive areas are out of sync with our City Charter.

Camino Del Mar is already a nightmare of congestion, especially during the summer, and this will not only make travel difficult but make emergency response times unacceptable.

We also are being asked to conserve water and protect other natural resources, so it makes no sense to keep paving and building in our small city.

This is a terrible idea.

Sincerely,
Susan Schneider
1305 Luneta Drive
Del Mar

City of Del Mar

Welcome to the Scoping Meeting for the Watermark Project Environmental Impact Report (EIR)

RECEIVED
APR 10 2015
City of Del Mar
Administrative Services Dept.

Please use this form to:

1. **Sign up to speak at tonight's meeting and/or**
2. **Provide a written comment(s)**

As a reminder, the purpose of an EIR scoping meeting is not to register support or opposition to a project, but to help identify the issues that should be analyzed as part of the EIR process. At the beginning of tonight's meeting staff and the City's environmental consultant will provide an overview of those issues and topics that have already identified for inclusion in the EIR. This is an opportunity to identify other environmental topics that should be studied, or to note particular areas of analysis for an identified topic. **Please note: If you choose to submit this form with your comments to the City of Del Mar Planning Department at a later date, the comment period for the Notice of Preparation (NOP) ends April 10, 2015.**

Name: WILLIAM & HELEN WATTS

Address: 252 - 17TH ST

Email: HELENDMAR@ROADRUNNER.COM

Please check the following boxes, as applicable:

☒ I would like to be notified of information or events related to the Watermark project.

☐ **I would like to speak at tonight's meeting:**
Please note that speakers will be allotted three minutes to provide oral comment. Donations of time may be allotted for a maximum time of nine minutes of comment by any speaker.

Comment(s) on issues/topics that should be addressed in the Watermark EIR:

WE FEEL THIS IS TOO SMALL AN AREA FOR SOME 48 UNITS OF VARIOUS SIZES. JIMMY DURANTE IS ONLY A TWO LANE ROAD, THIS ADDITION OF HUNDREDS MORE PEOPLE AND ALSO MANY MORE CARS IS NOT GOOD. J. DURANTE ROAD DOESN'T LOOK AS THOUGH IT COULD BE WIDENED.

SEE ATTACHED PAGE

Watermark Project

Helen and William Watts, 252 27th St., Del Mar, are firmly against the Watermark plan as presented. We feel that way too much building is planned for that small lot and that the traffic it could create would be detrimental for any kind of smooth flow, especially during the San Diego Fair and the Del Mar Race Meeting. We use Jimmy Durante Blvd to access the races on a daily basis and there is already enough traffic in that area to preclude a smooth entry.

Ever since we moved to Del Mar in the early 70's, we've heard the townspeople say that they want to keep Del Mar as a "sleepy little village", with which we agree. For any visitor coming in to Del Mar via Jimmy Durante Boulevard and seeing a high-rise and dense housing development would not give anyone the impression of a quiet little seaside village.

Please, let's keep Del Mar the way it is and not clutter it up with all that is planned for the Watermark Project.

City of Del Mar

Welcome to the March 26, 2015 Scoping Meeting for the Watermark Project Environmental Impact Report (EIR)

Sign-in Sheet

Name	Address	e-mail
Jeffrey Barnouw	705 Amphitheatre	barnouw@yahoo.com
Arnold Wiesel	2139 HEATHER LN	delmarhillside@yahoo.com
Annette Wiesel	2139 HEATHER LN	"
William Jurewitz	1230 ORIBIA RD	wjurewitz@wjurewitz.com
Julie Korsmeyer	1230 ORIBIA RD	jkwinner526@gmail.com
Don Glatthorn	925 Camino del Mar	
Tony Cassolato	576 CAMINO ELDORADO ENC. 92024	Tonyqc@cox.net
Marie Boullard	853 CAMINO DEL MAR, #200, DEL MAR	MBOULLARD@ZOLA.
David Cherashore	226 Via del Norte, La Jolla	dcherashore@gmail.com
Hershell Price	1757 Grand Ave Del Mar, CA	92014
Pam Slater-Price	1757 Grand Ave	Del Mar 92014
Al Corti	1955 Jimmy Durante Blvd	Del Mar
Bud Emerson	1020 Kline	D.M.
Roger Arnold	2105 Balboa Ave	rarnold@csusm.edu
Ted & Sandra Goldberg	1942 Santa Fe Ave	tgold123@gmail.com
Bill Michalsky	Drawer O DM	92014 drrocket@pacbell.net
Charles Koll	1200 Orba rd. Del Mar	charlesrkoll@gmail.com
[illegible]	[illegible]	[illegible]
Irene Redondo	292 Surf View Ct.	Del Mar
bkaplanek@coastnewsgroup.com		
Barbara Stegmeir	1174 Oribia Rd.	barbstag@gmail.com
Kerry & Linda Todd	234 Dolphin Cove	lindadearlinda@yahoo.com
Richard Benson	3900 6th Ave	rbenson@bensonboh1..com
Claire McGreal	1135 Stratford Ct	claire mcg@roadrunner.com
Kristine Houck	khouck@delmartimes.net	
Josyne Roseman	1741 GRAND AVE	JOSYNEROSEMAN @yahoo.c

City of Del Mar

Welcome to the Scoping Meeting for
the Watermark Project Environmental Impact Report (EIR)

Please use this form to:

1. **Sign up to speak at tonight's meeting and/or**
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Name: Barbara Stegman

Address: 1174 Orilla Rd, Del Mar

Email: barbsteg@gmail.com

Please check the following boxes, as applicable:

☒ I would like to be notified of information or events related to the Watermark project.

☐ **I would like to speak at tonight's meeting:**
Please note that speakers will be allotted three minutes to provide oral comment. Donations of time may be allotted for a maximum time of nine minutes of comment by any speaker.

Comment(s) on issues/topics that should be addressed in the Watermark EIR:

Impact on corner turning traffic of required 5' pool fence

Protection of the required setback in SE corner

Parking standard where no street parking is available

City of Del Mar

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Name: Julie Kornmeyer

Address: 1230 Orilla Rd

Email: jkwinner526@gmail.com

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☒ **I would like to speak at tonight's meeting:**
Please note that speakers will be allotted three minutes to provide oral comment. Donations of time may be allotted for a maximum time of nine minutes of comment by any speaker.

Comment(s) on issues/topics that should be addressed in the Watermark EIR:

- Community character — lagoon-/ Parking lot restoration to lagoon
- Lighting. —

City of Del Mar

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Name: Hershell Price

Address: 1757 Grand Ave, Del Mar, CA 92014

Email: HTPRICE@RoadRunner.com

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Comment(s) on issues/topics that should be addressed in the Watermark EIR:

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Name: Bud Emerson

Address: Box E

Email: _____

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Comment(s) on issues/topics that should be addressed in the Watermark EIR:

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Name: Annette Wiesel

Address: _____

Email: Awiesel1@yahoo.com

Please check the following boxes, as applicable:

☐ I would like to be notified of information or events related to the Watermark project.

☑ **I would like to speak at tonight's meeting:** I would like to give my 3 minutes to Arnold Wiesel
Please note that speakers will be allotted three minutes to provide oral comment. Donations of time may be allotted for a maximum time of nine minutes of comment by any speaker.

Comment(s) on issues/topics that should be addressed in the Watermark EIR:

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Name: Arnold Wiesel

Address: 2139 HEATHERLN.

Email: delmarhillside@yahoo.com

Please check the following boxes, as applicable:

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☑ **I would like to speak at tonight's meeting:**
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Comment(s) on issues/topics that should be addressed in the Watermark EIR:

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Name: Claire McGreal

Address: 1135 Stratford Ct DM

Email: Clairemcg@roadrunner.com

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☐ I would like to be notified of information or events related to the Watermark project.

☐ **I would like to speak at tonight's meeting:**
Please note that speakers will be allotted three minutes to provide oral comment. Donations of time may be allotted for a maximum time of nine minutes of comment by any speaker.

Comment(s) on issues/topics that should be addressed in the Watermark EIR:

Of concern to me:
Density
Adequacy of Parking
rentals vs. condos owned by dwellers
Lack of any public transit at project
Noise
Aesthetics
% of Lot Coverage by garages & buildings & paved Areas
Increased traffic
Lack of Open Space

City of Del Mar

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Name: Inese Redondo

Address: 292 Sartview Ct. Del Mar, Ca

Email: Inesetredondo Inesetredondo@yahoo.com

Please check the following boxes, as applicable:

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Comment(s) on issues/topics that should be addressed in the Watermark EIR:

APPENDIX C1 AND C2

Air Quality Technical Report
and Option B Technical Memorandum

AIR QUALITY TECHNICAL REPORT
for the
Watermark Del Mar Specific Plan EIR
City of Del Mar, California

Prepared for:

City of Del Mar
1050 Camino Del Mar
Del Mar, California 92014

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024

SEPTEMBER 2017

Printed on 30% post-consumer recycled material.

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ACRONYMS AND ABBREVIATIONS

CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CO	carbon monoxide
EPA	U.S. Environmental Protection Agency
NAAQS	National Ambient Air Quality Standards
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
O_3	ozone
PM_{10}	particulate matter less than or equal to10 microns in diameter
$PM_{2.5}$	particulate matter less than or equal to 2.5 microns in diameter
ppm	parts per million
RAQS	Regional Air Quality Strategy
SANDAG	San Diego Association of Governments
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SO_2	sulfur dioxide
SO_x	oxides of sulfur
TAC	toxic air contaminant
VOC	volatile organic compound

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SUMMARY

The proposed project location lies within the jurisdictional boundaries of the City of Del Mar (approximately 2.37 acres) in western San Diego County. The residential project includes development of 48 multi-family residential units, a parking structure, and recreational amenities. The project site is located within the San Diego Air Basin (SDAB) and is subject to the San Diego Air Pollution Control District's (SDAPCD) guidelines and regulations. The City uses the adopted guidance and significance thresholds for criteria air pollutants established by the SDAPCD.

The air quality impact analysis evaluates the potential for significant adverse air quality impacts due to construction and operational emissions resulting from the proposed project. Construction of the proposed project would result in a temporary addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. The analysis concludes that the daily construction emissions would not exceed the San Diego Air Pollution Control District's (SDAPCD's) significance thresholds for criteria pollutants. Air quality impacts resulting from construction would, therefore, be less than significant. Additionally, operational emissions were found to be less than significant for criteria pollutants and the project would not result in any significant cumulative impacts.

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1 INTRODUCTION

1.1 Purpose of the Report

The purpose of this report is to evaluate the potential air quality impacts associated with implementation of the Watermark Del Mar Specific Plan (proposed project).

1.2 Project Location

The Watermark Del Mar Site is approximately 0.76 mile west of Interstate 5 and 0.32 mile east of Camino Del Mar in the city of Del Mar, California (Figure 1). The site is located on the southern corner of the intersection of Jimmy Durante Boulevard and San Dieguito Drive (Figure 2). The site consists of two parcels: Assessor's Parcel Numbers 299-100-47 and 299-100-48. The site is vacant and totals approximately 103,282 square feet (2.37 acres). The site is generally bounded to the north by the intersection of Jimmy Durante Boulevard and San Dieguito Drive (Figure 3). San Dieguito Drive adjoins the site to the east-northeast, beyond which is a vacant lot and various facilities, including Co's Traffic Control, Del Mar Blue Print, Rose Towing, Del Mar Automotive, and other businesses. To the south and southwest are residences. To the west and northwest, Jimmy Durante Boulevard adjoins the site with a vacant lot and various businesses beyond.

1.3 Project Description

1.3.1 Residential

Option A

Option A would include 48 residential units on 103,282 square feet (approximately 2.37 acres) of gross land area for a maximum density of 20.5 dwelling units per acre. The proposed 20.5 dwelling-units-per-acre density is at the very low end of the City of Del Mar Community Plan Housing Element's prescribed density range.

Option A would provide for a residential building area of 62,941 square feet and a total lot coverage of approximately 45%. The lot coverage calculation for Option A does not include the parking structure floor area (non-habitable building area). Option A proposes a floor area ratio of 0.65 based on 63,541 square feet of floor area (habitable building area) on net land area of 103,237 square feet.

The proposed structures would be situated on the site to provide a minimum 10-foot setback from the adjacent residentially zoned properties. The design considers no additional setback required where the structures would be adjacent to the public right-of-way along Jimmy Durante Boulevard and San Dieguito Drive. The residential units provided would be a mix of studio, one-bedroom, two-bedroom, and three-bedroom units.

Option B

Under Option B, the project design has been modified to address input received during various community workshops on the project. The Specific Plan for Option B has been modified along with revised design plans to incorporate changes in response to concerns raised.

This option includes modifications to the building placement on the site, which was of particular concern as viewed from Jimmy Durante Boulevard. The changes to the buildings that front on this street include modifications to the setbacks on the first and second floors, adding building separation between the units as well as reconfiguring the pool area to eliminate the masonry columns and trellis at the corner of San Dieguito Drive and Jimmy Durante Blvd, replacing them with additional trees and landscaping. The open areas internal to the site have been enlarged. The parking provided on site has also been increased to be above standard requirements, based on concerns that there was no on-street parking in the immediate area. The result of all these changes is that the total unit count would be reduced by 10 to 38 housing units.

Option B would include 38 residential units on 103,282 square feet (approximately 2.37 acres) of gross land area for a maximum density of 16.1 dwelling units per acre. The proposed 16.1 dwelling-units-per-acre density is below the City of Del Mar Community Plan Housing Element's prescribed density range.

Option B would provide for a building area of 60,660 square feet and a total lot coverage of approximately 45%. Similar to Option A, the lot coverage calculation for Option B does not include the parking structure floor area (non-habitable building area). Option B proposes a floor area ratio of 0.62 based on 61,860 square feet of floor area (habitable building area) on net land area of 103,237 square feet.

The proposed structures would be situated on the site to provide a minimum 15-foot setback from the adjacent residentially zoned properties. The design considers no additional setback required where the structures would be adjacent to the public right-of-way along Jimmy Durante Boulevard. However, unlike Option A, Option B would provide an additional 10-foot setback adjacent to the public right-of-way along San Dieguito Drive. The residential units provided would be a mix of studio, one-bedroom, two-bedroom, and three-bedroom units.

1.3.2 Affordable Housing

he RHNA allocated 61 housing units to the City for the 2010–2020 Housing Element Cycle, including 22 housing units for extremely low, very low, and low-income households (City of Del Mar 2013, Table 36).

Option A

As a public benefit, Option A proposes seven affordable dwelling units. The seven affordable units represent a portion (15%) of the proposed 48 new units. Therefore, Option A would account for 79% of the units allocated by the RHNA and it would satisfy 32% of the City's affordable housing needs. The seven affordable dwelling units proposed by Option A would consist of two studio units, one one-bedroom unit, and four two-bedroom units. No three-bedroom units are proposed as affordable housing units.

Option B

As a public benefit, Option B proposes six affordable dwelling units. The six affordable units represent a portion (16%) of the proposed 38 new units. Therefore, Option B would account for 62% of the units allocated by the RHNA and it would satisfy 27% of the City's affordable housing needs. The six affordable dwelling units proposed by Option B would consist of two studio units, one one-bedroom unit, and three two-bedroom units. No three-bedroom units are proposed as affordable housing units.

Affordability The rental rates or purchase price for all affordable dwelling units required would be calculated in accordance with affordability levels for moderate income households (120% of the Area Median Income [AMI]) as defined by the State of California Department of Housing and Community Development (HCD), and the San Diego County Office of Housing and Community Development for San Diego County, and as adjusted and published annually. All seven of the affordable dwelling units would be subject to the recordation of a deed restriction committing the property owner and any successors-in-interest to limiting rental rates or purchase prices to the affordability rates to families with income levels at 120% of AMI or less for a period of 30 years from the date of issuance of the Certificate of Occupancy for such residential unit(s).

In lieu of a deed restriction required to ensure affordability as provided within the Specific Plans, all or part of the affordable dwelling units may be sold, deeded, or otherwise transferred to the City of Del Mar or to any other managing agency acceptable to the City of Del Mar and remain in full compliance with all codes and provisions for providing the required percentage of affordable dwelling units. Four of the affordable units under Option A and three affordable units under Option B would be gifted to the City or a City-designated entity, which would likely result in lower-tier affordability qualification.

Per Assembly Bill No. 2222 the Planning and Zoning Law requires, when a developer of housing proposes a housing development within the jurisdiction of the local government, that the city and

county provide the developer with a density bonus and other incentives or concessions for the production of lower income housing units or the donation of land within the development if the developer, among other things, agrees to construct a specified percentage of units for very low, low-, or moderate-income households or qualifying residents. With respect to State Density Bonus Incentives, Watermark Del Mar proposes that, with approval of Option A or Option B, any possible density increase and development incentives specified in the Del Mar Municipal Code would not be applicable to the site.

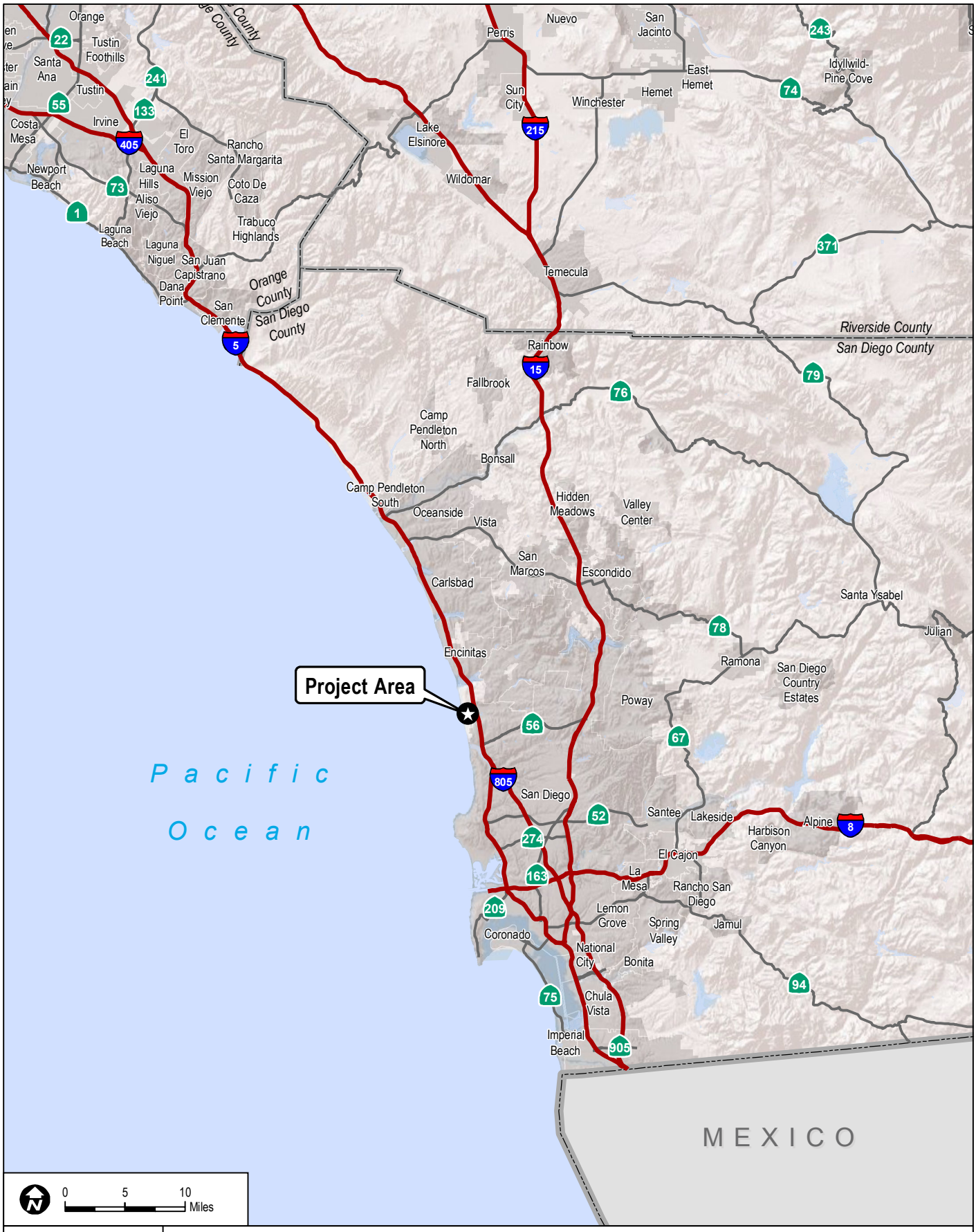

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FIGURE 1

Regional Map

Watermark Del Mar Air Quality Report

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SOURCE: Bing Maps 2015

FIGURE 2
Vicinity Map

Watermark Del Mar Air Quality Report

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SOURCE: Google Maps 2015

FIGURE 3

Existing Site Layout

Watermark Del Mar Air Quality Report

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SOURCE: Benson & Bohl Architects 2017

FIGURE 4
Conceptual Site Plan - Option A (48 Units)

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As provided for in the City of Del Mar Housing Element, Watermark Del Mar proposes that, with the addition of the affordable housing component, the City of Del Mar waive all or a portion of City of Del Mar development review fees and provide priority permit processing for the project. With respect to State Density Bonus Incentives, Watermark Del Mar proposes that, with approval of the Watermark Del Mar Specific Plan, any possible density increase and development incentives specified in the Del Mar Municipal Code not be applicable.

1.3.3 Architectural Design

Watermark Del Mar is designed to be a gateway to Del Mar from the north and east, and to create a welcoming beach-colony-inspired architectural statement that joins and enhances the architectural tradition established in Del Mar. Watermark Del Mar would provide a variation to the number and mix of unit sizes, building facades, and rooflines to provide a variety of architectural elements along Jimmy Durante Boulevard and maintain important vistas along San Dieguito Drive. Brick, cultured stone, architectural siding, a seaside-inspired color palette, and beach colony architectural elements found throughout Del Mar would be incorporated into the design to provide architectural compatibility with the broader Del Mar architectural statement.

Maximum building height for Watermark Del Mar would be 26 feet above either existing or finished grade when habitable space is constructed on grade. To comply with flood hazard provisions of the Del Mar Municipal Code Chapter 30.56 (Flood Overlay Zone), all finish grades would be at or above the 100-year base flood elevation of the San Dieguito River (+18 feet as indicated on maps issued by the Federal Emergency Management Agency). Where habitable structure is built over structured parking, the 26-foot height would be measured from the garage roof/podium deck elevation set at 2 feet above the base flood elevation or elevation +20 feet (City of Del Mar 2000).

Watermark Del Mar would ensure that roof decks, decks, and associated rooftop penetrations (e.g., access stairs, handrails) are architecturally integrated into the design of the residential structures. All Watermark Del Mar roof appurtenances, including air conditioning units and mechanical equipment, would be designed to be shielded and architecturally screened from view from public rights-of-way.

Watermark Del Mar's design would ensure that trash receptacles, adequate areas for collecting and loading recyclable materials, and/or outdoor storage areas are internalized or are adequately screened from view from surrounding properties or public rights-of way.

1.3.4 Circulation

Vehicular access to the proposed project site would be provided from a single driveway on San Dieguito Drive. The location of the driveway would be in approximately the same location as the existing driveway currently in use for fairground, racetrack, and event parking. The proposed driveway curb cut would access onto a private drive ramp to enter the secured parking facility for residents and guests. The drive ramp was designed to provide additional length to ensure ample space for queuing for residents and guests entering and exiting the facility.

The Watermark Del Mar Specific Plan community was designed to be pedestrian and cyclist friendly, with multiple access points for residents who do not use automobiles. Pedestrians and cyclists would have a variety of access points. In addition to the parking structure ramp, an additional pedestrian/cyclist entry point would occur on San Dieguito Drive. Also, a stepped central pedestrian/cyclist access point would occur at the center of Watermark Del Mar on Jimmy Durante Boulevard. This entry would serve as the main pedestrian entry point to the neighborhood with its centralized positioning and entry surrounded by trellis works and landscaping. Two additional pedestrian/cyclist entry points would be provided at each end of the site along Jimmy Durante Boulevard. The western-most entry point would provide access to the walking route to the Del Mar Plaza and the downtown area. The eastern-most pedestrian/cyclist entry would provide access to San Dieguito Lagoon and riverside strolling opportunities.

1.3.5 Parking

Watermark Del Mar's parking structure was designed to screen parking areas from view of adjacent properties and public rights-of-way by placing the parking structure partially below ground and, through the use of low, decorative walls, earth mounding and landscaping in the public right-of-way, to complement and enhance the pedestrian connection from the Jimmy Durante Boulevard and San Dieguito Drive intersection to the Del Mar Plaza.

Watermark Del Mar's partially underground parking structure would be accessed via a new curbed driveway at San Dieguito Drive that would lead to a private drive ramp. The location of the curbed driveway would be in approximately the same location as the existing driveway currently in use for fairground, race track, and event parking. The existing curb cut driveway at Jimmy Durante Boulevard at the west end of the site would be eliminated. Access to the parking structure was designed to be controlled by a card key access system located on the private drive ramp to enhance security of the parking structure and control vehicular access to the structure.

The Watermark Del Mar Specific Plan provides one stall for each studio and one-bedroom unit, and two stalls for each two-bedroom and three-bedroom unit. Additionally, Watermark Del Mar would provide guest parking stalls at a ratio of one stall per four units. The Watermark Del Mar

Specific Plan allows use of tandem parking (one car parked behind another in the same stall). Compact stalls (7 feet 6 inches wide and 16 feet in depth) are permitted at a 10% ratio. Watermark Del Mar would provide standard parking stalls that are a minimum of 9 feet wide and 18 feet in depth, and drive aisles that are a minimum of 22 feet in width.

The Watermark Del Mar Specific Plan provides that parking provided for off-street parking and non-habitable floor area be exempt from calculation toward a building's maximum allowable floor area ratio and would not be considered a "story."

1.3.6 Recreational Amenities

Watermark Del Mar would provide a pool, spa, lounge, and recreation area for residents. The recreation area is specifically sited to provide for an aesthetically pleasing vista to the site from the intersection of Jimmy Durante Boulevard and San Dieguito Drive. The pool, spa, and lounge area would provide approximately 2,800 square feet of recreational area, in addition to the adjacent 640-square-foot recreation room. The single-story building that would house the recreation room was sized to enhance and support the view to the sand stone bluff farther along San Dieguito Drive, and would serve as a gathering point for the neighborhood with a view over the pool, spa, and lounge area.

1.3.7 Landscaping

Landscape materials and plant palettes were selected to accentuate the coastal craftsman style of the architecture while introducing the natural character of the adjacent wetlands and native landscape. Mediterranean and coastal California plant palette proposed throughout the site would combine drought tolerance with aesthetic impact. The overall landscape palette would feature native plant species to unify the site with the surrounding landscape. The project would offer four landscape typologies: street frontage, podium-level courtyards, wetlands, and slope interface. Each landscape type would be designed to unify the site's coastal character while addressing climatic requirements.

1.3.8 Lighting

Illumination of Watermark Del Mar would be limited to specific areas and hours of activity, with the exception of necessary security lighting. Lighting would be provided throughout the project site on the exterior of structures. Specifically, lighting would be provided around residential buildings, podium-level courtyards and walkways, and other recreational areas. To minimize the potential effects of project lighting and ensure consistency with the lighting policies of the City of Del Mar, lighting fixtures within the project area would be designed and implemented to provide illumination that is appropriate for the level of activity at the site. Lighting inside and

outside the buildings would adhere to minimum lighting standards. Exterior lighting would be of minimum height and intensity, and face downward to minimize spread of the beam. Parking area lighting would be confined and contained within the enclosed parking structure.

1.3.9 Utilities

Sanitary sewer service would be provided by connecting to an existing sanitary sewer main adjacent to the property at the westernmost portion of the site's Jimmy Durante Boulevard frontage.

A private water system would be provided through a point of connection in Jimmy Durante Boulevard, extended to the property to a new on-site water meter assembly, and distributed within the project for domestic, fire, and landscape irrigation purposes. A new fire hydrant would be provided on Jimmy Durante Boulevard and on San Dieguito Drive.

A private storm drain system would be incorporated into the project design that provides stormwater treatment with a proposed bioretention basin prior to connecting to the existing storm drain outlet on San Dieguito Drive.

Electrical lines currently exist along Jimmy Durante Boulevard and San Dieguito Drive, and natural gas lines currently exist to the west and south of the site. Electrical and natural gas service is available to serve the needs of the project. Electricity and natural gas would be provided for energy needs associated with the residential buildings and supporting amenities.

1.3.10 Off-Site Improvements

Watermark Del Mar proposes a loading area at San Dieguito Drive for use by residents for delivery and unloading of furniture and appliances typically associated with the move-in and move-out of residents. The proposed loading area would be located just south of the proposed parking structure access and would include provisions for a pedestrian ramp and associated pedestrian sidewalk. The project proposes a new sidewalk from the intersection of San Dieguito Drive and Jimmy Durante Boulevard south to the southeastern property corner.

Jimmy Durante Boulevard off-site improvements would include new or replaced sidewalk along Jimmy Durante Boulevard from the intersection of Jimmy Durante Boulevard and San Dieguito Drive to the western property corner. Additionally, the street frontage improvements described in Section 1.3.7, Landscaping, would be included as part of the project.

1.3.11 Construction Assumptions and Methodology

Emissions from the construction phase of the project were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.1, available online (www.caleemod.com). The analysis contained herein is based on the following assumptions (duration of phases is approximate):

- Site preparation – 2 weeks (June 2019)
- Grading – 5 weeks (June 2019 – July 2019)
- Trenching – 4 weeks (October 2019 – November 2019)
- Building construction – 74 weeks (November 2019 – April 2021)
- Paving – 3 weeks (November 2019 – December 2019)
- Application of architectural coatings – 5 weeks (April 2021 – May 2021)

Construction is anticipated to commence following completion of entitlement efforts and completion of building design and associated permits. Construction would last for approximately 2 years, at which point building occupancy would occur. Construction equipment would include rollers, rubber-tired dozers, scrapers, water trucks, pavers, paving equipment, forklifts, and tractors/loaders/backhoes. Concrete and delivery trucks would also be used. Construction equipment would be used intermittently depending on construction phase.

Construction phasing would consist of parking structure construction, disturbed slope grading, residential structures over parking structure podium construction, and construction of the balance of the residential structures. Construction activities would take place within the limits of the construction hours identified in the City of Del Mar's Noise Regulations (City of Del Mar 1997).

Construction phasing specifications were provided by the project applicant, while the default values generated by CalEEMod were used for the construction equipment mix. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week (22 days per month) during project construction. Default construction worker, vendor trips, and trip lengths as provided in CalEEMod were utilized, with the exception of haul trips which were adjusted accordingly based on information provided by the applicant. CalEEMod default values were generated for worker and vendor trips. These assumptions are summarized Table 1.

Table 1
Construction Scenario Assumptions

Construction Phase	Average Daily Worker One-Way Trips	Average Daily Vendor One-Way Trips	Total Haul Truck One-Way Trips	Equipment	Quantity	Usage Hours
Site Preparation	13	0	0	Crawler Tractors	1	8
				Tractors/Loaders/Backhoes	2	7
Grading	15	2	240	Excavators	1	8
				Graders	1	8
				Sweepers/Scrubbers	1	8
				Tractors/Loaders/Backhoes	2	8
Trenching	8	0	0	Tractors/Loaders/Backhoes	3	8
Building Construction	56	13	0	Forklifts	3	7
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	1	8
Paving	15	2	0	Pavers	1	8
				Paving Equipment	1	8
				Rollers	1	8
Architectural Coating	11	0	0	Air Compressors	3	6

Notes: See Appendix A for details.
N/A = not applicable/not proposed

A detailed depiction of the construction schedule—including information regarding subphases and equipment used during each subphase—is included in Appendix A of this report.

Prior to construction, a Storm Water Pollution Prevention Plan would be prepared to identify best management practices to minimize off-site sediment transport for the duration of the project. In addition, grading plans would be subject to City of Del Mar approval, and would require measures to comply with the City of Del Mar's municipal storm water permit. The City of Del Mar's Municipal Code requires project compliance with the National Pollutant Discharge Elimination System permit for stormwater discharges and general construction activities, regular cleaning or sweeping of parking lots and impervious areas, and implementation of stormwater best management practices. The project would implement erosion and sediment control measures required by the City of Del Mar's Municipal Code, and other pertinent regulations and conditions. A traffic control plan would be prepared and made a standard condition of approval. The plan would include provisions for construction times and control plans for allowance of bicyclists and pedestrians along Jimmy Durante Boulevard and San Dieguito Drive throughout construction. The traffic control plan would also include provisions for allowance of emergency vehicle passage at all times.

2 EXISTING CONDITIONS

2.1 Existing Setting

The project Site is located within the San Diego Air Basin (SDAB or basin) and is subject to the San Diego Air Pollution Control District (SDAPCD) guidelines and regulations. The SDAB is one of 15 air basins that geographically divide the State of California. The weather of the San Diego region, as in most of Southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average temperature ranges (in degrees Fahrenheit (°F)) from the mid-40s to the high 90s. Most of the region's precipitation falls from November to April with infrequent (approximately 10%) precipitation during the summer. The average seasonal precipitation along the coast is approximately 10 inches; the amount increases with elevation as moist air is lifted over the mountains to the east.

The topography in the San Diego region varies greatly, from beaches on the west to mountains and desert on the east. Along with local meteorology, the topography influences the dispersal and movement of pollutants in the basin. The mountains to the east prohibit dispersal of pollutants in that direction and help trap them in inversion layers as described in the next section.

The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and influences the direction of prevailing winds (westerly to northwesterly). Local terrain is often the dominant factor inland, and winds in inland mountainous areas tend to blow through the valleys during the day and down the hills and valleys at night.

2.2 Climate and Meteorology

The SDAB is currently classified as a federal nonattainment area (an area considered to have worse air quality than the National Ambient Air Quality Standards (NAAQS)) for ozone (O_3), and a state nonattainment area (an area considered to have worse air quality than the California Ambient Air Quality Standards (CAAQS)) for O_3, particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$).

The SDAB lies in the southwest corner of California and comprises the entire San Diego region, covering 4,260 square miles, and is an area of high air pollution potential. The basin experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The SDAB experiences frequent temperature inversions. Subsidence inversions occur during the warmer months as descending air associated with the Pacific High Pressure Zone meets cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. Another type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce O_3, commonly known as smog.

Light daytime winds, predominately from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to carbon monoxide (CO) and oxides of nitrogen (NO_x) emissions. CO concentrations are generally higher in the morning and late evening. In the morning, CO levels are elevated due to cold temperatures and the large number of motor vehicles traveling. Higher CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the basin are associated with heavy traffic. Nitrogen dioxide (NO_2) levels are also generally higher during fall and winter days when O_3 concentrations are lower.

Under certain conditions, atmospheric oscillation results in the offshore transport of air from the Los Angeles region to San Diego County. This often produces high O_3 concentrations, as measured at air pollutant monitoring stations within the County. The transport of air pollutants from Los Angeles to San Diego has also occurred within the stable layer of the elevated subsidence inversion, where high levels of O_3 are transported.

Site-Specific Meteorological Conditions

The local climate in northern San Diego County is characterized as semi-arid with consistently mild, warmer temperatures throughout the year. The average summertime high temperature in the project area is approximately 74°F with maximum temperatures in August. The average wintertime low temperature is approximately 44°F in January. Average precipitation in the local area is approximately 10.54 inches per year, with the bulk of precipitation falling December through March (WRCC 2016).

2.3 Regulatory Setting

2.3.1 Federal Activities

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, including the setting of National Ambient Air Quality Standards (NAAQS) for major air pollutants, hazardous air pollutant (HAP) standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric O_3 protection, and enforcement provisions. NAAQS are established for "criteria pollutants" under the Clean Air Act, which are O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan that demonstrates how those areas will attain the standards within mandated time frames.

The 1977 federal Clean Air Act amendments required the EPA to identify National Emission Standards for Hazardous Air Pollutants to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act Amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

2.3.2 State of California

California Clean Air Act

The California Clean Air Act was adopted in 1988 and establishes the State's air quality goals, planning mechanisms, regulatory strategies, and standards of progress.

Under the federal CAA, the task of air quality management and regulation has been legislatively granted to the California Air Resources Board (CARB), with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels.

CARB is responsible for ensuring implementation of the California Clean Air Act, responding to the federal CAA, and regulating emissions from mobile sources, such as motor vehicles and construction equipment, and consumer products. Pursuant to the authority granted to it, CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS.

The NAAQS and CAAQS are presented in Table 2, Ambient Air Quality Standards.

Table 2
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]
O_3	1 hour	0.09 ppm (180 µg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m³	150 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m³	12.0 µg/m³	15.0 µg/m³
Lead[j,k]	30-day Average	1.5 µg/m³	—	—
	Calendar Quarter	—	1.5 µg/m³ (for certain areas)[k]	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m³)	—	—
Sulfates	24- hours	25 µg/m³	—	—

Table 2
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2016a.

Notes: ppm = parts per million by volume; μg/m^3 = micrograms per cubic meter; mg/m^3= milligrams per cubic meter.

a California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility-reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter (μg/m^3) is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25° Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

e National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

f On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

g To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

h On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

i On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/m^3 to 12.0 μg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/m^3, as was the annual secondary standard of 15 μg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

j CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

k The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 μg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Toxic Air Contaminants

A toxic air contaminant (TAC) is defined by California law as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Federal laws use the term hazardous air pollutants

(HAPs) to refer to the same types of compounds that are referred to as TACs under state law. California regulates TACs primarily through the Tanner Air Toxics Act (Assembly Bill (AB) 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588).

AB 1807 sets forth a formal procedure for CARB to utilize when designating substances as TACs. This procedure includes pre-designation research, public participation, and scientific peer review.

Pursuant to AB 2588, existing facilities that emit air pollutants above specified level were required to: (1) prepare a TAC emission inventory plan and report, (2) prepare a risk assessment if TAC emissions were significant, (3) notify the public of significant risk levels, and (4) if health impacts were above specified levels, prepare and implement risk reduction measures.

The following CARB-adopted regulatory measures and Health & Safety Code requirements pertain to the reduction of diesel particulate matter (the primary TAC associated with the proposed project's construction-related activities) and other criteria pollutant emissions from on-site road and off-road vehicles:

Idling of Commercial Heavy Duty Trucks (13 Section CCR 2485)

In July 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to control emissions from idling trucks. The ATCM prohibits idling for more than 5 minutes for all commercial trucks with a gross vehicle weight rating over 10,000 pounds. The ATCM contains an exception that allows trucks to idle while queuing or involved in operational activities.

In-Use Off-Road Diesel-Fueled Fleets (13 CCR Section 2449 et seq.)

In July 2007, CARB adopted an ATCM for in-use off-road diesel vehicles. This regulation required that specific fleet average requirements be met for NO_x emissions and for particulate matter emissions. Where average requirements cannot be met, BACT requirements apply. The regulation also includes several recordkeeping and reporting requirements. In response to AB 8 2X, the regulations were revised in July 2009 (effective December 3, 2009) to allow a partial postponement of the compliance schedule in 2011 and 2012 for existing fleets. On December 17, 2010, CARB adopted additional revisions to further delay the deadlines reflecting reductions in diesel emissions due to the poor economy and overestimates of diesel emissions in California. The revisions delayed the first compliance date until no earlier than January 1, 2014, for large fleets, with final compliance by January 1, 2023. The compliance dates for medium fleets would be delayed until an initial date of January 1, 2017, and final compliance date of January 1, 2023. The compliance dates for small fleets would be delayed until an initial date of January 1, 2019, and final compliance date of January 1, 2028. Correspondingly, the fleet average targets were

made more stringent in future compliance years. The revisions would also accelerate the phase-out of equipment with older equipment added to existing large and medium fleets over time, requiring the addition of Tier 2 or higher engines starting on March 1, 2011, with some exceptions: Tier 2 or higher engines on January 1, 2013, without exception; and Tier 3 or higher engines on January 1, 2018 (January 1, 2023, for small fleets).

On October 28, 2011 (effective December 14, 2011), the Executive Officer approved amendments to the regulation. The amendments included revisions to the applicability section and additions and revisions to the definition. The initial date for requiring the addition of Tier 2 or higher engines for large and medium fleets, with some exceptions, was revised to January 1, 2012. New provisions would allow removal of emission control devices for safety or visibility purposes. The regulation was amended to combine the particulate matter and NO_x fleet average targets under one, instead of two, sections. The amended fleet average targets are based on the fleet's NO_x fleet average, and the previous section regarding particulate matter performance requirements was deleted completely. The BACT requirements, if a fleet cannot comply with the fleet average requirements, were restructured and clarified. Other amendments to the regulations included minor administrative changes to the regulatory text.

In-Use On-Road Diesel-Fueled Vehicles (13 CCR Section 2025)

In December 2008, CARB adopted an ATCM to reduce NO_x and PMfrom most in-use on-road diesel trucks and buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. The original ATCM regulation required fleets to limit their NO_x and PM through a combination of exhaust retrofit equipment and new vehicles. The regulation limited particulate matter emissions for most fleets by 2011, and limited NO_x emissions for most fleets by 2013. The regulation did not require any vehicle to be replaced before 2012, and never required all vehicles in a fleet be replaced. In December 2009, the CARB Governing Board directed staff to evaluate amendments that would provide additional flexibility for fleets adversely affected by the poor California economy. On December 17, 2010, CARB revised this ATCM to delay its implementation along with limited relaxation of its requirements. Starting on January 1, 2015, lighter trucks with a GVWR of 14,001 to 26,000 pounds with 20-year-old or older engines would need to be replaced with newer trucks (2010 model year emissions equivalent as defined in the regulation). Trucks with a GVWR greater than 26,000 pounds with 1995 model year or older engines must be replaced as of January 1, 2015. Trucks with 1996–2006 model year engines must install a Level 3 (85% control) diesel particulate filter starting on January 1, 2012, to January 1, 2014, depending on the model year, and then must be replaced after 8 years. Trucks with 2007–2009 model year engines have no requirements until 2023, at which time they must be replaced with 2010 model year emissions equivalent engines as defined in the regulation. Trucks with 2010 model year engines would meet the final compliance requirements. The ATCM provides a phase-in option under

which a fleet operator would equip a percentage of trucks in the fleet with diesel particulate filters, starting at 30% as of January 1, 2012, with 100% by January 1, 2016. Under each option, delayed compliance is granted to fleet operators who have or will comply with requirements before the required deadlines.

On September 19, 2011 (effective December 14, 2011), the Executive Officer approved amendments to the regulations, including revisions to the compliance schedule for vehicles with a GVWR of 26,000 pounds or less to clarify that *all* vehicles must be equipped with 2010 model year emissions equivalent engines by 2023. The amendments included revised and additional credits for fleets that have downsized; implement early particulate matter retrofits; incorporate hybrid vehicles, alternative-fueled vehicles, and vehicles with heavy-duty pilot ignition engines; and implement early addition of newer vehicles. The amendments included provisions for additional flexibility, such as for low-usage construction trucks, and revisions to previous exemptions, delays, and extensions. Other amendments to the regulations included minor administrative changes to the regulatory text, including recordkeeping and reporting requirements related to other revisions.

2.3.3 Local Regulations

San Diego Air Pollution Control District

CARB is responsible for the regulation of mobile emission sources within the state, and local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The project Site is located within the SDAB and is subject to the guidelines and regulations of the SDAPCD. Among other jurisdictional responsibilities, SDAPCD regulates existing, modified, and new stationary sources of air pollutants, prepares and adopts regional plans for the attainment of federal and state air quality standards, establishes requirements and thresholds for projects conducting HRAs, and maintains guidance documents for various types of projects in the San Diego Air Basin (SDAB).

In San Diego County, O_3 and particulate matter are the pollutants of main concern, since exceedances of state ambient air quality standards for those pollutants are experienced here in most years. For this reason, the SDAB has been designated as a nonattainment area for the state PM_{10}, $PM_{2.5}$, and O_3 standards. The SDAB is also a federal O_3 attainment (maintenance) area for 1997 8-hour O_3 standard, an O_3 nonattainment area for the 2008 8-hour O_3 standard, and a CO maintenance area (western and central part of the SDAB only, including the project Site).

The *Eight-Hour Ozone Attainment Plan for San Diego County* indicates that local controls and state programs would allow the region to reach attainment of the federal 1997 8-hour O_3 standard

(SDAPCD 2007). In this plan, SDAPCD relies on the Regional Air Quality Strategy (RAQS) to demonstrate how the region will comply with the federal O_3 standard. The RAQS details how the region will manage and reduce O_3 precursors (NO_x and volatile organic compounds (VOCs)) by identifying measures and regulations intended to reduce these contaminants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and the EPA. Incentive programs for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS.

As discussed in the *Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County*[1], the SDAB reached attainment of the federal 1997 standard in 2011 (SDAPCD 2012). This redesignation request demonstrates the region's attainment of the 1997 O_3 NAAQS and outlines the plan for maintaining attainment status.

In December 2016, the SDAPCD updated the *Eight-Hour Ozone Attainment Plan for San Diego County*. The 2016 *Eight-Hour Ozone Attainment Plan for San Diego County* identifies control measures and associated emission reductions which would allow the region to reach attainment of the federal 8-hour O_3 standard by July 20, 2018 (SDAPCD 2016b). Currently, the County is in moderate nonattainment for the 2008 O_3 NAAQS. As documented in the 2016 *Eight-Hour Ozone Attainment Plan for San Diego County*, the County has a likely chance of obtaining attainment due to the transition to low emission cars, stricter new source review rules, and continuing the requirement of general conformity for military growth and the San Diego International Airport. The County will also continue emission control measures including ongoing implementation of existing regulations in ozone precursor reduction to stationary and area-wide sources, subsequent inspections of facilities and sources, and the adoption of laws requiring Best Available Retrofit Control Technology for control of emissions.

The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The RAQS for the SDAB was initially adopted in 1991, and most recently updated in 2016 (SDAPCD 2016a). The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the county, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth

[1] For the purpose of this report, the relevant federal air quality plan is the ozone attainment plan (SDAPCD 2016b). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the SDAB.

projections are based on population, vehicle trends, and land use plans developed by San Diego County and the cities in the county as part of the development of their general plans (SANDAG 2017a, 2017b).

In December 2016, the SDAPCD revised the RAQS for San Diego County. Since 2007, the San Diego region reduced daily VOC emissions and NO_x emissions by 3.9% and 7.0% respectively; the SDAPCD expects to continue reductions through 2035 (SDAPCD 2016a). These reductions were achieved through implementation of six VOC control measures and three NO_x control measures adopted in the SDAPCD's 2009 RAQS; in addition, the SDAPCD is considering additional measures, including three VOC measures and four control measures to reduce 0.3 daily tons of VOC and 1.2 daily tons of NO_x, provided they are found to be feasible region-wide. In addition, SDAPCD has implemented nine incentive-based programs, has worked with SANDAG to implement regional transportation control measures, and has reaffirmed the state emission offset repeal.

In regards to particulate matter emissions reduction efforts, in December 2005, the SDAPCD prepared a report titled "Measures to Reduce Particulate Matter in San Diego County" to address implementation of Senate Bill (SB) 656 in San Diego County (SB 656 required additional controls to reduce ambient concentrations of PM_{10} and $PM_{2.5}$) (SDAPCD 2005). In the report, SDAPCD evaluated the implementation of source-control measures that would reduce particulate matter emissions associated with residential wood combustion; various construction activities including earthmoving, demolition, and grading; bulk material storage and handling; carryout and trackout removal and cleanup methods; inactive disturbed land; disturbed open areas; unpaved parking lots/staging areas; unpaved roads; and windblown dust (SDAPCD 2005).

SDAPCD Rules and Regulations

As stated above, the SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SDAB. The following rules and regulations apply to all sources in the jurisdiction of SDAPCD, and would apply to the proposed project:

1. **SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance.** Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property (SDAPCD 1969).
2. **SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust.** Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and

inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project Site (SDAPCD 2009b).

3. **SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: Architectural Coatings.** Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2001).

2.4 Background Air Quality

2.4.1 Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include: O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and lead. These pollutants are discussed below.[2] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O_3 is a colorless gas that is formed in the atmosphere when VOCs, sometimes referred to as reactive organic gases, and NO_x react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The primary sources of VOCs and NO_x, the precursors of O_3, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation and ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. Short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

Nitrogen Dioxide. Most NO_2, like O_3, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_x and are major contributors to O_3 formation. High

[2] The descriptions of each of the criteria air pollutants and associated health effects are based on the EPA's Criteria Air Pollutants (EPA 2017a) and the CARB Glossary of Air Pollutant Terms (CARB 2016b).

concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis and some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 ppm.

Carbon Monoxide. CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_X), NO_x, and VOCs. Inhalable or coarse particulate matter, or PM_{10}, is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates, can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases, such as chlorides or ammonium, into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

Lead. Lead (Pb) in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline, the manufacturing of batteries, paint, ink, ceramics, and ammunition and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline for motor vehicles reduced the overall inventory of airborne lead by nearly 95%. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs (also referred to as ROGs). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

Non-Criteria Pollutants

Toxic Air Contaminants

The state list of TACs identifies about 700 plus substances and the federal list of HAPs identifies 189 substances. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC. Examples include certain aromatic and chlorinated hydrocarbons, certain metals, asbestos, and particulate matter including diesel particulate matter (DPM).

DPM is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with diesel particulate matter, CARB adopted a diesel risk reduction plan in 2000.

Odorous Compounds

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors

2.4.2 SDAB Attainment Designation

Pursuant to the 1990 federal Clean Air Act Amendments, the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on

whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. As previously discussed, these standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on CAAQS rather than the NAAQS.

The criteria pollutants of primary concern that are considered in this analysis are O_3, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$. Although there are no ambient standards for VOCs or NO_x, they are important as precursors to O_3.

The portion of the SDAB where the project Site is located is designated by the EPA as an attainment area for the 1997 8-hour NAAQS for O_3 and as a marginal nonattainment area for the 2008 8-hour NAAQS for O_3.The SDAB is designated in attainment for all other criteria pollutants under the NAAQS with the exception of PM_{10}, which was determined to be unclassifiable.

The SDAB is currently designated nonattainment for O_3, PM_{10} and $PM_{2.5}$ under the CAAQS. It is designated attainment for the CAAQS for CO, NO_2, SO_2, lead, and sulfates.

Table 3, SDAB Attainment Classification, summarizes the SDAB's federal and state attainment designations for each of the criteria pollutants.

Table 3
San Diego Air Basin Attainment Classification

Pollutant	Federal Designation	State Designation
O_3 (1 hour)	Attainment (Maintenance)[1]	**Nonattainment**
O_3 (8 hour – 1997) (8 hour – 2008)	Attainment (Maintenance) **Nonattainment (Marginal)**	**Nonattainment**
NO_2	Unclassifiable/Attainment	Attainment
CO	Attainment (Maintenance)[2]	Attainment
SO_2	Attainment	Attainment
PM_{10}	Unclassifiable[3]	**Nonattainment**
$PM_{2.5}$	Attainment	**Nonattainment**
Lead	Attainment	Attainment

Table 3
San Diego Air Basin Attainment Classification

Pollutant	Federal Designation	State Designation
Sulfates	(no federal standard)	Attainment
Hydrogen Sulfide	(no federal standard)	Unclassified
Visibility-Reducing Particles	(no federal standard)	Unclassified

Source: EPA 2017b; CARB 2016c.

1 The federal 1-hour standard of 0.12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in state implementation plans.

2 The western and central portions of the basin are designated attainment (maintenance), while the eastern portion is designated unclassifiable/attainment.

3 At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

2.4.3 Air Quality Monitoring Data

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. The project site's local ambient air quality is monitored by the SDAPCD. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data from 2014 to 2016 are presented in Table 4. The Del Mar Mira Costa College monitoring station, located at 832 Camino Del Mar, is the nearest air quality monitoring station to the project site, located approximately 1.11 miles south of the project site. The data collected at this station are considered representative of the air quality experienced in the project site. Air quality data for O_3 from the Del Mar Mira Costa College monitoring station is provided in Table 4. Because NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$ are not monitored at the Del Mar Mira Costa College monitoring station, NO_2, PM_{10}, and $PM_{2.5}$ measurements were taken from the San Diego-Kearny Villa Road monitoring station and CO and SO_2 measurements were taken from the El Cajon-Floyd Smith Drive monitoring station. The number of days exceeding the ambient air quality standards is also shown in Table 4.

Table 4
Local Ambient Air Quality Data

Concentration or Exceedances	Ambient Air Quality Standard	2014	2015	2016
Ozone (O_3) *(Del Mar-Miracosta College Monitoring Station)*				
Maximum 1-hour concentration (ppm)	0.09 ppm (state)	0.100	0.098	0.079
Number of days exceeding state standard		*1*	*1*	*0*
Maximum 8-hour concentration (ppm)	0.070 ppm (state)	0.088	0.078	0.071
	0.070 ppm (federal)	0.087	0.078	0.071
Number of days exceeding state standard		*4*	*2*	*1*
Number of days exceeding federal standard		*4*	*2*	*1*

Table 4
Local Ambient Air Quality Data

Concentration or Exceedances	Ambient Air Quality Standard	2014	2015	2016
Nitrogen Dioxide (NO_2) (San Diego-Kearny Villa Road Monitoring Station Monitoring Station)				
Maximum 1-hour concentration (ppm)	0.18 ppm (state)	0.051	0.051	0.053
	0.100 ppm (federal)	0.051	0.051	0.053
Number of days exceeding state standard		*0*	*0*	*0*
Number of days exceeding federal standard		*0*	*0*	*0*
Annual concentration (ppm)	0.030 ppm (state)	0.010	0.009	0.009
	0.053 ppm (federal)	—	—	—
Carbon Monoxide (CO) (El Cajon-Floyd Smith Drive Monitoring Station)				
Maximum 1-hour concentration (ppm)	20 ppm (state)	—	—	—
	35 ppm (federal)	2.0	1.4	1.7
Number of days exceeding state standard		—	—	—
Number of days exceeding federal standard		*0*	*0*	*0*
Maximum 8-hour concentration (ppm)	9.0 ppm (state)	—	—	—
	9 ppm (federal)	1.8	1.1	1.0
Number of days exceeding state standard		—	—	—
Number of days exceeding federal standard		*0*	*0*	*0*
Sulfur Dioxide (SO_2) (El Cajon-Floyd Smith Drive Monitoring Station)				
Maximum 1-hour concentration (ppm)	0.075 ppm (federal)	0.012	0.012	0.006
Number of days exceeding federal standard		*0*	*0*	*0*
Maximum 24-hour concentration (ppm)	0.14 ppm (federal)	0.005	0.004	0.002
Number of days exceeding federal standard		*0*	*0*	*0*
Annual concentration (ppm)	0.030 ppm (federal)	0.001	0.001	0.001
Coarse Particulate Matter (PM_{10}) (San Diego-Kearny Villa Road Monitoring Station)				
Maximum 24-hour concentration ($\mu g/m^3$)	50 $\mu g/m^3$ (state)	39.0	37.0	35.0
	150 $\mu g/m^3$ (federal)	39.0	39.0	36.0
Number of days exceeding state standard[a]		*0.0 (0)*	*0.0 (0)*	*ND (0)*
Number of days exceeding federal standard[a]		*0.0 (0)*	*0.0 (0)*	*0 (0)*
Annual concentration (state method) ($\mu g/m^3$)	20 $\mu g/m^3$ (state)	19.5	16.7	ND
Fine Particulate Matter ($PM_{2.5}$) (San Diego-Kearny Villa Road Monitoring Station)				
Maximum 24-hour concentration ($\mu g/m^3$)	35 $\mu g/m^3$ (federal)	20.2	25.7	19.4
Number of days exceeding federal standard[a]		*0 (0)*	*0 (0)*	*0 (0)*
Annual concentration ($\mu g/m^3$)	12 $\mu g/m^3$ (state)	8.2	ND	7.8
	12.0 $\mu g/m^3$ (federal)	8.1	7.2	7.5

Sources: CARB 2017; EPA 2017c.

Notes: — = not available; μg/m3 = micrograms per cubic meter; ND = insufficient data available to determine the value; ppm = parts per million
Data taken from CARB iADAM (http://www.arb.ca.gov/adam) and EPA AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year.
Exceedances of federal and state standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.
Del Mar-Mira Costa College Monitoring Station is located at 832 Camino Del Mar, Del Mar, California 92014.
San Diego-Kearny Villa Road Monitoring Station is located at 6125A Kearny Villa Road, San Diego, California 92145.
El Cajon-Floyd Smith Drive Monitoring Station is located at 10537 Floyd Smith Drive, El Cajon, California 92020.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.Intentionally Left Blank

3 THRESHOLDS OF SIGNIFICANCE

The State of California has developed guidelines to address the significance of air quality impacts based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which provides guidance that a project would have a significant environmental impact if it would:

4. Conflict with or obstruct the implementation of the applicable air quality plan;
5. Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
6. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors);
4. Expose sensitive receptors to substantial pollutant concentrations; or
5. Create objectionable odors affecting a substantial number of people.

SDAPCD

The City of Del Mar has not adopted numerical thresholds of significant for determining whether air quality impacts are significant. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 requiring the preparation of Air Quality Impact Assessments (AQIA) for permitted stationary sources. The SDAPCD sets forth quantitative emission thresholds below which a stationary source would not have a significant impact on ambient air quality. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 5 are exceeded. For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality.

Table 5
San Diego Air Pollution Control District Air Quality Significance Thresholds

Construction Emissions	
Pollutant	*Total Emissions (Pounds per Day)*
Respirable Particulate Matter (PM_{10})	100
Fine Particulate Matter ($PM_{2.5}$)[1]	55
Oxides of Nitrogen (NO_x)	250
Oxides of Sulfur (SO_x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOC)[2]	137

Table 5
San Diego Air Pollution Control District Air Quality Significance Thresholds

Operational Emissions			
	Total Emissions		
Pollutant	*Pounds per Hour*	*Pounds per Day*	*Tons per Year*
Respirable Particulate Matter (PM_{10})	—	100	15
Fine Particulate Matter ($PM_{2.5}$)[1]	—	55	10
Oxides of Nitrogen (NO_x)	25	250	40
Sulfur Oxides (SO_x)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	—	3.2	0.6
Volatile Organic Compounds (VOC)[2]	—	137	13.7

Source: SDAPCD Rules 1501 (SDAPCD 1995) and 20.2(d)(2) (SDAPCD 1998).

1 $PM_{2.5}$ is not currently regulated under SDAPCD Rule 20.2. $PM_{2.5}$ thresholds are based on South Coast Air Quality Management District (SCAQMD) significance thresholds of 55 lbs/day for construction and operation and 10 tons/year for operation.

2 VOC threshold based on the significance thresholds recommended by the Monterey Bay Air Resources District for the North Central Coast Air Basin, which has similar federal and state attainment status as the basin for O_3.

The thresholds listed in Table 5 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. In the event that emissions exceed these thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the CAAQS and NAAQS, including appropriate background levels. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 5, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

4 IMPACTS AND MITIGATION

4.1 Would the project conflict with or obstruct implementation of the applicable air quality plan?

As stated in Section 2.3, the SDAPCD and SANDAG are responsible for developing and implementing the clean air plans for attainment and maintenance of the ambient air quality standards in the SDAB—specifically, the SIP and RAQS.[3] The federal O_3 maintenance plan was adopted in December 2016. The SIP includes a demonstration that current strategies and tactics will maintain acceptable air quality in the SDAB based on the NAAQS. The RAQS was initially adopted in 1991 and was most recently updated in 2016. The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O_3. The SIP and RAQS rely on information from CARB and SANDAG, including mobile and area source emissions as well as information regarding projected growth in the County as a whole and the cities in the County, to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans.

The RAQS also relies on information from CARB and SANDAG, vehicle trends, and land-use plans developed by the cities and by San Diego County as part of development of their general plans. As such, if a project would entail development that is greater than that anticipated in the local plan and SANDAG's growth projections, the project might be in conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality. The project site is designated North Commercial (NC) in the City's Community Plan. Allowed uses under the NC designation include repair shops, blueprinting, manufacturing, restaurants, art/technical studios, offices, and warehouses (City of Del Mar 1985).

The proposed project would redesignate the project site as Specific Plan which allows for a 48 unit residential development at a density of 24 dwelling units per acre. The proposed use would locate a high-density residential development on a lot that borders Low Density (R1-10), Very low Density (R1-40) to the east, and commercial uses to the north and west. Although the proposed project would change the designation of the project site from NC to a specific plan allowing for residential and commercial uses, the potential criteria emissions from the site would be relatively comparable. Additionally, by adhering to the basic principles

[3] For the purpose of this discussion, the relevant federal air quality plan is the ozone maintenance plan (SDAPCD 2016b). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the basin.

of mixed use development, compact building design, and providing a diverse range of housing options, the proposed project would be consistent with the SIP and RAQS which rely on information from CARB and SANDAG including growth projections based on population, vehicle trends, and land use plans developed by San Diego County and the cities in the County as part of the development of their general plans, the proposed land uses would be accounted for in the projections contained in the SIP and RAQS. Therefore, the proposed project is not anticipated to substantially increase criteria pollutant emissions from the project site beyond those considered in the RAQS projects. As such the proposed project would be considered consistent with the RAQS and impacts would be **less than significant**.

4.2 Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction Impacts

Construction of the proposed project would result in a temporary, short-term addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Emissions resulting from construction of the proposed project would be temporary because construction activities would occur intermittently over the construction phase of the project, and construction activities and associated emissions would cease following project buildout. Construction emissions can vary substantially from day to day depending on the level of activity, the specific type of operation and, for dust, prevailing weather conditions. For the purposes of modeling, a worst-case maximum daily emission scenario for proposed project construction activities is analyzed. Fugitive dust (PM_{10} and $PM_{2.5}$) emissions would primarily result from grading and site preparation activities. NO_x and CO emissions would primarily result from the use of construction equipment and motor vehicles. VOC emissions would primarily result from asphalt and architectural coating off-gassing.

Emissions from the construction phase of the project were estimated using CalEEMod. As indicated in Section 1.3, construction of the proposed project is anticipated to commence in June 2019, over an approximately 24-month period. A detailed description of construction subphases as well as other assumptions made for the purposes of modeling is included in Appendix A of this report.

Construction subphases would overlap in some instances to meet the provided construction schedule. This overlap is accounted for in the construction emissions estimates. Construction of the proposed project would involve approximately 26,500 cubic yards of soil cut and 2,900 cubic yards of fill, resulting in 23,600 cubic yards of soil export. A more detailed description of the construction schedule, including information regarding subphases and equipment used during each subphase is included in Appendix A.

Construction worker and vendor trip assumptions were assigned to each construction subphase to determine criteria air pollutant emissions from these sources. Construction worker and vendor trips for construction were determined using CalEEMod default worker trip and vendor trip vehicle generation factors. The construction equipment mix was provided by the applicant and represents a reasonably conservative estimate of construction activity. Where project-specific construction equipment information was not available, CalEEMod default equipment mixes were used. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week (22 days per month) during project construction.

The proposed project is subject to SDAPCD Rule 55 – Fugitive Dust Control. This rule requires actions to restrict visible emissions of fugitive dust beyond the property line. Compliance with Rule 55 would limit fugitive dust (PM_{10} and $PM_{2.5}$) that may be generated during grading and construction activities. To account for dust control measures in the calculations, it was assumed that the active sites would be watered at least two times daily, resulting in an approximately 55% reduction of particulate matter. The proposed project is also subject to SDAPCD Rule 67.0 – Architectural Coatings. This rule establishes maximum VOC contents of 50 and 100 grams per liter for flat and non-flat coatings, respectively. CalEEMod default values of 250 grams per liter for residential and non-residential interior coatings and 250 grams per liter for residential and non-residential exterior coatings were replaced with VOC contents of 50 and 100 grams per liter.

Table 6 shows the estimated maximum daily construction emissions associated with the construction phases of the proposed project. Complete details of the emissions calculations are provided in Appendix A.

Table 6
Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds per day					
2019	2.60	23.38	22.42	0.04	1.87	1.40
2020	1.63	14.12	14.42	0.03	1.23	0.88
2021	24.00	12.81	14.21	0.03	1.11	0.76
Maximum Daily Emissions	**24.00**	**23.38**	**22.42**	**0.04**	**1.87**	**1.40**
SDAPCD Threshold	*137*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: See Appendix A for detailed results.
Notes: The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These estimates reflect control of fugitive dust required by SDAPCD Rule 55 (water a minimum twice per day) and compliance with SDAPCD Rule 67, which limits VOC content of architectural coatings.
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 6, daily construction emissions would not exceed SDAPCD's significance thresholds for any criteria air pollutant. Therefore, impacts would be **less than significant**.

Operational Impacts

Following the completion of construction activities, the proposed project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile and stationary sources, including vehicular traffic and area sources (water heating and landscaping).

Vehicular Traffic

The proposed project would impact air quality through an increase in vehicular traffic generated by project residents and visitors. CalEEMod was utilized to estimate daily emissions from proposed vehicular sources (refer to Appendix A). CalEEMod default data, including temperature, trip characteristics, variable start information, vehicle mix, and emissions factors, were conservatively used for the model inputs. Emission factors representing the vehicle mix and emissions for 2022 (first year full buildout) were used to estimate emissions.

Energy

Emissions from energy sources, which include natural gas appliances and space and water heating, were also estimated using CalEEMod. Default values for indoor and outdoor water use, solid waste generation, and natural gas consumption (through Title 24 and non-Title 24 natural gas energy intensities) were used for the proposed project. The proposed project is expected to meet the 2016 Title 24 standards, which requires that new residential development are required to achieve a 28% energy savings compared with 2013 Title 24 standards (CEC 2015).

Area Sources

In addition to estimating mobile source emissions, CalEEMod was also used to estimate emissions from the project area stationary sources, which include natural gas appliances, hearths, landscaping, consumer products, and maintenance application of architectural coatings. It was assumed all residential units would be constructed with natural gas fireplaces and no wood-burning devices. Similar to construction-related architectural coating emission estimates, CalEEMod default values of 250 grams per liter for residential and non-residential interior coatings and 250 grams per liter for residential and non-residential exterior coatings were replaced with VOC contents of 50 and 100 grams per liter based on SDAPCD regulations.

Table 7 presents the maximum daily emissions associated with the operation of the proposed project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Complete details of the emissions calculations are provided in Appendix A.

CalEEMod was used to estimate daily emissions from proposed vehicular sources. CalEEMod default trip-generation rates were adjusted based on weekday trip-generation rates per land use type. The model's default data, including temperature, trip characteristics, variable start information, emissions factors, and trip distances, were conservatively used for the model inputs.

Table 7
Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds per day					
Area Sources	1.79	0.84	4.31	0.01	0.09	0.09
Energy	0.02	0.17	0.07	0.00	0.01	0.01
Motor Vehicles	0.46	1.95	5.44	0.02	1.70	0.47
Total	**2.27**	**2.96**	**9.82**	**0.03**	**1.80**	**0.57**
Emission Threshold	*137*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: See Appendix A for detailed results.
Notes: The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These estimates reflect compliance with SDAPCD Rule 67, which limits VOC content of architectural coatings, assumed no wood burning devices, compliance with 2016 Title 24 standards (28% more efficient than 2013 standards for residential construction), compliance with CALGreen (20% indoor and outdoor reduction in water consumption), and compliance with AB 341 (75% waste diverted from landfills).
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 7, daily area source and operational emissions would not exceed the significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. As such, the proposed project's operational impacts on air quality would be **less than significant**.

4.3 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

In analyzing cumulative impacts from the proposed project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the SDAB is designated as nonattainment for the CAAQS and NAAQS. If the proposed project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, the project would only be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of

the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions in the basin to ensure the SDAB continues to make progress toward NAAQS- and CAAQS-attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative operational impacts if they represent development and population increases beyond regional projections.

The SDAB has been designated as a federal nonattainment area for O_3 and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ emissions associated with construction generally result in near-field impacts. The nonattainment status is the result of cumulative emissions from all sources of these air pollutants and their precursors within the SDAB. As discussed previously, the project-generated emissions of VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ would be below the significance thresholds for both construction and operational activities. As such, the proposed project would result in less than significant impacts to air quality relative to construction and operational emissions.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the SIP and RAQS serve as the primary air quality planning documents for the state and SDAB, respectively. The SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and by San Diego County as part of the development of their general plans. The project site is designated NC in the City's Community Plan. Allowed uses under the NC designation include repair shops, blueprinting, manufacturing, restaurants, art/technical studios, offices, and warehouses (City of Del Mar 1985). Although the proposed project would change the designation of the project site from NC to a specific plan allowing for residential and commercial uses, the potential criteria emissions from the site would be relatively comparable. Additionally, by adhering to the basic principles of mixed use development, compact building design, and providing a diverse range of housing options, the proposed project would be consistent with the SANDAG 2016 Regional Transportation Plan/Sustainable Communities Strategy. Therefore, the proposed project would not result in significant regional growth that is not accounted for within the RAQS; thus, at a regional level, it would be consistent with the underlying growth forecasts in the SIP and RAQS. As a

result, the proposed project would not result in a cumulatively considerable contribution to regional O_3 concentrations or other criteria pollutant emissions.

Based on the considerations described above, cumulative impacts would be **less than significant**.

4.4 Would the project expose sensitive receptors to substantial pollutant concentrations?

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed "sensitive receptors" are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. Sensitive receptors include residences, schools, playgrounds, child-care centers, athletic facilities, long-term health-care facilities, rehabilitation centers, convalescent centers, and retirement homes. The nearest existing sensitive receptors are located adjacent to the project site's eastern boundary. Receptors also include tenants of the proposed project.

Health Impacts of Toxic Air Contaminants

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as TACs or HAPs. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal HAPs, and is adopting appropriate control measures for sources of these TACs. The greatest potential for TAC emissions during construction would be diesel particulate emissions from heavy equipment operations and heavy-duty trucks and the associated health impacts to sensitive receptors. The following measures are required by state law to reduce DPM emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, Section 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SDAPCD recommends an incremental cancer risk threshold of 10 in a million (SDAPCD 2014). "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment (OEHHA) risk-assessment methodology. The proposed project would not require the extensive operation of heavy-duty construction equipment, which is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction equipment to reduce diesel particulate emissions and would not involve extensive use of diesel trucks, which are also subject to a CARB Airborne Toxics Control Measure.

As shown in Table 6, maximum daily particulate matter (PM_{10} or $PM_{2.5}$) emissions generated by construction equipment operation and haul-truck trips during construction (exhaust particulate matter, or DPM), combined with fugitive dust generated by equipment operation and vehicle travel, would be well below the SDAPCD significance thresholds. Moreover, total construction of the proposed project would last approximately 24 months, after which project-related TAC emissions would cease. Thus, the proposed project would not result in a long-term source of TAC emissions. No residual TAC emissions and corresponding cancer risk are anticipated after construction, and no long-term sources of TAC emissions are anticipated during operation of the proposed project. Therefore, the exposure of project-related TAC emission impacts to sensitive receptors would be **less than significant**.

Additionally, CARB has published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005), which identifies certain types of facilities or sources that may emit substantial quantities of TACs and therefore could conflict with sensitive land uses, such as "schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities." The *Air Quality and Land Use Handbook* is a guide for siting of new sensitive land uses, but it does not mandate specific separation distances to avoid potential health impacts. The enumerated facilities or sources include the following:

- High-traffic freeways and roads
- Distribution centers
- Rail yards
- Ports
- Refineries
- Chrome plating facilities

- Dry cleaners
- Large gas dispensing facilities.

CARB recommends that sensitive receptors not be located downwind or in proximity to such sources to avoid potential health hazards.

The proposed project would neither include any of the previously listed land uses nor expose tenants of the project to TAC emissions from these sources. Impacts would be **less than significant**.

Health Impacts of Carbon Monoxide

Mobile-source impacts occur on two scales of motion. Regionally, project-related travel will add to regional trip generation and increase the vehicle-miles travelled (VMT) within the SDAB. Locally, proposed project traffic will be added to the City's roadway system. If such traffic occurs during periods of poor atmospheric ventilation, consists of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and operates on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO "hotspots" in the area immediately around points of congested traffic. Because of continued improvement in mobile emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the basin is steadily decreasing (CARB 2004).

In accordance with the California Department of Transportation (Caltrans) Institute of Transportation Studies *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol) (Caltrans 1997), CO hotspots are typically evaluated when (1) the LOS of an intersection or roadway decreases to LOS E or worse; (2) signalization and/or channelization is added to an intersection; and (3) sensitive receptors such as residences, schools, and hospitals are located in the vicinity of the affected intersection or roadway segment.

The proposed project would generate minimal new traffic trips and would comply with the CO Protocol screening criteria. Accordingly, project-related traffic would not exceed CO standards and therefore, no further analysis was conducted for CO impacts. This CO emissions impact would be considered **less than significant** on a project-level and cumulative basis.

Health Impacts of Other Criteria Air Pollutants

Table 8 presents a list of the criteria pollutants and other related pollutants of concern, emission sources, associated health effects, and current SDAB attainment status.

Table 8
Pollutants, Sources, Health Effects, and Attainment Status

Pollutant	Sources	Health Effects	Attainment Status	
			NAAQS	*CAAQS*
O_3	Formed when VOCs and NO_x react in the presence of sunlight. VOC sources include any source that burns fuels (e.g., gasoline, natural gas, wood, oil); solvents; petroleum processing and storage.	Breathing difficulties, lung tissue damage, vegetation damage, damage to rubber and some plastics.	Attainment	Nonattainment
PM_{10}	Road dust, windblown dust, agriculture and construction, fireplaces. Also formed from other pollutants (NO_x, SO_x, organics). Incomplete combustion.	Increased respiratory disease, lung damage, cancer, premature death, reduced visibility, surface soiling.	Unclassifiable	Nonattainment
$PM_{2.5}$	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also formed from reaction of other pollutants (NO_x, SO_x, organics, and NH_3).	Increases respiratory disease, lung damage, cancer, and premature death, reduced visibility, surface soiling. Particles can aggravate heart diseases such as congestive heart failure and coronary artery disease.	Attainment	Nonattainment
CO	Any source that burns fuel such as automobiles, trucks, heavy construction and farming equipment, residential heating.	Chest pain in heart patients, headaches, reduced mental alertness.	Attainment	Attainment
NO_2	See carbon monoxide.	Lung irritation and damage. Reacts in the atmosphere to form O_3 and acid rain.	Unclassifiable/ Attainment	Attainment
Lead	Metal smelters, resource recovery, leaded gasoline, deterioration of lead paint.	Learning disabilities, brain and kidney damage.	Attainment	Attainment
SO_2	Coal or oil burning power plants and industries, refineries, diesel engines.	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Attainment	Attainment
Sulfates	Produced by reaction in the air of SO_2, (see SO_2 sources), a component of acid rain.	Breathing difficulties, aggravates asthma, reduced visibility.	(no federal standard)	Attainment
Hydrogen Sulfide	Geothermal power plants, petroleum production and refining, sewer gas.	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations).	(no federal standard)	Unclassified

Table 8
Pollutants, Sources, Health Effects, and Attainment Status

Pollutant	Sources	Health Effects	Attainment Status	
Visibly Reducing Particles	See $PM_{2.5}$	Reduced visibility (e.g., obscures mountains and other scenery), reduced airport safety.	(no federal standard)	Unclassified
Vinyl Chloride	Exhaust gases from factories that manufacture or process vinyl chloride (construction, packaging, and transportation industries)	Central nervous system effects (e.g., dizziness, drowsiness, headaches), kidney irritation, liver damage, liver cancer.	N/A	N/A
TAC	Combustion engines (stationary and mobile), diesel combustion, storage and use of TAC-containing substances (i.e., gasoline, lead smelting, etc.)	Depends on TAC, but may include cancer, mutagenic and/or teratogenic effects, other acute or chronic health effects	N/A	N/A

Source: County of San Diego 2007.
O3 = ozone; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; CO = carbon monoxide; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide; TAC = toxic air contaminant

Construction and operation of the proposed project would not result in emissions that exceed the SDAPCD's emission thresholds for any criteria air pollutants. Some VOCs would be associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which would not result in the exceedances of the thresholds as shown in Tables 6 and 7. Additionally, the proposed project would comply with SDAPCD Rule 67.0.1 which regulates the acceptable VOC limit of architectural coatings for both construction and operational applications.

In addition, VOCs and NO_x are precursors to O_3, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS (the SDAB is designated by the EPA as an attainment area for the 1-hour O_3 NAAQS standard and 1997 8-hour NAAQS standard). The health effects associated with O_3, as discussed in Section 2.2, are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SDAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 AAQS tend to occur between April and October when solar radiation is highest.

The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC and NO_x emissions

associated with proposed project construction and operations could minimally contribute to regional O_3 concentrations and the associated health impacts. Due to the minimal contribution as a result of construction and operational activities, health impacts would be considered **less than significant**.

Similar to O_3, construction of the proposed project would not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter. Due to the minimal contribution of particulate matter during construction and operation, health impacts would be considered **less than significant**.

Regarding nitrogen dioxide, according to the construction emissions analysis, construction of the proposed project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. As described in Section 2.2, NO_2 and NO_x health impacts are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. Construction of the proposed project would not require any stationary emission sources that would create substantial, localized NO_x impacts. Therefore, health impacts would be considered **less than significant**.

In summary, construction and operation of the proposed project would not result in exceedances of the SDAPCD significance thresholds for any criteria air pollutant. The VOC and NO_x emissions, as described previously, would minimally contribute to regional O_3 concentrations and the associated health effects. In addition to O_3, NO_x emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO_2. As shown in Table 4, the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Thus, it is not expected the proposed project's operational NO_x emissions would result in exceedances of the NO_2 standards or contribute to the associated health effects. CO tends to be a localized impact associated with congested intersections. The associated CO "hotspots" were discussed previously as a less-than-significant impact. Thus, the proposed project's CO emissions would not contribute to significant health effects associated with this pollutant. PM_{10} and $PM_{2.5}$ would not contribute to potential exceedances of the NAAQS and CAAQS for particulate matter and would not obstruct the SDAB from coming into attainment for these pollutants and would not contribute to significant health effects associated with particulates. Therefore, health impacts associated with criteria air pollutants would be considered **less than significant**.

4.5 Would the project create objectionable odors affecting a substantial number of people?

Odors would be generated from vehicles and/or equipment exhaust emissions during construction of the proposed project. Odors produced during construction would be attributable

to concentrations of unburned hydrocarbons from tailpipes of construction equipment and architectural coatings. Such odors are temporary and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be considered **less than significant**.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project involves residential uses and would not result in the creation of a land use that is commonly associated with odors. Therefore, project operations would result in an odor impact that is **less than significant**.

4.6 Mitigation Measures

No mitigation measures would be required to minimize potentially significant air quality impacts during construction or operation of the proposed project.

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APPENDIX A

CalEEMod Construction and Operational Emission Output

Watermark (Option 1)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	108.00	Space	1.07	46,808.00	0
Racquet Club	0.64	1000sqft	0.01	600.00	0
Recreational Swimming Pool	2.60	1000sqft	0.06	2,600.00	0
Condo/Townhouse	48.00	Dwelling Unit	1.23	62,941.00	137

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Watermark Del Mar Project (Option 1). CO2 intensity factor adjusted to refect 33% RPS.

Land Use - Project consists of 48 dwelling units, 2600 sf pool, and 108 space parking structure on a 2.37 acre site.

Construction Phase - Construction to begin June 2019 and would be completed by May 2021.

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Trips and VMT - Project specific information - 120 haul trips. Worker and vendor trip length = 8 miles, hauling trip length = 5 miles. Assumed water and asphalt trucks as vendor trips.

Grading - Export of 23,600 cy of soil

Architectural Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Vehicle Trips - Recreational amentites would not generate trips

Woodstoves - assumes all units have gas fireplaces

Area Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Energy Use - Default energy use intensity

Water And Wastewater - Default water and wastewater

Solid Waste - Default solid waste

Construction Off-road Equipment Mitigation - water exposed area 2x per day

Energy Mitigation - Meet 2016 Title 24 standards (28% more efficient than 2013)

Water Mitigation - 20% indoor and outdoor water consumption reduction per City CAP goal.

Waste Mitigation - 80% waste diversion consistent with the City's CAP.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	42,485.00	44,036.00
tblArchitecturalCoating	ConstArea_Residential_Interior	127,456.00	132,107.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaCoating	Area_Residential_Exterior	42485	44036
tblAreaCoating	Area_Residential_Interior	127456	132107
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0

tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	369.00
tblConstructionPhase	NumDays	6.00	25.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	3.00	10.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	26.40	48.00
tblFireplaces	NumberNoFireplace	4.80	0.00
tblFireplaces	NumberWood	16.80	0.00
tblGrading	MaterialExported	0.00	23,600.00
tblLandUse	BuildingSpaceSquareFeet	43,200.00	46,808.00
tblLandUse	BuildingSpaceSquareFeet	640.00	600.00
tblLandUse	BuildingSpaceSquareFeet	0.00	2,600.00
tblLandUse	BuildingSpaceSquareFeet	48,000.00	62,941.00
tblLandUse	LandUseSquareFeet	43,200.00	46,808.00
tblLandUse	LandUseSquareFeet	640.00	600.00
tblLandUse	LandUseSquareFeet	48,000.00	62,941.00
tblLandUse	LotAcreage	0.97	1.07
tblLandUse	LotAcreage	3.00	1.23
tblLandUse	RecSwimmingAreaAllowEdit	1.00	0.00
tblLandUse	RecSwimmingAreaSquareFeet	2,600.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Site Preparation

tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	OperationalYear	2018	2022
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	2,950.00	120.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
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tblTripsAndVMT	WorkerTripLength	10.80	8.00
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tblTripsAndVMT	WorkerTripNumber	8.00	13.00
tblTripsAndVMT	WorkerTripNumber	13.00	15.00
tblTripsAndVMT	WorkerTripNumber	8.00	15.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0654	0.6443	0.5399	9.8000e-004	0.0207	0.0353	0.0560	3.8900e-003	0.0331	0.0370	0.0000	87.8195	87.8195	0.0193	0.0000	88.3027
2020	0.2103	1.8516	1.8845	3.5900e-003	0.0560	0.1035	0.1594	0.0152	0.0993	0.1145	0.0000	318.1734	318.1734	0.0397	0.0000	319.1652
2021	0.3547	0.5447	0.6094	1.1600e-003	0.0171	0.0291	0.0461	4.6200e-003	0.0281	0.0327	0.0000	102.0783	102.0783	0.0119	0.0000	102.3756
Maximum	**0.3547**	**1.8516**	**1.8845**	**3.5900e-003**	**0.0560**	**0.1035**	**0.1594**	**0.0152**	**0.0993**	**0.1145**	**0.0000**	**318.1734**	**318.1734**	**0.0397**	**0.0000**	**319.1652**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0654	0.6442	0.5399	9.8000e-004	0.0147	0.0353	0.0500	3.2000e-003	0.0331	0.0363	0.0000	87.8194	87.8194	0.0193	0.0000	88.3026
2020	0.2103	1.8516	1.8845	3.5900e-003	0.0560	0.1035	0.1594	0.0152	0.0993	0.1145	0.0000	318.1731	318.1731	0.0397	0.0000	319.1649
2021	0.3547	0.5447	0.6094	1.1600e-003	0.0171	0.0291	0.0461	4.6200e-003	0.0281	0.0327	0.0000	102.0782	102.0782	0.0119	0.0000	102.3755
Maximum	**0.3547**	**1.8516**	**1.8845**	**3.5900e-003**	**0.0560**	**0.1035**	**0.1594**	**0.0152**	**0.0993**	**0.1145**	**0.0000**	**318.1731**	**318.1731**	**0.0397**	**0.0000**	**319.1649**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**6.41**	**0.00**	**2.30**	**2.92**	**0.00**	**0.37**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3031	0.0368	0.3717	2.3000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	38.3914	38.3914	1.2900e-003	6.9000e-004	38.6302
Energy	4.4600e-003	0.0382	0.0164	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003	0.0000	184.8340	184.8340	8.4500e-003	2.3800e-003	185.7555
Mobile	0.0774	0.3461	0.9345	3.2900e-003	0.2919	2.7500e-003	0.2946	0.0782	2.5700e-003	0.0807	0.0000	303.9603	303.9603	0.0158	0.0000	304.3546
Waste						0.0000	0.0000		0.0000	0.0000	8.2313	0.0000	8.2313	0.4865	0.0000	20.3927
Water						0.0000	0.0000		0.0000	0.0000	1.0530	16.1608	17.2138	0.1090	2.7300e-003	20.7542
Total	**0.3849**	**0.4210**	**1.3226**	**3.7600e-003**	**0.2919**	**0.0104**	**0.3023**	**0.0782**	**0.0103**	**0.0884**	**9.2843**	**543.3464**	**552.6307**	**0.6210**	**5.8000e-003**	**569.8873**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3031	0.0368	0.3717	2.3000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	38.3914	38.3914	1.2900e-003	6.9000e-004	38.6302
Energy	3.5200e-003	0.0301	0.0129	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003	0.0000	162.1397	162.1397	7.5500e-003	2.0600e-003	162.9432
Mobile	0.0774	0.3461	0.9345	3.2900e-003	0.2919	2.7500e-003	0.2946	0.0782	2.5700e-003	0.0807	0.0000	303.9603	303.9603	0.0158	0.0000	304.3546
Waste						0.0000	0.0000		0.0000	0.0000	1.6463	0.0000	1.6463	0.0973	0.0000	4.0785
Water						0.0000	0.0000		0.0000	0.0000	0.8424	12.9286	13.7710	0.0872	2.1900e-003	16.6034
Total	**0.3840**	**0.4130**	**1.3191**	**3.7100e-003**	**0.2919**	**9.7900e-003**	**0.3017**	**0.0782**	**9.6100e-003**	**0.0878**	**2.4886**	**517.4199**	**519.9086**	**0.2091**	**4.9400e-003**	**526.6099**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.24**	**1.91**	**0.26**	**1.33**	**0.00**	**6.23**	**0.21**	**0.00**	**6.34**	**0.74**	**73.20**	**4.77**	**5.92**	**66.32**	**14.83**	**7.59**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/14/2019	5	10	
2	Grading	Grading	6/15/2019	7/19/2019	5	25	
3	Trenching	Trenching	10/12/2019	11/8/2019	5	20	
4	Building Construction	Building Construction	11/19/2019	4/16/2021	5	369	
5	Paving	Paving	11/19/2019	12/6/2019	5	14	
6	Architectural Coating	Architectural Coating	4/17/2021	5/21/2021	5	25	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 1.07

Residential Indoor: 132,107; Residential Outdoor: 44,036; Non-Residential Indoor: 4,800; Non-Residential Outdoor: 1,600; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	3	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	13.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	15.00	2.00	120.00	8.00	8.00	5.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	56.00	13.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	15.00	2.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	11.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6500e-003	0.0000	2.6500e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0900e-003	0.0604	0.0331	7.0000e-005		2.8700e-003	2.8700e-003		2.6400e-003	2.6400e-003	0.0000	5.9669	5.9669	1.8900e-003	0.0000	6.0141
Total	**5.0900e-003**	**0.0604**	**0.0331**	**7.0000e-005**	**2.6500e-003**	**2.8700e-003**	**5.5200e-003**	**2.9000e-004**	**2.6400e-003**	**2.9300e-003**	**0.0000**	**5.9669**	**5.9669**	**1.8900e-003**	**0.0000**	**6.0141**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.5000e-003	0.0000	3.9000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3640	0.3640	1.0000e-005	0.0000	0.3643
Total	**2.1000e-004**	**1.5000e-004**	**1.5000e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**3.9000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3640**	**0.3640**	**1.0000e-005**	**0.0000**	**0.3643**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1900e-003	0.0000	1.1900e-003	1.3000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0900e-003	0.0604	0.0331	7.0000e-005		2.8700e-003	2.8700e-003		2.6400e-003	2.6400e-003	0.0000	5.9669	5.9669	1.8900e-003	0.0000	6.0141
Total	**5.0900e-003**	**0.0604**	**0.0331**	**7.0000e-005**	**1.1900e-003**	**2.8700e-003**	**4.0600e-003**	**1.3000e-004**	**2.6400e-003**	**2.7700e-003**	**0.0000**	**5.9669**	**5.9669**	**1.8900e-003**	**0.0000**	**6.0141**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.5000e-003	0.0000	3.9000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3640	0.3640	1.0000e-005	0.0000	0.3643
Total	**2.1000e-004**	**1.5000e-004**	**1.5000e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**3.9000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3640**	**0.3640**	**1.0000e-005**	**0.0000**	**0.3643**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2900e-003	0.0000	8.2900e-003	9.7000e-004	0.0000	9.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0187	0.2052	0.1463	2.6000e-004		0.0107	0.0107		9.8200e-003	9.8200e-003	0.0000	23.0820	23.0820	7.3000e-003	0.0000	23.2646
Total	**0.0187**	**0.2052**	**0.1463**	**2.6000e-004**	**8.2900e-003**	**0.0107**	**0.0190**	**9.7000e-004**	**9.8200e-003**	**0.0108**	**0.0000**	**23.0820**	**23.0820**	**7.3000e-003**	**0.0000**	**23.2646**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2000e-004	9.0400e-003	1.7100e-003	2.0000e-005	2.6000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.6119	1.6119	2.0000e-004	0.0000	1.6169
Vendor	1.2000e-004	3.2900e-003	8.8000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.1000e-004	5.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7153	0.7153	6.0000e-005	0.0000	0.7167
Worker	6.0000e-004	4.4000e-004	4.3400e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0499	1.0499	3.0000e-005	0.0000	1.0507
Total	**9.4000e-004**	**0.0128**	**6.9300e-003**	**4.0000e-005**	**1.5500e-003**	**5.0000e-005**	**1.6100e-003**	**4.2000e-004**	**5.0000e-005**	**4.7000e-004**	**0.0000**	**3.3771**	**3.3771**	**2.9000e-004**	**0.0000**	**3.3843**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7300e-003	0.0000	3.7300e-003	4.4000e-004	0.0000	4.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0187	0.2052	0.1463	2.6000e-004		0.0107	0.0107		9.8200e-003	9.8200e-003	0.0000	23.0820	23.0820	7.3000e-003	0.0000	23.2645
Total	**0.0187**	**0.2052**	**0.1463**	**2.6000e-004**	**3.7300e-003**	**0.0107**	**0.0144**	**4.4000e-004**	**9.8200e-003**	**0.0103**	**0.0000**	**23.0820**	**23.0820**	**7.3000e-003**	**0.0000**	**23.2645**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2000e-004	9.0400e-003	1.7100e-003	2.0000e-005	2.6000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.6119	1.6119	2.0000e-004	0.0000	1.6169
Vendor	1.2000e-004	3.2900e-003	8.8000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.1000e-004	5.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7153	0.7153	6.0000e-005	0.0000	0.7167
Worker	6.0000e-004	4.4000e-004	4.3400e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0499	1.0499	3.0000e-005	0.0000	1.0507
Total	**9.4000e-004**	**0.0128**	**6.9300e-003**	**4.0000e-005**	**1.5500e-003**	**5.0000e-005**	**1.6100e-003**	**4.2000e-004**	**5.0000e-005**	**4.7000e-004**	**0.0000**	**3.3771**	**3.3771**	**2.9000e-004**	**0.0000**	**3.3843**

3.4 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9800e-003	0.0701	0.0691	9.0000e-005		4.6800e-003	4.6800e-003		4.3100e-003	4.3100e-003	0.0000	8.3699	8.3699	2.6500e-003	0.0000	8.4361
Total	**6.9800e-003**	**0.0701**	**0.0691**	**9.0000e-005**		**4.6800e-003**	**4.6800e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**8.3699**	**8.3699**	**2.6500e-003**	**0.0000**	**8.4361**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**2.6000e-004**	**1.9000e-004**	**1.8500e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4480**	**0.4480**	**1.0000e-005**	**0.0000**	**0.4483**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9800e-003	0.0701	0.0691	9.0000e-005		4.6800e-003	4.6800e-003		4.3100e-003	4.3100e-003	0.0000	8.3699	8.3699	2.6500e-003	0.0000	8.4361
Total	**6.9800e-003**	**0.0701**	**0.0691**	**9.0000e-005**		**4.6800e-003**	**4.6800e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**8.3699**	**8.3699**	**2.6500e-003**	**0.0000**	**8.4361**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**2.6000e-004**	**1.9000e-004**	**1.8500e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4480**	**0.4480**	**1.0000e-005**	**0.0000**	**0.4483**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0239	0.2115	0.1997	3.1000e-004		0.0139	0.0139		0.0134	0.0134	0.0000	27.4313	27.4313	4.2500e-003	0.0000	27.5374
Total	**0.0239**	**0.2115**	**0.1997**	**3.1000e-004**		**0.0139**	**0.0139**		**0.0134**	**0.0134**	**0.0000**	**27.4313**	**27.4313**	**4.2500e-003**	**0.0000**	**27.5374**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0265	7.1100e-003	6.0000e-005	1.4700e-003	1.9000e-004	1.6600e-003	4.2000e-004	1.8000e-004	6.1000e-004	0.0000	5.7653	5.7653	4.5000e-004	0.0000	5.7766
Worker	2.7800e-003	2.0300e-003	0.0201	5.0000e-005	5.1600e-003	4.0000e-005	5.2000e-003	1.3700e-003	4.0000e-005	1.4100e-003	0.0000	4.8602	4.8602	1.6000e-004	0.0000	4.8642
Total	**3.7800e-003**	**0.0285**	**0.0272**	**1.1000e-004**	**6.6300e-003**	**2.3000e-004**	**6.8600e-003**	**1.7900e-003**	**2.2000e-004**	**2.0200e-003**	**0.0000**	**10.6256**	**10.6256**	**6.1000e-004**	**0.0000**	**10.6408**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0239	0.2115	0.1997	3.1000e-004		0.0139	0.0139		0.0134	0.0134	0.0000	27.4313	27.4313	4.2500e-003	0.0000	27.5374
Total	**0.0239**	**0.2115**	**0.1997**	**3.1000e-004**		**0.0139**	**0.0139**		**0.0134**	**0.0134**	**0.0000**	**27.4313**	**27.4313**	**4.2500e-003**	**0.0000**	**27.5374**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0265	7.1100e-003	6.0000e-005	1.4700e-003	1.9000e-004	1.6600e-003	4.2000e-004	1.8000e-004	6.1000e-004	0.0000	5.7653	5.7653	4.5000e-004	0.0000	5.7766
Worker	2.7800e-003	2.0300e-003	0.0201	5.0000e-005	5.1600e-003	4.0000e-005	5.2000e-003	1.3700e-003	4.0000e-005	1.4100e-003	0.0000	4.8602	4.8602	1.6000e-004	0.0000	4.8642
Total	**3.7800e-003**	**0.0285**	**0.0272**	**1.1000e-004**	**6.6300e-003**	**2.3000e-004**	**6.8600e-003**	**1.7900e-003**	**2.2000e-004**	**2.0200e-003**	**0.0000**	**10.6256**	**10.6256**	**6.1000e-004**	**0.0000**	**10.6408**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1815	1.6334	1.6754	2.6600e-003		0.1021	0.1021		0.0980	0.0980	0.0000	230.0075	230.0075	0.0348	0.0000	230.8783
Total	**0.1815**	**1.6334**	**1.6754**	**2.6600e-003**		**0.1021**	**0.1021**		**0.0980**	**0.0980**	**0.0000**	**230.0075**	**230.0075**	**0.0348**	**0.0000**	**230.8783**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8700e-003	0.2027	0.0539	5.0000e-004	0.0124	1.0300e-003	0.0134	3.5700e-003	9.9000e-004	4.5600e-003	0.0000	48.3844	48.3844	3.6100e-003	0.0000	48.4745
Worker	0.0219	0.0155	0.1552	4.4000e-004	0.0436	3.3000e-004	0.0439	0.0116	3.0000e-004	0.0119	0.0000	39.7816	39.7816	1.2300e-003	0.0000	39.8124
Total	**0.0288**	**0.2182**	**0.2091**	**9.4000e-004**	**0.0560**	**1.3600e-003**	**0.0573**	**0.0152**	**1.2900e-003**	**0.0165**	**0.0000**	**88.1659**	**88.1659**	**4.8400e-003**	**0.0000**	**88.2869**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1815	1.6334	1.6754	2.6600e-003		0.1021	0.1021		0.0980	0.0980	0.0000	230.0072	230.0072	0.0348	0.0000	230.8780
Total	**0.1815**	**1.6334**	**1.6754**	**2.6600e-003**		**0.1021**	**0.1021**		**0.0980**	**0.0980**	**0.0000**	**230.0072**	**230.0072**	**0.0348**	**0.0000**	**230.8780**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8700e-003	0.2027	0.0539	5.0000e-004	0.0124	1.0300e-003	0.0134	3.5700e-003	9.9000e-004	4.5600e-003	0.0000	48.3844	48.3844	3.6100e-003	0.0000	48.4745
Worker	0.0219	0.0155	0.1552	4.4000e-004	0.0436	3.3000e-004	0.0439	0.0116	3.0000e-004	0.0119	0.0000	39.7816	39.7816	1.2300e-003	0.0000	39.8124
Total	**0.0288**	**0.2182**	**0.2091**	**9.4000e-004**	**0.0560**	**1.3600e-003**	**0.0573**	**0.0152**	**1.2900e-003**	**0.0165**	**0.0000**	**88.1659**	**88.1659**	**4.8400e-003**	**0.0000**	**88.2869**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0472	0.4303	0.4824	7.7000e-004		0.0253	0.0253		0.0243	0.0243	0.0000	66.7243	66.7243	9.8800e-003	0.0000	66.9712
Total	**0.0472**	**0.4303**	**0.4824**	**7.7000e-004**		**0.0253**	**0.0253**		**0.0243**	**0.0243**	**0.0000**	**66.7243**	**66.7243**	**9.8800e-003**	**0.0000**	**66.9712**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6100e-003	0.0528	0.0142	1.4000e-004	3.5900e-003	1.2000e-004	3.7100e-003	1.0400e-003	1.1000e-004	1.1500e-003	0.0000	13.9065	13.9065	1.0000e-003	0.0000	13.9316
Worker	5.9900e-003	4.0800e-003	0.0420	1.2000e-004	0.0127	9.0000e-005	0.0127	3.3600e-003	9.0000e-005	3.4500e-003	0.0000	11.1523	11.1523	3.3000e-004	0.0000	11.1605
Total	**7.6000e-003**	**0.0569**	**0.0561**	**2.6000e-004**	**0.0162**	**2.1000e-004**	**0.0165**	**4.4000e-003**	**2.0000e-004**	**4.6000e-003**	**0.0000**	**25.0588**	**25.0588**	**1.3300e-003**	**0.0000**	**25.0921**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0472	0.4303	0.4824	7.7000e-004		0.0253	0.0253		0.0243	0.0243	0.0000	66.7242	66.7242	9.8800e-003	0.0000	66.9712
Total	**0.0472**	**0.4303**	**0.4824**	**7.7000e-004**		**0.0253**	**0.0253**		**0.0243**	**0.0243**	**0.0000**	**66.7242**	**66.7242**	**9.8800e-003**	**0.0000**	**66.9712**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6100e-003	0.0528	0.0142	1.4000e-004	3.5900e-003	1.2000e-004	3.7100e-003	1.0400e-003	1.1000e-004	1.1500e-003	0.0000	13.9065	13.9065	1.0000e-003	0.0000	13.9316
Worker	5.9900e-003	4.0800e-003	0.0420	1.2000e-004	0.0127	9.0000e-005	0.0127	3.3600e-003	9.0000e-005	3.4500e-003	0.0000	11.1523	11.1523	3.3000e-004	0.0000	11.1605
Total	**7.6000e-003**	**0.0569**	**0.0561**	**2.6000e-004**	**0.0162**	**2.1000e-004**	**0.0165**	**4.4000e-003**	**2.0000e-004**	**4.6000e-003**	**0.0000**	**25.0588**	**25.0588**	**1.3300e-003**	**0.0000**	**25.0921**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.0900e-003	0.0534	0.0513	8.0000e-005		2.8900e-003	2.8900e-003		2.6600e-003	2.6600e-003	0.0000	7.1663	7.1663	2.2700e-003	0.0000	7.2230
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0900e-003**	**0.0534**	**0.0513**	**8.0000e-005**		**2.8900e-003**	**2.8900e-003**		**2.6600e-003**	**2.6600e-003**	**0.0000**	**7.1663**	**7.1663**	**2.2700e-003**	**0.0000**	**7.2230**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	1.8400e-003	4.9000e-004	0.0000	1.0000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4006	0.4006	3.0000e-005	0.0000	0.4014
Worker	3.4000e-004	2.5000e-004	2.4300e-003	1.0000e-005	6.2000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5879	0.5879	2.0000e-005	0.0000	0.5884
Total	**4.1000e-004**	**2.0900e-003**	**2.9200e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.5000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.9885**	**0.9885**	**5.0000e-005**	**0.0000**	**0.9898**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	5.0900e-003	0.0534	0.0513	8.0000e-005		2.8900e-003	2.8900e-003		2.6600e-003	2.6600e-003	0.0000	7.1663	7.1663	2.2700e-003	0.0000	7.2230
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0900e-003**	**0.0534**	**0.0513**	**8.0000e-005**		**2.8900e-003**	**2.8900e-003**		**2.6600e-003**	**2.6600e-003**	**0.0000**	**7.1663**	**7.1663**	**2.2700e-003**	**0.0000**	**7.2230**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	1.8400e-003	4.9000e-004	0.0000	1.0000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4006	0.4006	3.0000e-005	0.0000	0.4014
Worker	3.4000e-004	2.5000e-004	2.4300e-003	1.0000e-005	6.2000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5879	0.5879	2.0000e-005	0.0000	0.5884
Total	**4.1000e-004**	**2.0900e-003**	**2.9200e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.5000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.9885**	**0.9885**	**5.0000e-005**	**0.0000**	**0.9898**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2913					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2100e-003	0.0573	0.0682	1.1000e-004		3.5300e-003	3.5300e-003		3.5300e-003	3.5300e-003	0.0000	9.5747	9.5747	6.6000e-004	0.0000	9.5911
Total	**0.2995**	**0.0573**	**0.0682**	**1.1000e-004**		**3.5300e-003**	**3.5300e-003**		**3.5300e-003**	**3.5300e-003**	**0.0000**	**9.5747**	**9.5747**	**6.6000e-004**	**0.0000**	**9.5911**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.6000e-004	2.7100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7206	0.7206	2.0000e-005	0.0000	0.7211
Total	**3.9000e-004**	**2.6000e-004**	**2.7100e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.2000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7206**	**0.7206**	**2.0000e-005**	**0.0000**	**0.7211**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2913					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2100e-003	0.0573	0.0682	1.1000e-004		3.5300e-003	3.5300e-003		3.5300e-003	3.5300e-003	0.0000	9.5747	9.5747	6.6000e-004	0.0000	9.5911
Total	**0.2995**	**0.0573**	**0.0682**	**1.1000e-004**		**3.5300e-003**	**3.5300e-003**		**3.5300e-003**	**3.5300e-003**	**0.0000**	**9.5747**	**9.5747**	**6.6000e-004**	**0.0000**	**9.5911**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.6000e-004	2.7100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7206	0.7206	2.0000e-005	0.0000	0.7211
Total	**3.9000e-004**	**2.6000e-004**	**2.7100e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.2000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7206**	**0.7206**	**2.0000e-005**	**0.0000**	**0.7211**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0774	0.3461	0.9345	3.2900e-003	0.2919	2.7500e-003	0.2946	0.0782	2.5700e-003	0.0807	0.0000	303.9603	303.9603	0.0158	0.0000	304.3546
Unmitigated	0.0774	0.3461	0.9345	3.2900e-003	0.2919	2.7500e-003	0.2946	0.0782	2.5700e-003	0.0807	0.0000	303.9603	303.9603	0.0158	0.0000	304.3546

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	278.88	272.16	232.32	774,554	774,554
Enclosed Parking with Elevator	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	278.88	272.16	232.32	774,554	774,554

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Racquet Club	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Recreational Swimming Pool	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Condo/Townhouse	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	127.2820	127.2820	6.8800e-003	1.4200e-003	127.8784
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	140.6747	140.6747	7.6100e-003	1.5700e-003	141.3338
NaturalGas Mitigated	3.5200e-003	0.0301	0.0129	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003	0.0000	34.8577	34.8577	6.70E-04	6.4000e-004	35.0648
NaturalGas Unmitigated	4.4600e-003	0.0382	0.0164	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003	0.0000	44.1593	44.1593	8.5000e-004	8.10E-04	44.4217

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	820560	4.4200e-003	0.0378	0.0161	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.7882	43.7882	8.4000e-004	8.0000e-004	44.0484
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	6954	4.0000e-005	3.4000e-004	2.9000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3711	0.3711	1.0000e-005	1.0000e-005	0.3733
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.4600e-003**	**0.0382**	**0.0164**	**2.4000e-004**		**3.0900e-003**	**3.0900e-003**		**3.0900e-003**	**3.0900e-003**	**0.0000**	**44.1593**	**44.1593**	**8.5000e-004**	**8.1000e-004**	**44.4217**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	646983	3.4900e-003	0.0298	0.0127	1.9000e-004		2.4100e-003	2.4100e-003		2.4100e-003	2.4100e-003	0.0000	34.5255	34.5255	6.6000e-004	6.3000e-004	34.7306
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	6224.88	3.0000e-005	3.1000e-004	2.6000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3322	0.3322	1.0000e-005	1.0000e-005	0.3342
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**3.5200e-003**	**0.0301**	**0.0130**	**1.9000e-004**		**2.4300e-003**	**2.4300e-003**		**2.4300e-003**	**2.4300e-003**	**0.0000**	**34.8576**	**34.8576**	**6.7000e-004**	**6.4000e-004**	**35.0648**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	257665	62.6870	3.3900e-003	7.0000e-004	62.9807
Enclosed Parking with Elevator	315486	76.7542	4.1500e-003	8.6000e-004	77.1138
Racquet Club	5070	1.2335	7.0000e-005	1.0000e-005	1.2393
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**140.6747**	**7.6100e-003**	**1.5700e-003**	**141.3338**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	254206	61.8456	3.3400e-003	6.9000e-004	62.1354
Enclosed Parking with Elevator	264109	64.2549	3.4700e-003	7.2000e-004	64.5559
Racquet Club	4856.64	1.1816	6.0000e-005	1.0000e-005	1.1871
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**127.2820**	**6.8700e-003**	**1.4200e-003**	**127.8784**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3031	0.0368	0.3717	2.3000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	38.3914	38.3914	1.2900e-003	6.9000e-004	38.6302
Unmitigated	0.3031	0.0368	0.3717	2.3000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	38.3914	38.3914	1.2900e-003	6.9000e-004	38.6302

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0271					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2613					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.8200e-003	0.0327	0.0139	2.1000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	37.8072	37.8072	7.2000e-004	6.9000e-004	38.0319
Landscaping	0.0109	4.1200e-003	0.3578	2.0000e-005		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	0.5842	0.5842	5.7000e-004	0.0000	0.5983
Total	**0.3031**	**0.0368**	**0.3717**	**2.3000e-004**		**4.6200e-003**	**4.6200e-003**		**4.6200e-003**	**4.6200e-003**	**0.0000**	**38.3914**	**38.3914**	**1.2900e-003**	**6.9000e-004**	**38.6302**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0271					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2613					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.8200e-003	0.0327	0.0139	2.1000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	37.8072	37.8072	7.2000e-004	6.9000e-004	38.0319
Landscaping	0.0109	4.1200e-003	0.3578	2.0000e-005		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	0.5842	0.5842	5.7000e-004	0.0000	0.5983
Total	**0.3031**	**0.0368**	**0.3717**	**2.3000e-004**		**4.6200e-003**	**4.6200e-003**		**4.6200e-003**	**4.6200e-003**	**0.0000**	**38.3914**	**38.3914**	**1.2900e-003**	**6.9000e-004**	**38.6302**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.7710	0.0872	2.1900e-003	16.6034
Unmitigated	17.2138	0.1090	2.7300e-003	20.7542

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	3.12739 / 1.97162	16.2285	0.1027	2.5800e-003	19.5646
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0378516 / 0.023864	0.1946	1.2400e-003	3.0000e-005	0.2350
Recreational Swimming Pool	0.153772 / 0.0942475	0.7907	5.0500e-003	1.3000e-004	0.9547
Total		**17.2138**	**0.1090**	**2.7400e-003**	**20.7542**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	2.50191 / 1.57729	12.9828	0.0822	2.0600e-003	15.6517
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0302813 / 0.0195506	0.1557	9.9000e-004	2.0000e-005	0.1880
Recreational Swimming Pool	0.123018 / 0.075398	0.6325	4.0400e-003	1.0000e-004	0.7637
Total		**13.7710**	**0.0872**	**2.1800e-003**	**16.6034**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.6463	0.0973	0.0000	4.0785
Unmitigated	8.2313	0.4865	0.0000	20.3927

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	22.08	4.4820	0.2649	0.0000	11.1041
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	3.65	0.7409	0.0438	0.0000	1.8356
Recreational Swimming Pool	14.82	3.0083	0.1778	0.0000	7.4530
Total		**8.2313**	**0.4865**	**0.0000**	**20.3927**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	4.416	0.8964	0.0530	0.0000	2.2208
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.73	0.1482	8.7600e-003	0.0000	0.3671
Recreational Swimming Pool	2.964	0.6017	0.0356	0.0000	1.4906
Total		**1.6463**	**0.0973**	**0.0000**	**4.0785**

Watermark (Option 1)

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	108.00	Space	1.07	46,808.00	0
Racquet Club	0.64	1000sqft	0.01	600.00	0
Recreational Swimming Pool	2.60	1000sqft	0.06	2,600.00	0
Condo/Townhouse	48.00	Dwelling Unit	1.23	62,941.00	137

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Watermark Del Mar Project (Option 1). CO2 intensity factor adjusted to refect 33% RPS.

Land Use - Project consists of 48 dwelling units, 2600 sf pool, and 108 space parking structure on a 2.37 acre site.

Construction Phase - Construction to begin June 2019 and would be completed by May 2021.

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Trips and VMT - Project specific information - 120 haul trips. Worker and vendor trip length = 8 miles, hauling trip length = 5 miles. Assumed water and asphalt trucks as vendor trips.

Grading - Export of 23,600 cy of soil

Architectural Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Vehicle Trips - Recreational amentites would not generate trips

Woodstoves - assumes all units have gas fireplaces

Area Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Energy Use - Default energy use intensity

Water And Wastewater - Default water and wastewater

Solid Waste - Default solid waste

Construction Off-road Equipment Mitigation - water exposed area 2x per day

Energy Mitigation - Meet 2016 Title 24 standards (28% more efficient than 2013)

Water Mitigation - 20% indoor and outdoor water consumption reduction per City CAP goal.

Waste Mitigation - 80% waste diversion consistent with the City's CAP.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	42,485.00	44,036.00
tblArchitecturalCoating	ConstArea_Residential_Interior	127,456.00	132,107.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaCoating	Area_Residential_Exterior	42485	44036
tblAreaCoating	Area_Residential_Interior	127456	132107
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0

tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	369.00
tblConstructionPhase	NumDays	6.00	25.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	3.00	10.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	26.40	48.00
tblFireplaces	NumberNoFireplace	4.80	0.00
tblFireplaces	NumberWood	16.80	0.00
tblGrading	MaterialExported	0.00	23,600.00
tblLandUse	BuildingSpaceSquareFeet	43,200.00	46,808.00
tblLandUse	BuildingSpaceSquareFeet	640.00	600.00
tblLandUse	BuildingSpaceSquareFeet	0.00	2,600.00
tblLandUse	BuildingSpaceSquareFeet	48,000.00	62,941.00
tblLandUse	LandUseSquareFeet	43,200.00	46,808.00
tblLandUse	LandUseSquareFeet	640.00	600.00
tblLandUse	LandUseSquareFeet	48,000.00	62,941.00
tblLandUse	LotAcreage	0.97	1.07
tblLandUse	LotAcreage	3.00	1.23
tblLandUse	RecSwimmingAreaAllowEdit	1.00	0.00
tblLandUse	RecSwimmingAreaSquareFeet	2,600.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Site Preparation

tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	OperationalYear	2018	2022
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	2,950.00	120.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripNumber	8.00	13.00
tblTripsAndVMT	WorkerTripNumber	13.00	15.00
tblTripsAndVMT	WorkerTripNumber	8.00	15.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.5700	23.3609	22.4346	0.0408	0.7901	1.3278	1.8712	0.1467	1.2582	1.4049	0.0000	4,019.1891	4,019.1891	0.7100	0.0000	4,036.9388
2020	1.6056	14.1045	14.4190	0.0276	0.4373	0.7896	1.2270	0.1182	0.7582	0.8764	0.0000	2,699.6255	2,699.6255	0.3335	0.0000	2,707.9625
2021	23.9922	12.7967	14.2061	0.0275	0.4373	0.6724	1.1097	0.1182	0.6456	0.7638	0.0000	2,684.1529	2,684.1529	0.3250	0.0000	2,692.2766
Maximum	**23.9922**	**23.3609**	**22.4346**	**0.0408**	**0.7901**	**1.3278**	**1.8712**	**0.1467**	**1.2582**	**1.4049**	**0.0000**	**4,019.1891**	**4,019.1891**	**0.7100**	**0.0000**	**4,036.9388**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.5700	23.3609	22.4346	0.0408	0.5435	1.3278	1.8712	0.1467	1.2582	1.4049	0.0000	4,019.1891	4,019.1891	0.7100	0.0000	4,036.9388
2020	1.6056	14.1045	14.4190	0.0276	0.4373	0.7896	1.2270	0.1182	0.7582	0.8764	0.0000	2,699.6255	2,699.6255	0.3335	0.0000	2,707.9625
2021	23.9922	12.7967	14.2061	0.0275	0.4373	0.6724	1.1097	0.1182	0.6456	0.7638	0.0000	2,684.1529	2,684.1529	0.3250	0.0000	2,692.2766
Maximum	**23.9922**	**23.3609**	**22.4346**	**0.0408**	**0.5435**	**1.3278**	**1.8712**	**0.1467**	**1.2582**	**1.4049**	**0.0000**	**4,019.1891**	**4,019.1891**	**0.7100**	**0.0000**	**4,036.9388**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**14.82**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7944	0.8421	4.3145	5.2900e-003		0.0863	0.0863		0.0863	0.0863	0.0000	1,023.6255	1,023.6255	0.0264	0.0186	1,029.8394
Energy	0.0245	0.2091	0.0897	1.3300e-003		0.0169	0.0169		0.0169	0.0169		266.7251	266.7251	5.1100e-003	4.8900e-003	268.3101
Mobile	0.4614	1.8963	5.4440	0.0194	1.6884	0.0155	1.7040	0.4513	0.0145	0.4657		1,976.5086	1,976.5086	0.0989		1,978.9815
Total	**2.2802**	**2.9475**	**9.8482**	**0.0261**	**1.6884**	**0.1187**	**1.8072**	**0.4513**	**0.1177**	**0.5690**	**0.0000**	**3,266.8591**	**3,266.8591**	**0.1305**	**0.0235**	**3,277.1309**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7944	0.8421	4.3145	5.2900e-003		0.0863	0.0863		0.0863	0.0863	0.0000	1,023.6255	1,023.6255	0.0264	0.0186	1,029.8394
Energy	0.0193	0.1650	0.0709	1.0500e-003		0.0133	0.0133		0.0133	0.0133		210.5424	210.5424	4.0400e-003	3.8600e-003	211.7935
Mobile	0.4614	1.8963	5.4440	0.0194	1.6884	0.0155	1.7040	0.4513	0.0145	0.4657		1,976.5086	1,976.5086	0.0989		1,978.9815
Total	**2.2751**	**2.9034**	**9.8294**	**0.0258**	**1.6884**	**0.1152**	**1.8036**	**0.4513**	**0.1142**	**0.5654**	**0.0000**	**3,210.6764**	**3,210.6764**	**0.1294**	**0.0225**	**3,220.6144**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.23**	**1.49**	**0.19**	**1.07**	**0.00**	**3.00**	**0.20**	**0.00**	**3.02**	**0.63**	**0.00**	**1.72**	**1.72**	**0.82**	**4.38**	**1.72**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/14/2019	5	10	
2	Grading	Grading	6/15/2019	7/19/2019	5	25	
3	Trenching	Trenching	10/12/2019	11/8/2019	5	20	
4	Building Construction	Building Construction	11/19/2019	4/16/2021	5	369	
5	Paving	Paving	11/19/2019	12/6/2019	5	14	
6	Architectural Coating	Architectural Coating	4/17/2021	5/21/2021	5	25	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 1.07

Residential Indoor: 132,107; Residential Outdoor: 44,036; Non-Residential Indoor: 4,800; Non-Residential Outdoor: 1,600; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	3	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	13.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	15.00	2.00	120.00	8.00	8.00	5.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	56.00	13.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	15.00	2.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	11.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.0177	12.0845	6.6093	0.0133		0.5745	0.5745		0.5286	0.5286		1,315.4812	1,315.4812	0.4162		1,325.8863
Total	**1.0177**	**12.0845**	**6.6093**	**0.0133**	**0.5303**	**0.5745**	**1.1048**	**0.0573**	**0.5286**	**0.5858**		**1,315.4812**	**1,315.4812**	**0.4162**		**1,325.8863**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0419	0.0276	0.3140	8.5000e-004	0.0791	5.9000e-004	0.0797	0.0210	5.4000e-004	0.0215		84.5977	84.5977	2.7700e-003		84.6670
Total	**0.0419**	**0.0276**	**0.3140**	**8.5000e-004**	**0.0791**	**5.9000e-004**	**0.0797**	**0.0210**	**5.4000e-004**	**0.0215**		**84.5977**	**84.5977**	**2.7700e-003**		**84.6670**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	1.0177	12.0845	6.6093	0.0133		0.5745	0.5745		0.5286	0.5286	0.0000	1,315.4812	1,315.4812	0.4162		1,325.8863
Total	**1.0177**	**12.0845**	**6.6093**	**0.0133**	**0.2386**	**0.5745**	**0.8131**	**0.0258**	**0.5286**	**0.5543**	**0.0000**	**1,315.4812**	**1,315.4812**	**0.4162**		**1,325.8863**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0419	0.0276	0.3140	8.5000e-004	0.0791	5.9000e-004	0.0797	0.0210	5.4000e-004	0.0215		84.5977	84.5977	2.7700e-003		84.6670
Total	**0.0419**	**0.0276**	**0.3140**	**8.5000e-004**	**0.0791**	**5.9000e-004**	**0.0797**	**0.0210**	**5.4000e-004**	**0.0215**		**84.5977**	**84.5977**	**2.7700e-003**		**84.6670**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6629	0.0000	0.6629	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.4984	16.4143	11.7036	0.0206		0.8537	0.8537		0.7854	0.7854		2,035.4834	2,035.4834	0.6440		2,051.5836
Total	**1.4984**	**16.4143**	**11.7036**	**0.0206**	**0.6629**	**0.8537**	**1.5166**	**0.0773**	**0.7854**	**0.8627**		**2,035.4834**	**2,035.4834**	**0.6440**		**2,051.5836**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0174	0.7215	0.1257	1.3300e-003	0.0210	1.6400e-003	0.0227	5.7700e-003	1.5700e-003	7.3400e-003		145.0847	145.0847	0.0169		145.5065
Vendor	9.7800e-003	0.2595	0.0672	5.9000e-004	0.0148	1.8800e-003	0.0167	4.2700e-003	1.8000e-003	6.0700e-003		63.7103	63.7103	4.7900e-003		63.8300
Worker	0.0483	0.0318	0.3623	9.8000e-004	0.0913	6.8000e-004	0.0920	0.0242	6.2000e-004	0.0249		97.6128	97.6128	3.2000e-003		97.6927
Total	**0.0756**	**1.0127**	**0.5551**	**2.9000e-003**	**0.1272**	**4.2000e-003**	**0.1314**	**0.0343**	**3.9900e-003**	**0.0383**		**306.4077**	**306.4077**	**0.0249**		**307.0291**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2983	0.0000	0.2983	0.0348	0.0000	0.0348			0.0000			0.0000
Off-Road	1.4984	16.4143	11.7036	0.0206		0.8537	0.8537		0.7854	0.7854	0.0000	2,035.4834	2,035.4834	0.6440		2,051.5836
Total	**1.4984**	**16.4143**	**11.7036**	**0.0206**	**0.2983**	**0.8537**	**1.1520**	**0.0348**	**0.7854**	**0.8202**	**0.0000**	**2,035.4834**	**2,035.4834**	**0.6440**		**2,051.5836**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0174	0.7215	0.1257	1.3300e-003	0.0210	1.6400e-003	0.0227	5.7700e-003	1.5700e-003	7.3400e-003		145.0847	145.0847	0.0169		145.5065
Vendor	9.7800e-003	0.2595	0.0672	5.9000e-004	0.0148	1.8800e-003	0.0167	4.2700e-003	1.8000e-003	6.0700e-003		63.7103	63.7103	4.7900e-003		63.8300
Worker	0.0483	0.0318	0.3623	9.8000e-004	0.0913	6.8000e-004	0.0920	0.0242	6.2000e-004	0.0249		97.6128	97.6128	3.2000e-003		97.6927
Total	**0.0756**	**1.0127**	**0.5551**	**2.9000e-003**	**0.1272**	**4.2000e-003**	**0.1314**	**0.0343**	**3.9900e-003**	**0.0383**		**306.4077**	**306.4077**	**0.0249**		**307.0291**

3.4 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	7.0121	6.9080	9.3200e-003		0.4681	0.4681		0.4307	0.4307		922.6256	922.6256	0.2919		929.9233
Total	**0.6984**	**7.0121**	**6.9080**	**9.3200e-003**		**0.4681**	**0.4681**		**0.4307**	**0.4307**		**922.6256**	**922.6256**	**0.2919**		**929.9233**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0258	0.0170	0.1932	5.2000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		52.0601	52.0601	1.7000e-003		52.1028
Total	**0.0258**	**0.0170**	**0.1932**	**5.2000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**52.0601**	**52.0601**	**1.7000e-003**		**52.1028**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	7.0121	6.9080	9.3200e-003		0.4681	0.4681		0.4307	0.4307	0.0000	922.6256	922.6256	0.2919		929.9233
Total	**0.6984**	**7.0121**	**6.9080**	**9.3200e-003**		**0.4681**	**0.4681**		**0.4307**	**0.4307**	**0.0000**	**922.6256**	**922.6256**	**0.2919**		**929.9233**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0258	0.0170	0.1932	5.2000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		52.0601	52.0601	1.7000e-003		52.1028
Total	**0.0258**	**0.0170**	**0.1932**	**5.2000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**52.0601**	**52.0601**	**1.7000e-003**		**52.1028**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5407	13.6425	12.8836	0.0203		0.8982	0.8982		0.8625	0.8625		1,950.8271	1,950.8271	0.3019		1,958.3749
Total	**1.5407**	**13.6425**	**12.8836**	**0.0203**		**0.8982**	**0.8982**		**0.8625**	**0.8625**		**1,950.8271**	**1,950.8271**	**0.3019**		**1,958.3749**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0636	1.6864	0.4367	3.8600e-003	0.0964	0.0122	0.1086	0.0278	0.0117	0.0394		414.1168	414.1168	0.0311		414.8947
Worker	0.1805	0.1188	1.3524	3.6600e-003	0.3409	2.5200e-003	0.3434	0.0904	2.3200e-003	0.0928		364.4210	364.4210	0.0119		364.7193
Total	**0.2440**	**1.8052**	**1.7891**	**7.5200e-003**	**0.4373**	**0.0147**	**0.4521**	**0.1182**	**0.0140**	**0.1322**		**778.5378**	**778.5378**	**0.0430**		**779.6139**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5407	13.6425	12.8836	0.0203		0.8982	0.8982		0.8625	0.8625	0.0000	1,950.8271	1,950.8271	0.3019		1,958.3749
Total	**1.5407**	**13.6425**	**12.8836**	**0.0203**		**0.8982**	**0.8982**		**0.8625**	**0.8625**	**0.0000**	**1,950.8271**	**1,950.8271**	**0.3019**		**1,958.3749**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0636	1.6864	0.4367	3.8600e-003	0.0964	0.0122	0.1086	0.0278	0.0117	0.0394		414.1168	414.1168	0.0311		414.8947
Worker	0.1805	0.1188	1.3524	3.6600e-003	0.3409	2.5200e-003	0.3434	0.0904	2.3200e-003	0.0928		364.4210	364.4210	0.0119		364.7193
Total	**0.2440**	**1.8052**	**1.7891**	**7.5200e-003**	**0.4373**	**0.0147**	**0.4521**	**0.1182**	**0.0140**	**0.1322**		**778.5378**	**778.5378**	**0.0430**		**779.6139**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3857	12.4683	12.7890	0.0203		0.7793	0.7793		0.7484	0.7484		1,935.4186	1,935.4186	0.2931		1,942.7464
Total	**1.3857**	**12.4683**	**12.7890**	**0.0203**		**0.7793**	**0.7793**		**0.7484**	**0.7484**		**1,935.4186**	**1,935.4186**	**0.2931**		**1,942.7464**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0515	1.5291	0.3917	3.8300e-003	0.0964	7.8200e-003	0.1042	0.0278	7.4800e-003	0.0352		411.2719	411.2719	0.0296		412.0111
Worker	0.1685	0.1071	1.2383	3.5400e-003	0.3409	2.4800e-003	0.3434	0.0904	2.2900e-003	0.0927		352.9350	352.9350	0.0108		353.2050
Total	**0.2199**	**1.6362**	**1.6300**	**7.3700e-003**	**0.4373**	**0.0103**	**0.4476**	**0.1182**	**9.7700e-003**	**0.1280**		**764.2069**	**764.2069**	**0.0404**		**765.2161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3857	12.4683	12.7890	0.0203		0.7793	0.7793		0.7484	0.7484	0.0000	1,935.4186	1,935.4186	0.2931		1,942.7464
Total	**1.3857**	**12.4683**	**12.7890**	**0.0203**		**0.7793**	**0.7793**		**0.7484**	**0.7484**	**0.0000**	**1,935.4186**	**1,935.4186**	**0.2931**		**1,942.7464**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0515	1.5291	0.3917	3.8300e-003	0.0964	7.8200e-003	0.1042	0.0278	7.4800e-003	0.0352		411.2719	411.2719	0.0296		412.0111
Worker	0.1685	0.1071	1.2383	3.5400e-003	0.3409	2.4800e-003	0.3434	0.0904	2.2900e-003	0.0927		352.9350	352.9350	0.0108		353.2050
Total	**0.2199**	**1.6362**	**1.6300**	**7.3700e-003**	**0.4373**	**0.0103**	**0.4476**	**0.1182**	**9.7700e-003**	**0.1280**		**764.2069**	**764.2069**	**0.0404**		**765.2161**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2416	11.3233	12.6953	0.0203		0.6670	0.6670		0.6404	0.6404		1,935.5501	1,935.5501	0.2866		1,942.7146
Total	**1.2416**	**11.3233**	**12.6953**	**0.0203**		**0.6670**	**0.6670**		**0.6404**	**0.6404**		**1,935.5501**	**1,935.5501**	**0.2866**		**1,942.7146**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0415	1.3761	0.3535	3.7900e-003	0.0964	3.0200e-003	0.0994	0.0278	2.8800e-003	0.0306		407.5144	407.5144	0.0284		408.2245
Worker	0.1586	0.0972	1.1573	3.4200e-003	0.3409	2.4400e-003	0.3434	0.0904	2.2500e-003	0.0927		341.0884	341.0884	9.9700e-003		341.3375
Total	**0.2000**	**1.4733**	**1.5108**	**7.2100e-003**	**0.4373**	**5.4600e-003**	**0.4428**	**0.1182**	**5.1300e-003**	**0.1233**		**748.6027**	**748.6027**	**0.0384**		**749.5620**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2416	11.3233	12.6953	0.0203		0.6670	0.6670		0.6404	0.6404	0.0000	1,935.5501	1,935.5501	0.2866		1,942.7146
Total	**1.2416**	**11.3233**	**12.6953**	**0.0203**		**0.6670**	**0.6670**		**0.6404**	**0.6404**	**0.0000**	**1,935.5501**	**1,935.5501**	**0.2866**		**1,942.7146**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0415	1.3761	0.3535	3.7900e-003	0.0964	3.0200e-003	0.0994	0.0278	2.8800e-003	0.0306		407.5144	407.5144	0.0284		408.2245
Worker	0.1586	0.0972	1.1573	3.4200e-003	0.3409	2.4400e-003	0.3434	0.0904	2.2500e-003	0.0927		341.0884	341.0884	9.9700e-003		341.3375
Total	**0.2000**	**1.4733**	**1.5108**	**7.2100e-003**	**0.4373**	**5.4600e-003**	**0.4428**	**0.1182**	**5.1300e-003**	**0.1233**		**748.6027**	**748.6027**	**0.0384**		**749.5620**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793		1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7272**	**7.6220**	**7.3324**	**0.0114**		**0.4123**	**0.4123**		**0.3793**	**0.3793**		**1,128.5012**	**1,128.5012**	**0.3571**		**1,137.4274**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.7800e-003	0.2595	0.0672	5.9000e-004	0.0148	1.8800e-003	0.0167	4.2700e-003	1.8000e-003	6.0700e-003		63.7103	63.7103	4.7900e-003		63.8300
Worker	0.0483	0.0318	0.3623	9.8000e-004	0.0913	6.8000e-004	0.0920	0.0242	6.2000e-004	0.0249		97.6128	97.6128	3.2000e-003		97.6927
Total	**0.0581**	**0.2913**	**0.4294**	**1.5700e-003**	**0.1061**	**2.5600e-003**	**0.1087**	**0.0285**	**2.4200e-003**	**0.0309**		**161.3230**	**161.3230**	**7.9900e-003**		**161.5226**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793	0.0000	1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7272**	**7.6220**	**7.3324**	**0.0114**		**0.4123**	**0.4123**		**0.3793**	**0.3793**	**0.0000**	**1,128.5012**	**1,128.5012**	**0.3571**		**1,137.4274**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.7800e-003	0.2595	0.0672	5.9000e-004	0.0148	1.8800e-003	0.0167	4.2700e-003	1.8000e-003	6.0700e-003		63.7103	63.7103	4.7900e-003		63.8300
Worker	0.0483	0.0318	0.3623	9.8000e-004	0.0913	6.8000e-004	0.0920	0.0242	6.2000e-004	0.0249		97.6128	97.6128	3.2000e-003		97.6927
Total	**0.0581**	**0.2913**	**0.4294**	**1.5700e-003**	**0.1061**	**2.5600e-003**	**0.1087**	**0.0285**	**2.4200e-003**	**0.0309**		**161.3230**	**161.3230**	**7.9900e-003**		**161.5226**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.3043					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6567	4.5805	5.4527	8.9100e-003		0.2823	0.2823		0.2823	0.2823		844.3442	844.3442	0.0579		845.7927
Total	**23.9610**	**4.5805**	**5.4527**	**8.9100e-003**		**0.2823**	**0.2823**		**0.2823**	**0.2823**		**844.3442**	**844.3442**	**0.0579**		**845.7927**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0312	0.0191	0.2273	6.7000e-004	0.0670	4.8000e-004	0.0674	0.0178	4.4000e-004	0.0182		66.9995	66.9995	1.9600e-003		67.0484
Total	**0.0312**	**0.0191**	**0.2273**	**6.7000e-004**	**0.0670**	**4.8000e-004**	**0.0674**	**0.0178**	**4.4000e-004**	**0.0182**		**66.9995**	**66.9995**	**1.9600e-003**		**67.0484**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.3043					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6567	4.5805	5.4527	8.9100e-003		0.2823	0.2823		0.2823	0.2823	0.0000	844.3441	844.3441	0.0579		845.7927
Total	**23.9610**	**4.5805**	**5.4527**	**8.9100e-003**		**0.2823**	**0.2823**		**0.2823**	**0.2823**	**0.0000**	**844.3441**	**844.3441**	**0.0579**		**845.7927**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0312	0.0191	0.2273	6.7000e-004	0.0670	4.8000e-004	0.0674	0.0178	4.4000e-004	0.0182		66.9995	66.9995	1.9600e-003		67.0484
Total	**0.0312**	**0.0191**	**0.2273**	**6.7000e-004**	**0.0670**	**4.8000e-004**	**0.0674**	**0.0178**	**4.4000e-004**	**0.0182**		**66.9995**	**66.9995**	**1.9600e-003**		**67.0484**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4614	1.8963	5.4440	0.0194	1.6884	0.0155	1.7040	0.4513	0.0145	0.4657		1,976.5086	1,976.5086	0.0989		1,978.9815
Unmitigated	0.4614	1.8963	5.4440	0.0194	1.6884	0.0155	1.7040	0.4513	0.0145	0.4657		1,976.5086	1,976.5086	0.0989		1,978.9815

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	278.88	272.16	232.32	774,554	774,554
Enclosed Parking with Elevator	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	278.88	272.16	232.32	774,554	774,554

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Racquet Club	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Recreational Swimming Pool	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Condo/Townhouse	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0193	0.1650	0.0709	1.0500e-003		0.0133	0.0133		0.0133	0.0133		210.5424	210.5424	4.0400e-003	3.8600e-003	211.7935
NaturalGas Unmitigated	0.0245	0.2091	0.0897	1.3300e-003		0.0169	0.0169		0.0169	0.0169		266.7251	266.7251	5.1100e-003	4.8900e-003	268.3101

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	2248.11	0.0242	0.2072	0.0882	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4836	264.4836	5.0700e-003	4.8500e-003	266.0553
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	19.0521	2.1000e-004	1.8700e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2414	2.2414	4.0000e-005	4.0000e-005	2.2547
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0245**	**0.2091**	**0.0897**	**1.3300e-003**		**0.0169**	**0.0169**		**0.0169**	**0.0169**		**266.7251**	**266.7251**	**5.1100e-003**	**4.8900e-003**	**268.3101**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	1.77256	0.0191	0.1634	0.0695	1.0400e-003		0.0132	0.0132		0.0132	0.0132		208.5359	208.5359	4.0000e-003	3.8200e-003	209.7752
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0170545	1.8000e-004	1.6700e-003	1.4000e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		2.0064	2.0064	4.0000e-005	4.0000e-005	2.0183
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0193**	**0.1650**	**0.0709**	**1.0500e-003**		**0.0133**	**0.0133**		**0.0133**	**0.0133**		**210.5424**	**210.5424**	**4.0400e-003**	**3.8600e-003**	**211.7935**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7944	0.8421	4.3145	5.2900e-003		0.0863	0.0863		0.0863	0.0863	0.0000	1,023.6255	1,023.6255	0.0264	0.0186	1,029.8394
Unmitigated	1.7944	0.8421	4.3145	5.2900e-003		0.0863	0.0863		0.0863	0.0863	0.0000	1,023.6255	1,023.6255	0.0264	0.0186	1,029.8394

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1484					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4320					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0932	0.7962	0.3388	5.0800e-003		0.0644	0.0644		0.0644	0.0644	0.0000	1,016.4706	1,016.4706	0.0195	0.0186	1,022.5110
Landscaping	0.1208	0.0458	3.9757	2.1000e-004		0.0219	0.0219		0.0219	0.0219		7.1549	7.1549	6.9400e-003		7.3284
Total	**1.7944**	**0.8421**	**4.3145**	**5.2900e-003**		**0.0863**	**0.0863**		**0.0863**	**0.0863**	**0.0000**	**1,023.6255**	**1,023.6255**	**0.0264**	**0.0186**	**1,029.8394**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1484					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4320					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0932	0.7962	0.3388	5.0800e-003		0.0644	0.0644		0.0644	0.0644	0.0000	1,016.4706	1,016.4706	0.0195	0.0186	1,022.5110
Landscaping	0.1208	0.0458	3.9757	2.1000e-004		0.0219	0.0219		0.0219	0.0219		7.1549	7.1549	6.9400e-003		7.3284
Total	**1.7944**	**0.8421**	**4.3145**	**5.2900e-003**		**0.0863**	**0.0863**		**0.0863**	**0.0863**	**0.0000**	**1,023.6255**	**1,023.6255**	**0.0264**	**0.0186**	**1,029.8394**

Watermark (Option 1)

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	108.00	Space	1.07	46,808.00	0
Racquet Club	0.64	1000sqft	0.01	600.00	0
Recreational Swimming Pool	2.60	1000sqft	0.06	2,600.00	0
Condo/Townhouse	48.00	Dwelling Unit	1.23	62,941.00	137

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Watermark Del Mar Project (Option 1). CO2 intensity factor adjusted to refect 33% RPS.

Land Use - Project consists of 48 dwelling units, 2600 sf pool, and 108 space parking structure on a 2.37 acre site.

Construction Phase - Construction to begin June 2019 and would be completed by May 2021.

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Trips and VMT - Project specific information - 120 haul trips. Worker and vendor trip length = 8 miles, hauling trip length = 5 miles. Assumed water and asphalt trucks as vendor trips.

Grading - Export of 23,600 cy of soil

Architectural Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Vehicle Trips - Recreational amentites would not generate trips

Woodstoves - assumes all units have gas fireplaces

Area Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Energy Use - Default energy use intensity

Water And Wastewater - Default water and wastewater

Solid Waste - Default solid waste

Construction Off-road Equipment Mitigation - water exposed area 2x per day

Energy Mitigation - Meet 2016 Title 24 standards (28% more efficient than 2013)

Water Mitigation - 20% indoor and outdoor water consumption reduction per City CAP goal.

Waste Mitigation - 80% waste diversion consistent with the City's CAP.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	42,485.00	44,036.00
tblArchitecturalCoating	ConstArea_Residential_Interior	127,456.00	132,107.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaCoating	Area_Residential_Exterior	42485	44036
tblAreaCoating	Area_Residential_Interior	127456	132107
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0

tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	369.00
tblConstructionPhase	NumDays	6.00	25.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	3.00	10.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	26.40	48.00
tblFireplaces	NumberNoFireplace	4.80	0.00
tblFireplaces	NumberWood	16.80	0.00
tblGrading	MaterialExported	0.00	23,600.00
tblLandUse	BuildingSpaceSquareFeet	43,200.00	46,808.00
tblLandUse	BuildingSpaceSquareFeet	640.00	600.00
tblLandUse	BuildingSpaceSquareFeet	0.00	2,600.00
tblLandUse	BuildingSpaceSquareFeet	48,000.00	62,941.00
tblLandUse	LandUseSquareFeet	43,200.00	46,808.00
tblLandUse	LandUseSquareFeet	640.00	600.00
tblLandUse	LandUseSquareFeet	48,000.00	62,941.00
tblLandUse	LotAcreage	0.97	1.07
tblLandUse	LotAcreage	3.00	1.23
tblLandUse	RecSwimmingAreaAllowEdit	1.00	0.00
tblLandUse	RecSwimmingAreaSquareFeet	2,600.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Site Preparation

tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	OperationalYear	2018	2022
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	2,950.00	120.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripNumber	8.00	13.00
tblTripsAndVMT	WorkerTripNumber	13.00	15.00
tblTripsAndVMT	WorkerTripNumber	8.00	15.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.5983	23.3841	22.4216	0.0404	0.7901	1.3280	1.8715	0.1467	1.2584	1.4051	0.0000	3,979.8002	3,979.8002	0.7115	0.0000	3,997.5881
2020	1.6267	14.1187	14.4100	0.0273	0.4373	0.7898	1.2271	0.1182	0.7583	0.8765	0.0000	2,668.2948	2,668.2948	0.3348	0.0000	2,676.6637
2021	23.9957	12.8070	14.1940	0.0272	0.4373	0.6725	1.1098	0.1182	0.6457	0.7639	0.0000	2,653.5975	2,653.5975	0.3262	0.0000	2,661.7515
Maximum	**23.9957**	**23.3841**	**22.4216**	**0.0404**	**0.7901**	**1.3280**	**1.8715**	**0.1467**	**1.2584**	**1.4051**	**0.0000**	**3,979.8002**	**3,979.8002**	**0.7115**	**0.0000**	**3,997.5881**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.5983	23.3841	22.4216	0.0404	0.5435	1.3280	1.8715	0.1467	1.2584	1.4051	0.0000	3,979.8002	3,979.8002	0.7115	0.0000	3,997.5881
2020	1.6267	14.1187	14.4100	0.0273	0.4373	0.7898	1.2271	0.1182	0.7583	0.8765	0.0000	2,668.2948	2,668.2948	0.3348	0.0000	2,676.6637
2021	23.9957	12.8070	14.1940	0.0272	0.4373	0.6725	1.1098	0.1182	0.6457	0.7639	0.0000	2,653.5975	2,653.5975	0.3262	0.0000	2,661.7515
Maximum	**23.9957**	**23.3841**	**22.4216**	**0.0404**	**0.5435**	**1.3280**	**1.8715**	**0.1467**	**1.2584**	**1.4051**	**0.0000**	**3,979.8002**	**3,979.8002**	**0.7115**	**0.0000**	**3,997.5881**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**14.82**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7944	0.8421	4.3145	5.2900e-003		0.0863	0.0863		0.0863	0.0863	0.0000	1,023.6255	1,023.6255	0.0264	0.0186	1,029.8394
Energy	0.0245	0.2091	0.0897	1.3300e-003		0.0169	0.0169		0.0169	0.0169		266.7251	266.7251	5.1100e-003	4.8900e-003	268.3101
Mobile	0.4474	1.9488	5.3324	0.0184	1.6884	0.0156	1.7041	0.4513	0.0146	0.4658		1,875.0658	1,875.0658	0.0993		1,877.5470
Total	**2.2663**	**2.9999**	**9.7367**	**0.0251**	**1.6884**	**0.1188**	**1.8073**	**0.4513**	**0.1178**	**0.5691**	**0.0000**	**3,165.4163**	**3,165.4163**	**0.1308**	**0.0235**	**3,175.6965**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7944	0.8421	4.3145	5.2900e-003		0.0863	0.0863		0.0863	0.0863	0.0000	1,023.6255	1,023.6255	0.0264	0.0186	1,029.8394
Energy	0.0193	0.1650	0.0709	1.0500e-003		0.0133	0.0133		0.0133	0.0133		210.5424	210.5424	4.0400e-003	3.8600e-003	211.7935
Mobile	0.4474	1.9488	5.3324	0.0184	1.6884	0.0156	1.7041	0.4513	0.0146	0.4658		1,875.0658	1,875.0658	0.0993		1,877.5470
Total	**2.2612**	**2.9559**	**9.7179**	**0.0248**	**1.6884**	**0.1153**	**1.8037**	**0.4513**	**0.1143**	**0.5655**	**0.0000**	**3,109.2336**	**3,109.2336**	**0.1297**	**0.0225**	**3,119.1799**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.23**	**1.47**	**0.19**	**1.12**	**0.00**	**3.00**	**0.20**	**0.00**	**3.02**	**0.63**	**0.00**	**1.77**	**1.77**	**0.82**	**4.38**	**1.78**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/14/2019	5	10	
2	Grading	Grading	6/15/2019	7/19/2019	5	25	
3	Trenching	Trenching	10/12/2019	11/8/2019	5	20	
4	Building Construction	Building Construction	11/19/2019	4/16/2021	5	369	
5	Paving	Paving	11/19/2019	12/6/2019	5	14	
6	Architectural Coating	Architectural Coating	4/17/2021	5/21/2021	5	25	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 1.07

Residential Indoor: 132,107; Residential Outdoor: 44,036; Non-Residential Indoor: 4,800; Non-Residential Outdoor: 1,600; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	3	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	13.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	15.00	2.00	120.00	8.00	8.00	5.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	56.00	13.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	15.00	2.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	11.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.0177	12.0845	6.6093	0.0133		0.5745	0.5745		0.5286	0.5286		1,315.4812	1,315.4812	0.4162		1,325.8863
Total	**1.0177**	**12.0845**	**6.6093**	**0.0133**	**0.5303**	**0.5745**	**1.1048**	**0.0573**	**0.5286**	**0.5858**		**1,315.4812**	**1,315.4812**	**0.4162**		**1,325.8863**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0465	0.0310	0.3021	8.0000e-004	0.0791	5.9000e-004	0.0797	0.0210	5.4000e-004	0.0215		79.4500	79.4500	2.6500e-003		79.5163
Total	**0.0465**	**0.0310**	**0.3021**	**8.0000e-004**	**0.0791**	**5.9000e-004**	**0.0797**	**0.0210**	**5.4000e-004**	**0.0215**		**79.4500**	**79.4500**	**2.6500e-003**		**79.5163**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	1.0177	12.0845	6.6093	0.0133		0.5745	0.5745		0.5286	0.5286	0.0000	1,315.4812	1,315.4812	0.4162		1,325.8863
Total	**1.0177**	**12.0845**	**6.6093**	**0.0133**	**0.2386**	**0.5745**	**0.8131**	**0.0258**	**0.5286**	**0.5543**	**0.0000**	**1,315.4812**	**1,315.4812**	**0.4162**		**1,325.8863**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0465	0.0310	0.3021	8.0000e-004	0.0791	5.9000e-004	0.0797	0.0210	5.4000e-004	0.0215		79.4500	79.4500	2.6500e-003		79.5163
Total	**0.0465**	**0.0310**	**0.3021**	**8.0000e-004**	**0.0791**	**5.9000e-004**	**0.0797**	**0.0210**	**5.4000e-004**	**0.0215**		**79.4500**	**79.4500**	**2.6500e-003**		**79.5163**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6629	0.0000	0.6629	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.4984	16.4143	11.7036	0.0206		0.8537	0.8537		0.7854	0.7854		2,035.4834	2,035.4834	0.6440		2,051.5836
Total	**1.4984**	**16.4143**	**11.7036**	**0.0206**	**0.6629**	**0.8537**	**1.5166**	**0.0773**	**0.7854**	**0.8627**		**2,035.4834**	**2,035.4834**	**0.6440**		**2,051.5836**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0186	0.7107	0.1496	1.2700e-003	0.0210	1.7700e-003	0.0228	5.7700e-003	1.6900e-003	7.4600e-003		138.0940	138.0940	0.0182		138.5494
Vendor	0.0102	0.2601	0.0741	5.8000e-004	0.0148	1.9100e-003	0.0167	4.2700e-003	1.8300e-003	6.1000e-003		62.2070	62.2070	5.0800e-003		62.3340
Worker	0.0537	0.0357	0.3485	9.2000e-004	0.0913	6.8000e-004	0.0920	0.0242	6.2000e-004	0.0249		91.6731	91.6731	3.0600e-003		91.7495
Total	**0.0825**	**1.0065**	**0.5723**	**2.7700e-003**	**0.1272**	**4.3600e-003**	**0.1315**	**0.0343**	**4.1400e-003**	**0.0384**		**291.9741**	**291.9741**	**0.0264**		**292.6329**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2983	0.0000	0.2983	0.0348	0.0000	0.0348			0.0000			0.0000
Off-Road	1.4984	16.4143	11.7036	0.0206		0.8537	0.8537		0.7854	0.7854	0.0000	2,035.4834	2,035.4834	0.6440		2,051.5836
Total	**1.4984**	**16.4143**	**11.7036**	**0.0206**	**0.2983**	**0.8537**	**1.1520**	**0.0348**	**0.7854**	**0.8202**	**0.0000**	**2,035.4834**	**2,035.4834**	**0.6440**		**2,051.5836**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0186	0.7107	0.1496	1.2700e-003	0.0210	1.7700e-003	0.0228	5.7700e-003	1.6900e-003	7.4600e-003		138.0940	138.0940	0.0182		138.5494
Vendor	0.0102	0.2601	0.0741	5.8000e-004	0.0148	1.9100e-003	0.0167	4.2700e-003	1.8300e-003	6.1000e-003		62.2070	62.2070	5.0800e-003		62.3340
Worker	0.0537	0.0357	0.3485	9.2000e-004	0.0913	6.8000e-004	0.0920	0.0242	6.2000e-004	0.0249		91.6731	91.6731	3.0600e-003		91.7495
Total	**0.0825**	**1.0065**	**0.5723**	**2.7700e-003**	**0.1272**	**4.3600e-003**	**0.1315**	**0.0343**	**4.1400e-003**	**0.0384**		**291.9741**	**291.9741**	**0.0264**		**292.6329**

3.4 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	7.0121	6.9080	9.3200e-003		0.4681	0.4681		0.4307	0.4307		922.6256	922.6256	0.2919		929.9233
Total	**0.6984**	**7.0121**	**6.9080**	**9.3200e-003**		**0.4681**	**0.4681**		**0.4307**	**0.4307**		**922.6256**	**922.6256**	**0.2919**		**929.9233**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0286	0.0191	0.1859	4.9000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		48.8923	48.8923	1.6300e-003		48.9331
Total	**0.0286**	**0.0191**	**0.1859**	**4.9000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**48.8923**	**48.8923**	**1.6300e-003**		**48.9331**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	7.0121	6.9080	9.3200e-003		0.4681	0.4681		0.4307	0.4307	0.0000	922.6256	922.6256	0.2919		929.9233
Total	**0.6984**	**7.0121**	**6.9080**	**9.3200e-003**		**0.4681**	**0.4681**		**0.4307**	**0.4307**	**0.0000**	**922.6256**	**922.6256**	**0.2919**		**929.9233**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0286	0.0191	0.1859	4.9000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		48.8923	48.8923	1.6300e-003		48.9331
Total	**0.0286**	**0.0191**	**0.1859**	**4.9000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**48.8923**	**48.8923**	**1.6300e-003**		**48.9331**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5407	13.6425	12.8836	0.0203		0.8982	0.8982		0.8625	0.8625		1,950.8271	1,950.8271	0.3019		1,958.3749
Total	**1.5407**	**13.6425**	**12.8836**	**0.0203**		**0.8982**	**0.8982**		**0.8625**	**0.8625**		**1,950.8271**	**1,950.8271**	**0.3019**		**1,958.3749**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0662	1.6904	0.4817	3.7700e-003	0.0964	0.0124	0.1088	0.0278	0.0119	0.0396		404.3455	404.3455	0.0330		405.1707
Worker	0.2003	0.1334	1.3012	3.4400e-003	0.3409	2.5200e-003	0.3434	0.0904	2.3200e-003	0.0928		342.2462	342.2462	0.0114		342.5316
Total	**0.2665**	**1.8238**	**1.7829**	**7.2100e-003**	**0.4373**	**0.0149**	**0.4523**	**0.1182**	**0.0142**	**0.1324**		**746.5918**	**746.5918**	**0.0444**		**747.7023**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5407	13.6425	12.8836	0.0203		0.8982	0.8982		0.8625	0.8625	0.0000	1,950.8271	1,950.8271	0.3019		1,958.3749
Total	**1.5407**	**13.6425**	**12.8836**	**0.0203**		**0.8982**	**0.8982**		**0.8625**	**0.8625**	**0.0000**	**1,950.8271**	**1,950.8271**	**0.3019**		**1,958.3749**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0662	1.6904	0.4817	3.7700e-003	0.0964	0.0124	0.1088	0.0278	0.0119	0.0396		404.3455	404.3455	0.0330		405.1707
Worker	0.2003	0.1334	1.3012	3.4400e-003	0.3409	2.5200e-003	0.3434	0.0904	2.3200e-003	0.0928		342.2462	342.2462	0.0114		342.5316
Total	**0.2665**	**1.8238**	**1.7829**	**7.2100e-003**	**0.4373**	**0.0149**	**0.4523**	**0.1182**	**0.0142**	**0.1324**		**746.5918**	**746.5918**	**0.0444**		**747.7023**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3857	12.4683	12.7890	0.0203		0.7793	0.7793		0.7484	0.7484		1,935.4186	1,935.4186	0.2931		1,942.7464
Total	**1.3857**	**12.4683**	**12.7890**	**0.0203**		**0.7793**	**0.7793**		**0.7484**	**0.7484**		**1,935.4186**	**1,935.4186**	**0.2931**		**1,942.7464**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0538	1.5302	0.4325	3.7400e-003	0.0964	7.9500e-003	0.1044	0.0278	7.6100e-003	0.0354		401.4207	401.4207	0.0313		402.2040
Worker	0.1872	0.1203	1.1885	3.3300e-003	0.3409	2.4800e-003	0.3434	0.0904	2.2900e-003	0.0927		331.4555	331.4555	0.0103		331.7133
Total	**0.2410**	**1.6504**	**1.6210**	**7.0700e-003**	**0.4373**	**0.0104**	**0.4478**	**0.1182**	**9.9000e-003**	**0.1281**		**732.8762**	**732.8762**	**0.0416**		**733.9173**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3857	12.4683	12.7890	0.0203		0.7793	0.7793		0.7484	0.7484	0.0000	1,935.4186	1,935.4186	0.2931		1,942.7464
Total	**1.3857**	**12.4683**	**12.7890**	**0.0203**		**0.7793**	**0.7793**		**0.7484**	**0.7484**	**0.0000**	**1,935.4186**	**1,935.4186**	**0.2931**		**1,942.7464**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0538	1.5302	0.4325	3.7400e-003	0.0964	7.9500e-003	0.1044	0.0278	7.6100e-003	0.0354		401.4207	401.4207	0.0313		402.2040
Worker	0.1872	0.1203	1.1885	3.3300e-003	0.3409	2.4800e-003	0.3434	0.0904	2.2900e-003	0.0927		331.4555	331.4555	0.0103		331.7133
Total	**0.2410**	**1.6504**	**1.6210**	**7.0700e-003**	**0.4373**	**0.0104**	**0.4478**	**0.1182**	**9.9000e-003**	**0.1281**		**732.8762**	**732.8762**	**0.0416**		**733.9173**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2416	11.3233	12.6953	0.0203		0.6670	0.6670		0.6404	0.6404		1,935.5501	1,935.5501	0.2866		1,942.7146
Total	**1.2416**	**11.3233**	**12.6953**	**0.0203**		**0.6670**	**0.6670**		**0.6404**	**0.6404**		**1,935.5501**	**1,935.5501**	**0.2866**		**1,942.7146**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0436	1.3744	0.3916	3.7000e-003	0.0964	3.1300e-003	0.0995	0.0278	2.9900e-003	0.0307		397.7219	397.7219	0.0301		398.4740
Worker	0.1764	0.1092	1.1072	3.2200e-003	0.3409	2.4400e-003	0.3434	0.0904	2.2500e-003	0.0927		320.3254	320.3254	9.5000e-003		320.5629
Total	**0.2200**	**1.4836**	**1.4988**	**6.9200e-003**	**0.4373**	**5.5700e-003**	**0.4429**	**0.1182**	**5.2400e-003**	**0.1234**		**718.0474**	**718.0474**	**0.0396**		**719.0369**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2416	11.3233	12.6953	0.0203		0.6670	0.6670		0.6404	0.6404	0.0000	1,935.5501	1,935.5501	0.2866		1,942.7146
Total	**1.2416**	**11.3233**	**12.6953**	**0.0203**		**0.6670**	**0.6670**		**0.6404**	**0.6404**	**0.0000**	**1,935.5501**	**1,935.5501**	**0.2866**		**1,942.7146**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0436	1.3744	0.3916	3.7000e-003	0.0964	3.1300e-003	0.0995	0.0278	2.9900e-003	0.0307		397.7219	397.7219	0.0301		398.4740
Worker	0.1764	0.1092	1.1072	3.2200e-003	0.3409	2.4400e-003	0.3434	0.0904	2.2500e-003	0.0927		320.3254	320.3254	9.5000e-003		320.5629
Total	**0.2200**	**1.4836**	**1.4988**	**6.9200e-003**	**0.4373**	**5.5700e-003**	**0.4429**	**0.1182**	**5.2400e-003**	**0.1234**		**718.0474**	**718.0474**	**0.0396**		**719.0369**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793		1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7272**	**7.6220**	**7.3324**	**0.0114**		**0.4123**	**0.4123**		**0.3793**	**0.3793**		**1,128.5012**	**1,128.5012**	**0.3571**		**1,137.4274**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0102	0.2601	0.0741	5.8000e-004	0.0148	1.9100e-003	0.0167	4.2700e-003	1.8300e-003	6.1000e-003		62.2070	62.2070	5.0800e-003		62.3340
Worker	0.0537	0.0357	0.3485	9.2000e-004	0.0913	6.8000e-004	0.0920	0.0242	6.2000e-004	0.0249		91.6731	91.6731	3.0600e-003		91.7495
Total	**0.0638**	**0.2958**	**0.4226**	**1.5000e-003**	**0.1061**	**2.5900e-003**	**0.1087**	**0.0285**	**2.4500e-003**	**0.0310**		**153.8801**	**153.8801**	**8.1400e-003**		**154.0835**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793	0.0000	1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7272**	**7.6220**	**7.3324**	**0.0114**		**0.4123**	**0.4123**		**0.3793**	**0.3793**	**0.0000**	**1,128.5012**	**1,128.5012**	**0.3571**		**1,137.4274**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0102	0.2601	0.0741	5.8000e-004	0.0148	1.9100e-003	0.0167	4.2700e-003	1.8300e-003	6.1000e-003		62.2070	62.2070	5.0800e-003		62.3340
Worker	0.0537	0.0357	0.3485	9.2000e-004	0.0913	6.8000e-004	0.0920	0.0242	6.2000e-004	0.0249		91.6731	91.6731	3.0600e-003		91.7495
Total	**0.0638**	**0.2958**	**0.4226**	**1.5000e-003**	**0.1061**	**2.5900e-003**	**0.1087**	**0.0285**	**2.4500e-003**	**0.0310**		**153.8801**	**153.8801**	**8.1400e-003**		**154.0835**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.3043					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6567	4.5805	5.4527	8.9100e-003		0.2823	0.2823		0.2823	0.2823		844.3442	844.3442	0.0579		845.7927
Total	**23.9610**	**4.5805**	**5.4527**	**8.9100e-003**		**0.2823**	**0.2823**		**0.2823**	**0.2823**		**844.3442**	**844.3442**	**0.0579**		**845.7927**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0215	0.2175	6.3000e-004	0.0670	4.8000e-004	0.0674	0.0178	4.4000e-004	0.0182		62.9211	62.9211	1.8700e-003		62.9677
Total	**0.0347**	**0.0215**	**0.2175**	**6.3000e-004**	**0.0670**	**4.8000e-004**	**0.0674**	**0.0178**	**4.4000e-004**	**0.0182**		**62.9211**	**62.9211**	**1.8700e-003**		**62.9677**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.3043					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6567	4.5805	5.4527	8.9100e-003		0.2823	0.2823		0.2823	0.2823	0.0000	844.3441	844.3441	0.0579		845.7927
Total	**23.9610**	**4.5805**	**5.4527**	**8.9100e-003**		**0.2823**	**0.2823**		**0.2823**	**0.2823**	**0.0000**	**844.3441**	**844.3441**	**0.0579**		**845.7927**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0215	0.2175	6.3000e-004	0.0670	4.8000e-004	0.0674	0.0178	4.4000e-004	0.0182		62.9211	62.9211	1.8700e-003		62.9677
Total	**0.0347**	**0.0215**	**0.2175**	**6.3000e-004**	**0.0670**	**4.8000e-004**	**0.0674**	**0.0178**	**4.4000e-004**	**0.0182**		**62.9211**	**62.9211**	**1.8700e-003**		**62.9677**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4474	1.9488	5.3324	0.0184	1.6884	0.0156	1.7041	0.4513	0.0146	0.4658		1,875.0658	1,875.0658	0.0993		1,877.5470
Unmitigated	0.4474	1.9488	5.3324	0.0184	1.6884	0.0156	1.7041	0.4513	0.0146	0.4658		1,875.0658	1,875.0658	0.0993		1,877.5470

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	278.88	272.16	232.32	774,554	774,554
Enclosed Parking with Elevator	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	278.88	272.16	232.32	774,554	774,554

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Racquet Club	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Recreational Swimming Pool	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Condo/Townhouse	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0193	0.1650	0.0709	1.0500e-003		0.0133	0.0133		0.0133	0.0133		210.5424	210.5424	4.0400e-003	3.8600e-003	211.7935
NaturalGas Unmitigated	0.0245	0.2091	0.0897	1.3300e-003		0.0169	0.0169		0.0169	0.0169		266.7251	266.7251	5.1100e-003	4.8900e-003	268.3101

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	2248.11	0.0242	0.2072	0.0882	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4836	264.4836	5.0700e-003	4.8500e-003	266.0553
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	19.0521	2.1000e-004	1.8700e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2414	2.2414	4.0000e-005	4.0000e-005	2.2547
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0245**	**0.2091**	**0.0897**	**1.3300e-003**		**0.0169**	**0.0169**		**0.0169**	**0.0169**		**266.7251**	**266.7251**	**5.1100e-003**	**4.8900e-003**	**268.3101**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	1.77256	0.0191	0.1634	0.0695	1.0400e-003		0.0132	0.0132		0.0132	0.0132		208.5359	208.5359	4.0000e-003	3.8200e-003	209.7752
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0170545	1.8000e-004	1.6700e-003	1.4000e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		2.0064	2.0064	4.0000e-005	4.0000e-005	2.0183
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0193**	**0.1650**	**0.0709**	**1.0500e-003**		**0.0133**	**0.0133**		**0.0133**	**0.0133**		**210.5424**	**210.5424**	**4.0400e-003**	**3.8600e-003**	**211.7935**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7944	0.8421	4.3145	5.2900e-003		0.0863	0.0863		0.0863	0.0863	0.0000	1,023.6255	1,023.6255	0.0264	0.0186	1,029.8394
Unmitigated	1.7944	0.8421	4.3145	5.2900e-003		0.0863	0.0863		0.0863	0.0863	0.0000	1,023.6255	1,023.6255	0.0264	0.0186	1,029.8394

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1484					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4320					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0932	0.7962	0.3388	5.0800e-003		0.0644	0.0644		0.0644	0.0644	0.0000	1,016.4706	1,016.4706	0.0195	0.0186	1,022.5110
Landscaping	0.1208	0.0458	3.9757	2.1000e-004		0.0219	0.0219		0.0219	0.0219		7.1549	7.1549	6.9400e-003		7.3284
Total	**1.7944**	**0.8421**	**4.3145**	**5.2900e-003**		**0.0863**	**0.0863**		**0.0863**	**0.0863**	**0.0000**	**1,023.6255**	**1,023.6255**	**0.0264**	**0.0186**	**1,029.8394**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1484					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4320					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0932	0.7962	0.3388	5.0800e-003		0.0644	0.0644		0.0644	0.0644	0.0000	1,016.4706	1,016.4706	0.0195	0.0186	1,022.5110
Landscaping	0.1208	0.0458	3.9757	2.1000e-004		0.0219	0.0219		0.0219	0.0219		7.1549	7.1549	6.9400e-003		7.3284
Total	**1.7944**	**0.8421**	**4.3145**	**5.2900e-003**		**0.0863**	**0.0863**		**0.0863**	**0.0863**	**0.0000**	**1,023.6255**	**1,023.6255**	**0.0264**	**0.0186**	**1,029.8394**

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MEMORANDUM

To:	City of Del Mar
From:	Ian McIntire, *Dudek*
Subject:	Watermark Del Mar Specific Plan Air Quality Emissions Assessment for Option B
Date:	September 26, 2017
Attachment A:	Air Quality Calculations

Dudek is pleased to submit this air quality emissions assessment to assist the City of Del Mar with environmental planning requirements for Option 2 of the proposed Watermark Del Mar Specific Plan (proposed project Option A and Option B) located in the City of Del Mar (City). The proposed project would develop 38 residential units on a 2.37 acre site. This memorandum estimates criteria air pollutant emissions from construction and operation of the proposed project This assessment also compares the estimated Option B construction and operational emissions to the San Diego Air Pollution Control District (SDAPCD) emissions-based thresholds and the conclusions provided in the *2017 Air Quality Technical Report* for Option A (48 units).

The contents and organization of this memorandum are as follows: project description; general analysis and methodology; threshold of significance and an impact analysis for the air quality assessment; conclusions; and references cited.

1 PROJECT DESCRIPTION

Under Option B, the project design has been modified to address input received during various community workshops on the project (Figure 1). The Specific Plan for Option B has been modified along with revised design plans to incorporate changes in response to concerns raised.

This option includes modifications to the building placement on the site, which was of particular concern as viewed from Jimmy Durante Boulevard. The changes to the buildings that front on this street include modifications to the setbacks on the first and second floors, adding building separation between the units as well as reconfiguring the pool area to eliminate the masonry columns and trellis at the corner of San Dieguito Drive and Jimmy Durante Blvd, replacing them with additional trees and landscaping. The open areas internal to the site have been enlarged. The parking provided on site has also been increased to be above standard requirements, based on

concerns that there was no on-street parking in the immediate area. The result of all these changes is that the total unit count would be reduced by 10 to 38 housing units.

Option B would include 38 residential units on 103,282 square feet (approximately 2.37 acres) of gross land area for a maximum density of 16.1 dwelling units per acre. The proposed 16.1 dwelling-units-per-acre density is below the City of Del Mar Community Plan Housing Element's prescribed density range.

Option B would provide for a building area of 60,660 square feet and a total lot coverage of approximately 45%. Similar to Option A, the lot coverage calculation for Option B does not include the parking structure floor area (non-habitable building area). Option B proposes a floor area ratio of 0.62 based on 61,860 square feet of floor area (habitable building area) on net land area of 103,237 square feet.

The proposed structures would be situated on the site to provide a minimum 15-foot setback from the adjacent residentially zoned properties. The design considers no additional setback required where the structures would be adjacent to the public right-of-way along Jimmy Durante Boulevard. However, unlike Option A, Option B would provide an additional 10-foot setback adjacent to the public right-of-way along San Dieguito Drive. The residential units provided would be a mix of studio, one-bedroom, two-bedroom, and three-bedroom units.

2 GENERAL ANALYSIS AND METHODOLOGY

Option B is located within the San Diego Air Basin (SDAB) and is within the jurisdictional boundaries of the San Diego Air Pollution Control District (SDAPCD), which has jurisdiction over San Diego County. The California Emissions Estimator Model (CalEEMod) version 2016.3.1 was used to estimate project-related construction and operational emissions from Option B.

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants that are evaluated include volatile organic compounds (VOCs; also referred to as reactive organic gases (ROGs)), oxides of nitrogen (NO_x), carbon monoxide (CO), sulfur oxides (SO_x), particulate matter with an aerodynamic diameter less than or equal to 10 microns in size (PM_{10}), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in size ($PM_{2.5}$). VOCs and NO_x are important because they are precursors to ozone (O_3). Criteria air pollutant emissions associated with construction of the proposed project were estimated for the following emission sources: operation of off-road construction equipment, on-road hauling and

vendor (material delivery) trucks, and worker vehicles. Project operational emission sources evaluated include mobile (vehicle) sources, area sources such as consumer products, and energy use.

2.1 Construction Assumptions

Emissions from the construction phase of the proposed project was estimated using the CalEEMod model. The analysis contained herein is based on the following assumptions (duration of phases is approximate):

- Site preparation – 2 weeks (June 2019)
- Grading – 5 weeks (June 2019 – July 2019)
- Trenching – 4 weeks (October 2019 – November 2019)
- Building construction – 75 weeks (November 2019 – April 2021)
- Paving – 4 weeks (November 2019 – December 2019)
- Application of architectural coatings – 5 weeks (May 2021 – June 2021)

Construction is anticipated to commence following completion of entitlement efforts and completion of building design and associated permits. Construction would last for approximately 2 years, at which point building occupancy would occur. Construction equipment would include rollers, rubber-tired dozers, scrapers, water trucks, pavers, paving equipment, forklifts, and tractors/loaders/backhoes. Concrete and delivery trucks would also be used. Construction equipment would be used intermittently depending on construction phase.

Construction phasing would consist of parking structure construction, disturbed slope grading, residential structures over parking structure podium construction, and construction of the balance of the residential structures. Construction activities would take place within the limits of the construction hours identified in the City of Del Mar's Noise Regulations (City of Del Mar 1997).

Construction phasing specifications were provided by the project applicant, while the default values generated by CalEEMod were used for the construction equipment mix. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week (22 days per month) during project construction. Default construction worker, vendor trips, and trip lengths as provided in CalEEMod were utilized, with the exception of haul trips which were adjusted accordingly based on information provided by the applicant. CalEEMod default values were generated for worker and vendor trips. These assumptions are summarized Table 1.

Table 1
Construction Scenario Assumptions

Construction Phase	Average Daily Worker One-Way Trips	Average Daily Vendor One-Way Trips	Total Haul Truck One-Way Trips	Equipment	Quantity	Usage Hours
Site Preparation	8	0	0	Crawler Tractors	1	8
				Tractors/Loaders/Backhoes	2	7
Grading	13	2	135	Excavators	1	8
				Graders	1	8
				Sweepers/Scrubbers	1	8
				Tractors/Loaders/Backhoes	2	8
Trenching	8	0	0	Tractors/Loaders/Backhoes	3	8
Building Construction	51	13	0	Forklifts	3	7
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	1	8
Paving	8	2	0	Pavers	1	8
				Paving Equipment	1	8
				Rollers	1	8
Architectural Coating	10	0	0	Air Compressors	3	6

Notes: See Attachment A for details.
N/A = not applicable/not proposed

A detailed depiction of the construction schedule—including information regarding subphases and equipment used during each subphase—is included in Attachment A of this memorandum.

3 AIR QUALITY ASSESSMENT

3.1 Thresholds of Significance

The State of California has developed guidelines to address the significance of air quality impacts based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), which provides guidance that a project would have a significant environmental impact if it would:

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

In addition, Appendix G of the CEQA Guidelines indicates that where available, the significance criteria established by the applicable air quality management district or APCD may be relied upon to determine whether the proposed project would have a significant impact on air quality. The following significance thresholds for air quality are based on criteria provided in the County's *Guidelines for Determining Significance and Report Format and Content Requirements – Air Quality*

(County of San Diego 2007). The County's guidelines were adapted from Appendix G of the CEQA Guidelines listed previously.

A significant impact would result if any of the following would occur:

- The proposed project would result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation:
    - The proposed project would result in emissions that exceed 250 pounds per day of NO_x or 75 pounds per day of VOCs;
    - The proposed project would result in emissions of CO that, when totaled with the ambient concentration, would exceed a 1-hour concentration of 20 ppm or an 8-hour average of 9 ppm;
    - The proposed project would result in emissions of $PM_{2.5}$ that exceed 55 pounds per day;
    - The proposed project would result in emissions of PM_{10} that exceed 100 pounds per day and increase the ambient PM_{10} concentrations by 5 $\mu g/m^3$ or greater at the maximum exposed individual.
- The proposed project would result in a cumulatively considerable net increase of any criteria pollutant for which the SDAB is in nonattainment under an applicable federal or state ambient air quality standard.
    - The following guidelines for determining significance must be used for determining the cumulatively considerable net increases during the construction phase:
        - A project that has a significant direct impact on air quality with regard to emissions of PM_{10}, $PM_{2.5}$, NO_x, and/or VOCs would also have a significant cumulatively considerable net increase;
        - In the event direct impacts from a proposed project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions of concern from the proposed project, in combination with the emissions of concern from other proposed projects or reasonably foreseeable future projects within a proximity relevant to the pollutants of concern, are in excess of the guidelines, including the SDAPCD screening-level thresholds.
    - The following guidelines for determining significance must be used for determining the cumulatively considerable net increase during the operational phase:
        - A project that does not conform to the County's RAQS and/or has a significant direct impact on air quality with regard to operation emissions of PM_{10}, $PM_{2.5}$, NO_x, and/or VOCs would also have a significant cumulatively considerable net increase;

- Projects that cause road intersections to operate at or below level of service E (analysis required only when the addition of peak-hour trips from the proposed project and the surrounding projects exceeds 2,000) and create a CO hotspot create a cumulatively considerable net increase of CO.

Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 1 are exceeded.

Table 1
SDAPCD Air Quality Significance Thresholds

Construction Emissions			
Pollutant	*Total Emissions (pounds per day)*		
Respirable particulate matter (PM_{10})	100		
Fine particulate matter ($PM_{2.5}$)	55		
Oxides of nitrogen (NO_x)	250		
Oxides of sulfur (SO_x)	250		
Carbon monoxide (CO)	550		
Volatile organic compounds (VOC)	137*		
Operational Emissions			
Pollutant	*Total Emissions*		
	Pounds per Hour	*Pounds per Day*	*Tons per Year*
Respirable particulate matter (PM_{10})	—	100	15
Fine particulate matter ($PM_{2.5}$)	—	55	10
Oxides of nitrogen (NO_x)	25	250	40
Sulfur oxides (SO_x)	25	250	40
Carbon monoxide (CO)	100	550	100
Lead and lead compounds	—	3.2	0.6
Volatile organic compounds (VOC)	—	137*	13.7

Sources: County of San Diego 2007; SDAPCD 2016; SDAPCD 2015.

* VOC threshold based on the significance thresholds recommended by the Monterey Bay Unified Air Pollution Control District for the North Central Coast Air Basin, which has similar federal and state attainment status as the SDAB for O_3.

[a] TACs include carcinogens and noncarcinogens.

The thresholds listed in Table 1 represent screening-level thresholds that can be used to evaluate whether project-related emissions would cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. In the event that emissions exceed these thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the CAAQS and NAAQS, including appropriate background levels. For non-attainment pollutants, if emissions exceed the thresholds shown in Table 1, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person (SDAPCD 1976). A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

3.2 Impact Analysis

3.2.1 Construction Criteria Air Pollutant Emissions Analysis

Construction of Option B would slightly decrease the intensity of development compared with Option A. Option B would also result in a temporary addition of pollutants to the local airshed. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts. Criteria air pollutant emissions associated with construction activity were quantified using CalEEMod. Default values provided by the program were used where detailed project information was not available. A detailed depiction of the construction schedule—including information regarding phasing, equipment used during each phase, haul trucks, vendor trucks, and worker vehicles—is included in Attachment A of this memorandum.

Table 2 presents the estimated maximum daily construction emissions generated during construction of Option B compared with the maximum daily construction emissions from the Option A project.

Table 2
Estimated Maximum Daily Construction Criteria Air Pollutant Emissions for Option A and Option B

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds per day					
Option A (48 units) Estimated Emissions						
Option 1 Project	24.00	23.38	22.42	0.04	1.87	1.40
Option B (38 units) Estimated Emissions						
2019	2.50	22.77	21.57	0.04	1.76	1.35
2020	1.56	13.58	13.74	0.03	1.16	0.84
2021	21.15	12.32	15.54	0.03	1.05	0.73
Maximum Daily Emissions	**21.15**	**22.77**	**21.57**	**0.04**	**1.76**	**1.35**
SDAPCD Threshold	*137*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: See Attachment A for detailed results.

Notes: The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These estimates reflect control of fugitive dust required by SDAPCD Rule 55 (water a minimum twice per day) and compliance with SDAPCD Rule 67, which limits VOC content of architectural coatings.
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 2, Option B would result in a slight decrease in daily construction emissions for all criteria air pollutants compared with Option A and would not exceed SDAPCD's significance thresholds for any criteria air pollutant. Therefore, impacts would be **less than significant**.

3.2.2 Operational Criteria Air Pollutant Emissions Analysis

Option B includes the construction of 38 residential units and would slightly decrease the intensity of development compared with Option 1. The proposed project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile and stationary sources, including vehicular traffic and area sources (water heating and landscaping).

Option B would impact air quality through an increase in vehicular traffic generated by project residents and visitors. CalEEMod was utilized to estimate daily emissions from proposed vehicular sources (refer to Attachment A). CalEEMod default data, including temperature, trip characteristics, variable start information, vehicle mix, and emissions factors, were conservatively used for the model inputs. Emission factors representing the vehicle mix and emissions for 2022 (first year full buildout) were used to estimate emissions.

Emissions from energy sources, which include natural gas appliances and space and water heating, were also estimated using CalEEMod. Default values for indoor and outdoor water use, solid waste generation, and natural gas consumption (through Title 24 and non-Title 24 natural gas energy intensities) were used for the proposed project. The proposed project is expected to meet the 2016 Title 24 standards, which requires that new residential development are required to achieve a 28% energy savings compared with 2013 Title 24 standards (CEC 2015).

In addition to estimating mobile source emissions, CalEEMod was also used to estimate emissions from the project area stationary sources, which include natural gas appliances, hearths, landscaping, consumer products, and maintenance application of architectural coatings. It was assumed all residential units would be constructed with natural gas fireplaces and no wood-burning devices. Similar to construction-related architectural coating emission estimates, CalEEMod default values of 250 grams per liter for residential and non-residential interior coatings and 250 grams per liter for residential and non-residential exterior coatings were replaced with VOC contents of 50 and 100 grams per liter based on SDAPCD regulations.

Table 3 presents the maximum daily emissions associated with the operation of Option B compared with the maximum operational emissions associated with development of the Option A project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Complete details of the emissions calculations are provided in Attachment A.

Table 3
Estimated Maximum Daily Operational Criteria Air Pollutant Emissions for Option A and Option B

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds per day					
Option A (48 units) Estimated Emissions						
Option A Project	2.27	2.96	9.82	0.03	1.80	0.57
Option B (38 units) Estimated Emissions						
Area Sources	1.65	0.67	3.42	0.00	0.07	0.07
Energy	0.02	0.13	0.06	0.00	0.01	0.01
Motor Vehicles	0.37	1.54	4.31	0.02	1.35	0.37
Total	**2.04**	**2.34**	**7.79**	**0.02**	**1.43**	**0.45**
Emission Threshold	*137*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: See Attachment A for detailed results.
Notes: The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These estimates reflect compliance with SDAPCD Rule 67, which limits VOC content of architectural coatings, assumed no wood burning devices, compliance with 2016 Title 24 standards (28% more efficient than 2013 standards for residential construction), compliance with CALGreen (20% indoor and outdoor reduction in water consumption), and compliance with AB 341 (75% waste diverted from landfills).
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 3, Option B would result in a slight decrease in daily operational emissions for all criteria air pollutants compared with Option A and would not exceed SDAPCD's significance thresholds for any criteria air pollutant. Therefore, impacts would be **less than significant**.

4 CONCLUSIONS

Construction of Option B which includes 38 residential units instead of the 48 residential units proposed under Option A would result in a decrease in estimated maximum daily construction emissions. Emissions generated during construction of the proposed project would not exceed the SDAPCD's significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ and thus construction impacts would be **less than significant**. Option B's operational emissions would also result in a decrease in estimated maximum daily operational emissions compared with Option A. Operation of Option B would not result in criteria air pollutant emissions that would

exceed the SDAPCD thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ and thus operational impacts would be **less than significant**.

5 REFERENCES

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SOURCE: Benson & Bohl Architects 2017

FIGURE 1
Conceptual Site Plan - Option B (38 Units)

ATTACHMENT A

Air Quality Emissions Calculations

Watermark (Option 2)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	100.00	Space	1.23	53,430.00	0
Racquet Club	1.20	1000sqft	0.03	1,200.00	0
Recreational Swimming Pool	1.85	1000sqft	0.04	1,850.00	0
Condo/Townhouse	38.00	Dwelling Unit	1.07	60,660.00	109

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Watermark Del Mar Project (Option 2). CO2 intensity factor adjusted to refect 33% RPS.

Land Use - Project consists of 38 dwelling units, 1,850 sf pool, and 100 space parking structure on a 2.37 acre site.

Construction Phase - Construction to begin June 2019 and would be completed by June 2021.

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Trips and VMT - 135 haul trips. Worker and vendor trip length = 8 miles, hauling trip length = 5 miles. Assumed water and asphalt trucks as vendor trips.

Grading - Export of 26,500 cy of soil

Architectural Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Vehicle Trips - Recreational amentites would not generate trips

Woodstoves - assumes all units have gas fireplaces

Area Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Energy Use - Default energy use intensity

Water And Wastewater - Default water and wastewater

Solid Waste - Default solid waste

Construction Off-road Equipment Mitigation - water exposed area 2x per day

Energy Mitigation - Meet 2016 Title 24 standards (28% more efficient than 2013).

Water Mitigation - 20% indoor and outdoor water consumption reduction per City CAP goal.

Waste Mitigation - 80% waste diversion consistent with the City's CAP.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	375.00
tblConstructionPhase	NumDays	6.00	25.00

tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	10.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	20.90	38.00
tblFireplaces	NumberNoFireplace	3.80	0.00
tblFireplaces	NumberWood	13.30	0.00
tblGrading	MaterialExported	0.00	26,500.00
tblLandUse	BuildingSpaceSquareFeet	40,000.00	53,430.00
tblLandUse	BuildingSpaceSquareFeet	38,000.00	60,660.00
tblLandUse	LandUseSquareFeet	40,000.00	53,430.00
tblLandUse	LandUseSquareFeet	38,000.00	60,660.00
tblLandUse	LotAcreage	0.90	1.23
tblLandUse	LotAcreage	2.38	1.07
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	OperationalYear	2018	2022
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	3,313.00	135.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripLength	7.30	8.00

tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0621	0.6225	0.5147	9.3000e-004	0.0193	0.0337	0.0530	3.4900e-003	0.0315	0.0350	0.0000	83.7420	83.7420	0.0191	0.0000	84.2198
2020	0.2015	1.7812	1.7960	3.4500e-003	0.0521	0.0991	0.1512	0.0141	0.0953	0.1094	0.0000	305.6856	305.6856	0.0367	0.0000	306.6024
2021	0.3237	0.5880	0.6515	1.2500e-003	0.0178	0.0312	0.0491	4.8300e-003	0.0302	0.0350	0.0000	110.0283	110.0283	0.0124	0.0000	110.3379
Maximum	**0.3237**	**1.7812**	**1.7960**	**3.4500e-003**	**0.0521**	**0.0991**	**0.1512**	**0.0141**	**0.0953**	**0.1094**	**0.0000**	**305.6856**	**305.6856**	**0.0367**	**0.0000**	**306.6024**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0621	0.6225	0.5147	9.3000e-004	0.0132	0.0337	0.0469	2.7800e-003	0.0315	0.0343	0.0000	83.7419	83.7419	0.0191	0.0000	84.2197
2020	0.2015	1.7812	1.7960	3.4500e-003	0.0521	0.0991	0.1512	0.0141	0.0953	0.1094	0.0000	305.6853	305.6853	0.0367	0.0000	306.6021
2021	0.3237	0.5880	0.6515	1.2500e-003	0.0178	0.0312	0.0491	4.8300e-003	0.0302	0.0350	0.0000	110.0282	110.0282	0.0124	0.0000	110.3378
Maximum	**0.3237**	**1.7812**	**1.7960**	**3.4500e-003**	**0.0521**	**0.0991**	**0.1512**	**0.0141**	**0.0953**	**0.1094**	**0.0000**	**305.6853**	**305.6853**	**0.0367**	**0.0000**	**306.6021**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**6.87**	**0.00**	**2.42**	**3.16**	**0.00**	**0.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2815	0.0291	0.2944	1.8000e-004		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	30.3934	30.3934	1.0200e-003	5.5000e-004	30.5825
Energy	3.5800e-003	0.0306	0.0133	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	175.1148	175.1148	8.2300e-003	2.2100e-003	175.9797
Mobile	0.0612	0.2740	0.7398	2.6100e-003	0.2311	2.1800e-003	0.2333	0.0619	2.0400e-003	0.0639	0.0000	240.6352	240.6352	0.0125	0.0000	240.9474
Waste						0.0000	0.0000		0.0000	0.0000	7.0783	0.0000	7.0783	0.4183	0.0000	17.5362
Water						0.0000	0.0000		0.0000	0.0000	0.8427	12.9324	13.7751	0.0873	2.1900e-003	16.6085
Total	**0.3463**	**0.3337**	**1.0475**	**2.9900e-003**	**0.2311**	**8.3000e-003**	**0.2394**	**0.0619**	**8.1600e-003**	**0.0700**	**7.9210**	**459.0757**	**466.9967**	**0.5273**	**4.9500e-003**	**481.6544**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2815	0.0291	0.2944	1.8000e-004		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	30.3934	30.3934	1.0200e-003	5.5000e-004	30.5825
Energy	2.8300e-003	0.0242	0.0106	1.5000e-004		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	152.6664	152.6664	7.2800e-003	1.9100e-003	153.4168
Mobile	0.0612	0.2740	0.7398	2.6100e-003	0.2311	2.1800e-003	0.2333	0.0619	2.0400e-003	0.0639	0.0000	240.6352	240.6352	0.0125	0.0000	240.9474
Waste						0.0000	0.0000		0.0000	0.0000	1.4157	0.0000	1.4157	0.0837	0.0000	3.5072
Water						0.0000	0.0000		0.0000	0.0000	0.6742	10.3459	11.0201	0.0698	1.7500e-003	13.2868
Total	**0.3456**	**0.3273**	**1.0448**	**2.9400e-003**	**0.2311**	**7.7800e-003**	**0.2389**	**0.0619**	**7.6400e-003**	**0.0695**	**2.0898**	**434.0409**	**436.1307**	**0.1743**	**4.2100e-003**	**441.7409**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.22**	**1.92**	**0.26**	**1.67**	**0.00**	**6.27**	**0.22**	**0.00**	**6.37**	**0.74**	**73.62**	**5.45**	**6.61**	**66.95**	**14.95**	**8.29**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/14/2019	5	10	
2	Grading	Grading	6/15/2019	7/19/2019	5	25	
3	Trenching	Trenching	10/26/2019	11/22/2019	5	20	
4	Building Construction	Building Construction	11/23/2019	4/30/2021	5	375	
5	Paving	Paving	11/23/2019	12/20/2019	5	20	
6	Architectural Coating	Architectural Coating	5/1/2021	6/4/2021	5	25	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 1.23

Residential Indoor: 122,837; Residential Outdoor: 40,946; Non-Residential Indoor: 1,800; Non-Residential Outdoor: 600; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	3	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	135.00	8.00	8.00	5.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	51.00	13.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	2.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	10.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6500e-003	0.0000	2.6500e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0900e-003	0.0604	0.0331	7.0000e-005		2.8700e-003	2.8700e-003		2.6400e-003	2.6400e-003	0.0000	5.9669	5.9669	1.8900e-003	0.0000	6.0141
Total	**5.0900e-003**	**0.0604**	**0.0331**	**7.0000e-005**	**2.6500e-003**	**2.8700e-003**	**5.5200e-003**	**2.9000e-004**	**2.6400e-003**	**2.9300e-003**	**0.0000**	**5.9669**	**5.9669**	**1.8900e-003**	**0.0000**	**6.0141**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	9.0000e-005	9.3000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2240	0.2240	1.0000e-005	0.0000	0.2242
Total	**1.3000e-004**	**9.0000e-005**	**9.3000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2240**	**0.2240**	**1.0000e-005**	**0.0000**	**0.2242**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1900e-003	0.0000	1.1900e-003	1.3000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0900e-003	0.0604	0.0331	7.0000e-005		2.8700e-003	2.8700e-003		2.6400e-003	2.6400e-003	0.0000	5.9669	5.9669	1.8900e-003	0.0000	6.0141
Total	**5.0900e-003**	**0.0604**	**0.0331**	**7.0000e-005**	**1.1900e-003**	**2.8700e-003**	**4.0600e-003**	**1.3000e-004**	**2.6400e-003**	**2.7700e-003**	**0.0000**	**5.9669**	**5.9669**	**1.8900e-003**	**0.0000**	**6.0141**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	9.0000e-005	9.3000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2240	0.2240	1.0000e-005	0.0000	0.2242
Total	**1.3000e-004**	**9.0000e-005**	**9.3000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2240**	**0.2240**	**1.0000e-005**	**0.0000**	**0.2242**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.4900e-003	0.0000	8.4900e-003	1.0000e-003	0.0000	1.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0180	0.1979	0.1391	2.5000e-004		0.0102	0.0102		9.3700e-003	9.3700e-003	0.0000	22.2101	22.2101	7.0300e-003	0.0000	22.3858
Total	**0.0180**	**0.1979**	**0.1391**	**2.5000e-004**	**8.4900e-003**	**0.0102**	**0.0187**	**1.0000e-003**	**9.3700e-003**	**0.0104**	**0.0000**	**22.2101**	**22.2101**	**7.0300e-003**	**0.0000**	**22.3858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5000e-004	0.0102	1.9200e-003	2.0000e-005	2.9000e-004	2.0000e-005	3.1000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.8134	1.8134	2.2000e-004	0.0000	1.8190
Vendor	1.2000e-004	3.2900e-003	8.8000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.1000e-004	5.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7153	0.7153	6.0000e-005	0.0000	0.7167
Worker	5.2000e-004	3.8000e-004	3.7600e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.9099	0.9099	3.0000e-005	0.0000	0.9106
Total	**8.9000e-004**	**0.0138**	**6.5600e-003**	**4.0000e-005**	**1.4400e-003**	**5.0000e-005**	**1.4900e-003**	**3.9000e-004**	**5.0000e-005**	**4.4000e-004**	**0.0000**	**3.4386**	**3.4386**	**3.1000e-004**	**0.0000**	**3.4463**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.8200e-003	0.0000	3.8200e-003	4.5000e-004	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0180	0.1979	0.1391	2.5000e-004		0.0102	0.0102		9.3700e-003	9.3700e-003	0.0000	22.2101	22.2101	7.0300e-003	0.0000	22.3858
Total	**0.0180**	**0.1979**	**0.1391**	**2.5000e-004**	**3.8200e-003**	**0.0102**	**0.0140**	**4.5000e-004**	**9.3700e-003**	**9.8200e-003**	**0.0000**	**22.2101**	**22.2101**	**7.0300e-003**	**0.0000**	**22.3858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5000e-004	0.0102	1.9200e-003	2.0000e-005	2.9000e-004	2.0000e-005	3.1000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.8134	1.8134	2.2000e-004	0.0000	1.8190
Vendor	1.2000e-004	3.2900e-003	8.8000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.1000e-004	5.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7153	0.7153	6.0000e-005	0.0000	0.7167
Worker	5.2000e-004	3.8000e-004	3.7600e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.9099	0.9099	3.0000e-005	0.0000	0.9106
Total	**8.9000e-004**	**0.0138**	**6.5600e-003**	**4.0000e-005**	**1.4400e-003**	**5.0000e-005**	**1.4900e-003**	**3.9000e-004**	**5.0000e-005**	**4.4000e-004**	**0.0000**	**3.4386**	**3.4386**	**3.1000e-004**	**0.0000**	**3.4463**

3.4 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9800e-003	0.0701	0.0691	9.0000e-005		4.6800e-003	4.6800e-003		4.3100e-003	4.3100e-003	0.0000	8.3699	8.3699	2.6500e-003	0.0000	8.4361
Total	**6.9800e-003**	**0.0701**	**0.0691**	**9.0000e-005**		**4.6800e-003**	**4.6800e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**8.3699**	**8.3699**	**2.6500e-003**	**0.0000**	**8.4361**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**2.6000e-004**	**1.9000e-004**	**1.8500e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4480**	**0.4480**	**1.0000e-005**	**0.0000**	**0.4483**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9800e-003	0.0701	0.0691	9.0000e-005		4.6800e-003	4.6800e-003		4.3100e-003	4.3100e-003	0.0000	8.3699	8.3699	2.6500e-003	0.0000	8.4361
Total	**6.9800e-003**	**0.0701**	**0.0691**	**9.0000e-005**		**4.6800e-003**	**4.6800e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**8.3699**	**8.3699**	**2.6500e-003**	**0.0000**	**8.4361**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**2.6000e-004**	**1.9000e-004**	**1.8500e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4480**	**0.4480**	**1.0000e-005**	**0.0000**	**0.4483**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0200	0.1763	0.1662	2.6000e-004		0.0116	0.0116		0.0112	0.0112	0.0000	22.9502	22.9502	3.4000e-003	0.0000	23.0351
Total	**0.0200**	**0.1763**	**0.1662**	**2.6000e-004**		**0.0116**	**0.0116**		**0.0112**	**0.0112**	**0.0000**	**22.9502**	**22.9502**	**3.4000e-003**	**0.0000**	**23.0351**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.7000e-004	0.0231	6.1900e-003	5.0000e-005	1.2800e-003	1.7000e-004	1.4400e-003	3.7000e-004	1.6000e-004	5.3000e-004	0.0000	5.0214	5.0214	3.9000e-004	0.0000	5.0312
Worker	2.2000e-003	1.6100e-003	0.0159	4.0000e-005	4.0900e-003	3.0000e-005	4.1200e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.8551	3.8551	1.3000e-004	0.0000	3.8583
Total	**3.0700e-003**	**0.0247**	**0.0221**	**9.0000e-005**	**5.3700e-003**	**2.0000e-004**	**5.5600e-003**	**1.4600e-003**	**1.9000e-004**	**1.6500e-003**	**0.0000**	**8.8766**	**8.8766**	**5.2000e-004**	**0.0000**	**8.8895**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0200	0.1763	0.1662	2.6000e-004		0.0116	0.0116		0.0112	0.0112	0.0000	22.9501	22.9501	3.4000e-003	0.0000	23.0351
Total	**0.0200**	**0.1763**	**0.1662**	**2.6000e-004**		**0.0116**	**0.0116**		**0.0112**	**0.0112**	**0.0000**	**22.9501**	**22.9501**	**3.4000e-003**	**0.0000**	**23.0351**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.7000e-004	0.0231	6.1900e-003	5.0000e-005	1.2800e-003	1.7000e-004	1.4400e-003	3.7000e-004	1.6000e-004	5.3000e-004	0.0000	5.0214	5.0214	3.9000e-004	0.0000	5.0312
Worker	2.2000e-003	1.6100e-003	0.0159	4.0000e-005	4.0900e-003	3.0000e-005	4.1200e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.8551	3.8551	1.3000e-004	0.0000	3.8583
Total	**3.0700e-003**	**0.0247**	**0.0221**	**9.0000e-005**	**5.3700e-003**	**2.0000e-004**	**5.5600e-003**	**1.4600e-003**	**1.9000e-004**	**1.6500e-003**	**0.0000**	**8.8766**	**8.8766**	**5.2000e-004**	**0.0000**	**8.8895**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1747	1.5644	1.6007	2.5500e-003		0.0977	0.0977		0.0940	0.0940	0.0000	221.0716	221.0716	0.0319	0.0000	221.8701
Total	**0.1747**	**1.5644**	**1.6007**	**2.5500e-003**		**0.0977**	**0.0977**		**0.0940**	**0.0940**	**0.0000**	**221.0716**	**221.0716**	**0.0319**	**0.0000**	**221.8701**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8700e-003	0.2027	0.0539	5.0000e-004	0.0124	1.0300e-003	0.0134	3.5700e-003	9.9000e-004	4.5600e-003	0.0000	48.3844	48.3844	3.6100e-003	0.0000	48.4745
Worker	0.0200	0.0141	0.1413	4.0000e-004	0.0397	3.0000e-004	0.0400	0.0106	2.7000e-004	0.0108	0.0000	36.2297	36.2297	1.1200e-003	0.0000	36.2577
Total	**0.0268**	**0.2168**	**0.1953**	**9.0000e-004**	**0.0521**	**1.3300e-003**	**0.0534**	**0.0141**	**1.2600e-003**	**0.0154**	**0.0000**	**84.6140**	**84.6140**	**4.7300e-003**	**0.0000**	**84.7322**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1747	1.5644	1.6007	2.5500e-003		0.0977	0.0977		0.0940	0.0940	0.0000	221.0713	221.0713	0.0319	0.0000	221.8699
Total	**0.1747**	**1.5644**	**1.6007**	**2.5500e-003**		**0.0977**	**0.0977**		**0.0940**	**0.0940**	**0.0000**	**221.0713**	**221.0713**	**0.0319**	**0.0000**	**221.8699**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8700e-003	0.2027	0.0539	5.0000e-004	0.0124	1.0300e-003	0.0134	3.5700e-003	9.9000e-004	4.5600e-003	0.0000	48.3844	48.3844	3.6100e-003	0.0000	48.4745
Worker	0.0200	0.0141	0.1413	4.0000e-004	0.0397	3.0000e-004	0.0400	0.0106	2.7000e-004	0.0108	0.0000	36.2297	36.2297	1.1200e-003	0.0000	36.2577
Total	**0.0268**	**0.2168**	**0.1953**	**9.0000e-004**	**0.0521**	**1.3300e-003**	**0.0534**	**0.0141**	**1.2600e-003**	**0.0154**	**0.0000**	**84.6140**	**84.6140**	**4.7300e-003**	**0.0000**	**84.7322**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0514	0.4665	0.5216	8.4000e-004		0.0275	0.0275		0.0264	0.0264	0.0000	72.5693	72.5693	0.0102	0.0000	72.8251
Total	**0.0514**	**0.4665**	**0.5216**	**8.4000e-004**		**0.0275**	**0.0275**		**0.0264**	**0.0264**	**0.0000**	**72.5693**	**72.5693**	**0.0102**	**0.0000**	**72.8251**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8200e-003	0.0598	0.0160	1.6000e-004	4.0600e-003	1.3000e-004	4.2000e-003	1.1700e-003	1.3000e-004	1.3000e-003	0.0000	15.7363	15.7363	1.1400e-003	0.0000	15.7647
Worker	6.1700e-003	4.2000e-003	0.0433	1.3000e-004	0.0130	1.0000e-004	0.0131	3.4600e-003	9.0000e-005	3.5500e-003	0.0000	11.4929	11.4929	3.4000e-004	0.0000	11.5014
Total	**7.9900e-003**	**0.0640**	**0.0593**	**2.9000e-004**	**0.0171**	**2.3000e-004**	**0.0173**	**4.6300e-003**	**2.2000e-004**	**4.8500e-003**	**0.0000**	**27.2292**	**27.2292**	**1.4800e-003**	**0.0000**	**27.2661**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0514	0.4665	0.5216	8.4000e-004		0.0275	0.0275		0.0264	0.0264	0.0000	72.5692	72.5692	0.0102	0.0000	72.8250
Total	**0.0514**	**0.4665**	**0.5216**	**8.4000e-004**		**0.0275**	**0.0275**		**0.0264**	**0.0264**	**0.0000**	**72.5692**	**72.5692**	**0.0102**	**0.0000**	**72.8250**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8200e-003	0.0598	0.0160	1.6000e-004	4.0600e-003	1.3000e-004	4.2000e-003	1.1700e-003	1.3000e-004	1.3000e-003	0.0000	15.7363	15.7363	1.1400e-003	0.0000	15.7647
Worker	6.1700e-003	4.2000e-003	0.0433	1.3000e-004	0.0130	1.0000e-004	0.0131	3.4600e-003	9.0000e-005	3.5500e-003	0.0000	11.4929	11.4929	3.4000e-004	0.0000	11.5014
Total	**7.9900e-003**	**0.0640**	**0.0593**	**2.9000e-004**	**0.0171**	**2.3000e-004**	**0.0173**	**4.6300e-003**	**2.2000e-004**	**4.8500e-003**	**0.0000**	**27.2292**	**27.2292**	**1.4800e-003**	**0.0000**	**27.2661**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.2700e-003	0.0762	0.0733	1.1000e-004		4.1200e-003	4.1200e-003		3.7900e-003	3.7900e-003	0.0000	10.2376	10.2376	3.2400e-003	0.0000	10.3186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.2700e-003**	**0.0762**	**0.0733**	**1.1000e-004**		**4.1200e-003**	**4.1200e-003**		**3.7900e-003**	**3.7900e-003**	**0.0000**	**10.2376**	**10.2376**	**3.2400e-003**	**0.0000**	**10.3186**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	2.6300e-003	7.1000e-004	1.0000e-005	1.5000e-004	2.0000e-005	1.6000e-004	4.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.5722	0.5722	4.0000e-005	0.0000	0.5734
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**3.6000e-004**	**2.8200e-003**	**2.5600e-003**	**1.0000e-005**	**6.3000e-004**	**2.0000e-005**	**6.4000e-004**	**1.7000e-004**	**2.0000e-005**	**1.9000e-004**	**0.0000**	**1.0202**	**1.0202**	**5.0000e-005**	**0.0000**	**1.0217**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.2700e-003	0.0762	0.0733	1.1000e-004		4.1200e-003	4.1200e-003		3.7900e-003	3.7900e-003	0.0000	10.2376	10.2376	3.2400e-003	0.0000	10.3186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.2700e-003**	**0.0762**	**0.0733**	**1.1000e-004**		**4.1200e-003**	**4.1200e-003**		**3.7900e-003**	**3.7900e-003**	**0.0000**	**10.2376**	**10.2376**	**3.2400e-003**	**0.0000**	**10.3186**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	2.6300e-003	7.1000e-004	1.0000e-005	1.5000e-004	2.0000e-005	1.6000e-004	4.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.5722	0.5722	4.0000e-005	0.0000	0.5734
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**3.6000e-004**	**2.8200e-003**	**2.5600e-003**	**1.0000e-005**	**6.3000e-004**	**2.0000e-005**	**6.4000e-004**	**1.7000e-004**	**2.0000e-005**	**1.9000e-004**	**0.0000**	**1.0202**	**1.0202**	**5.0000e-005**	**0.0000**	**1.0217**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2558					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2100e-003	0.0573	0.0682	1.1000e-004		3.5300e-003	3.5300e-003		3.5300e-003	3.5300e-003	0.0000	9.5747	9.5747	6.6000e-004	0.0000	9.5911
Total	**0.2640**	**0.0573**	**0.0682**	**1.1000e-004**		**3.5300e-003**	**3.5300e-003**		**3.5300e-003**	**3.5300e-003**	**0.0000**	**9.5747**	**9.5747**	**6.6000e-004**	**0.0000**	**9.5911**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.4000e-004	2.4700e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.5000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.6551	0.6551	2.0000e-005	0.0000	0.6556
Total	**3.5000e-004**	**2.4000e-004**	**2.4700e-003**	**1.0000e-005**	**7.4000e-004**	**1.0000e-005**	**7.5000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6551**	**0.6551**	**2.0000e-005**	**0.0000**	**0.6556**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2558					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2100e-003	0.0573	0.0682	1.1000e-004		3.5300e-003	3.5300e-003		3.5300e-003	3.5300e-003	0.0000	9.5747	9.5747	6.6000e-004	0.0000	9.5911
Total	**0.2640**	**0.0573**	**0.0682**	**1.1000e-004**		**3.5300e-003**	**3.5300e-003**		**3.5300e-003**	**3.5300e-003**	**0.0000**	**9.5747**	**9.5747**	**6.6000e-004**	**0.0000**	**9.5911**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.4000e-004	2.4700e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.5000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.6551	0.6551	2.0000e-005	0.0000	0.6556
Total	**3.5000e-004**	**2.4000e-004**	**2.4700e-003**	**1.0000e-005**	**7.4000e-004**	**1.0000e-005**	**7.5000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6551**	**0.6551**	**2.0000e-005**	**0.0000**	**0.6556**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0612	0.2740	0.7398	2.6100e-003	0.2311	2.1800e-003	0.2333	0.0619	2.0400e-003	0.0639	0.0000	240.6352	240.6352	0.0125	0.0000	240.9474
Unmitigated	0.0612	0.2740	0.7398	2.6100e-003	0.2311	2.1800e-003	0.2333	0.0619	2.0400e-003	0.0639	0.0000	240.6352	240.6352	0.0125	0.0000	240.9474

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	220.78	215.46	183.92	613,189	613,189
Enclosed Parking with Elevator	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	220.78	215.46	183.92	613,189	613,189

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Racquet Club	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Recreational Swimming Pool	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Condo/Townhouse	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	124.6693	124.6693	6.7400e-003	1.3900e-003	125.2534
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	139.7069	139.7069	7.5500e-003	1.5600e-003	140.3615
NaturalGas Mitigated	2.8300e-003	0.0242	0.0106	1.5000e-004		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	27.9970	27.9970	5.4000e-004	5.1000e-004	28.1634
NaturalGas Unmitigated	3.5800e-003	0.0306	0.0133	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4079	35.4079	6.8000e-004	6.5000e-004	35.6183

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	649610	3.5000e-003	0.0299	0.0127	1.9000e-004		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	34.6657	34.6657	6.6000e-004	6.4000e-004	34.8717
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	13908	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7422	0.7422	1.0000e-005	1.0000e-005	0.7466
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**3.5700e-003**	**0.0306**	**0.0133**	**1.9000e-004**		**2.4700e-003**	**2.4700e-003**		**2.4700e-003**	**2.4700e-003**	**0.0000**	**35.4079**	**35.4079**	**6.7000e-004**	**6.5000e-004**	**35.6183**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	512195	2.7600e-003	0.0236	0.0100	1.5000e-004		1.9100e-003	1.9100e-003		1.9100e-003	1.9100e-003	0.0000	27.3327	27.3327	5.2000e-004	5.0000e-004	27.4951
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	12449.8	7.0000e-005	6.1000e-004	5.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6644	0.6644	1.0000e-005	1.0000e-005	0.6683
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8300e-003**	**0.0242**	**0.0106**	**1.5000e-004**		**1.9600e-003**	**1.9600e-003**		**1.9600e-003**	**1.9600e-003**	**0.0000**	**27.9970**	**27.9970**	**5.3000e-004**	**5.1000e-004**	**28.1634**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	203985	49.6272	2.6800e-003	5.6000e-004	49.8597
Enclosed Parking with Elevator	360118	87.6127	4.7400e-003	9.8000e-004	88.0232
Racquet Club	10140	2.4670	1.3000e-004	3.0000e-005	2.4785
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**139.7069**	**7.5500e-003**	**1.5700e-003**	**140.3615**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	201247	48.9611	2.6500e-003	5.5000e-004	49.1905
Enclosed Parking with Elevator	301473	73.3451	3.9700e-003	8.2000e-004	73.6888
Racquet Club	9713.28	2.3631	1.3000e-004	3.0000e-005	2.3742
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**124.6693**	**6.7500e-003**	**1.4000e-003**	**125.2534**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2815	0.0291	0.2944	1.8000e-004		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	30.3934	30.3934	1.0200e-003	5.5000e-004	30.5825
Unmitigated	0.2815	0.0291	0.2944	1.8000e-004		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	30.3934	30.3934	1.0200e-003	5.5000e-004	30.5825

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0248					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2451					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.0200e-003	0.0258	0.0110	1.6000e-004		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	29.9307	29.9307	5.7000e-004	5.5000e-004	30.1086
Landscaping	8.6200e-003	3.2700e-003	0.2834	1.0000e-005		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	0.4627	0.4627	4.5000e-004	0.0000	0.4740
Total	**0.2815**	**0.0291**	**0.2944**	**1.7000e-004**		**3.6500e-003**	**3.6500e-003**		**3.6500e-003**	**3.6500e-003**	**0.0000**	**30.3934**	**30.3934**	**1.0200e-003**	**5.5000e-004**	**30.5825**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0248					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2451					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.0200e-003	0.0258	0.0110	1.6000e-004		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	29.9307	29.9307	5.7000e-004	5.5000e-004	30.1086
Landscaping	8.6200e-003	3.2700e-003	0.2834	1.0000e-005		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	0.4627	0.4627	4.5000e-004	0.0000	0.4740
Total	**0.2815**	**0.0291**	**0.2944**	**1.7000e-004**		**3.6500e-003**	**3.6500e-003**		**3.6500e-003**	**3.6500e-003**	**0.0000**	**30.3934**	**30.3934**	**1.0200e-003**	**5.5000e-004**	**30.5825**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.0201	0.0698	1.7500e-003	13.2868
Unmitigated	13.7751	0.0873	2.1900e-003	16.6085

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	2.47585 / 1.56086	12.8476	0.0813	2.0400e-003	15.4886
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0709718 / 0.0434089	0.3649	2.3300e-003	6.0000e-005	0.4406
Recreational Swimming Pool	0.109415 / 0.0670607	0.5626	3.5900e-003	9.0000e-005	0.6793
Total		**13.7751**	**0.0873**	**2.1900e-003**	**16.6085**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	1.98068 / 1.24869	10.2781	0.0651	1.6300e-003	12.3909
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0567774 /	0.2919	1.8600e-003	5.0000e-005	0.3525
Recreational Swimming Pool	0.0875319 /	0.4501	2.8800e-003	7.0000e-005	0.5434
Total		**11.0201**	**0.0698**	**1.7500e-003**	**13.2868**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.4157	0.0837	0.0000	3.5072
Unmitigated	7.0783	0.4183	0.0000	17.5362

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	17.48	3.5483	0.2097	0.0000	8.7907
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	6.84	1.3885	0.0821	0.0000	3.4399
Recreational Swimming Pool	10.55	2.1416	0.1266	0.0000	5.3056
Total		**7.0783**	**0.4183**	**0.0000**	**17.5362**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	3.496	0.7097	0.0419	0.0000	1.7581
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	1.368	0.2777	0.0164	0.0000	0.6880
Recreational Swimming Pool	2.11	0.4283	0.0253	0.0000	1.0611
Total		**1.4157**	**0.0837**	**0.0000**	**3.5072**

Watermark (Option 2)

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	100.00	Space	1.23	53,430.00	0
Racquet Club	1.20	1000sqft	0.03	1,200.00	0
Recreational Swimming Pool	1.85	1000sqft	0.04	1,850.00	0
Condo/Townhouse	38.00	Dwelling Unit	1.07	60,660.00	109

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Watermark Del Mar Project (Option 2). CO2 intensity factor adjusted to refect 33% RPS.

Land Use - Project consists of 38 dwelling units, 1,850 sf pool, and 100 space parking structure on a 2.37 acre site.

Construction Phase - Construction to begin June 2019 and would be completed by June 2021.

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Trips and VMT - 135 haul trips. Worker and vendor trip length = 8 miles, hauling trip length = 5 miles. Assumed water and asphalt trucks as vendor trips.

Grading - Export of 26,500 cy of soil

Architectural Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Vehicle Trips - Recreational amentites would not generate trips

Woodstoves - assumes all units have gas fireplaces

Area Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Energy Use - Default energy use intensity

Water And Wastewater - Default water and wastewater

Solid Waste - Default solid waste

Construction Off-road Equipment Mitigation - water exposed area 2x per day

Energy Mitigation - Meet 2016 Title 24 standards (28% more efficient than 2013).

Water Mitigation - 20% indoor and outdoor water consumption reduction per City CAP goal.

Waste Mitigation - 80% waste diversion consistent with the City's CAP.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	375.00
tblConstructionPhase	NumDays	6.00	25.00

tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	10.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	20.90	38.00
tblFireplaces	NumberNoFireplace	3.80	0.00
tblFireplaces	NumberWood	13.30	0.00
tblGrading	MaterialExported	0.00	26,500.00
tblLandUse	BuildingSpaceSquareFeet	40,000.00	53,430.00
tblLandUse	BuildingSpaceSquareFeet	38,000.00	60,660.00
tblLandUse	LandUseSquareFeet	40,000.00	53,430.00
tblLandUse	LandUseSquareFeet	38,000.00	60,660.00
tblLandUse	LotAcreage	0.90	1.23
tblLandUse	LotAcreage	2.38	1.07
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	OperationalYear	2018	2022
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	3,313.00	135.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripLength	7.30	8.00

tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.4732	22.7511	21.5691	0.0392	0.7969	1.2882	1.7586	0.1273	1.2218	1.3491	0.0000	3,864.2135	3,864.2135	0.6831	0.0000	3,881.2911
2020	1.5382	13.5686	13.7385	0.0266	0.4069	0.7561	1.1630	0.1101	0.7273	0.8375	0.0000	2,592.9213	2,592.9213	0.3082	0.0000	2,600.6263
2021	21.1477	12.3140	13.5377	0.0264	0.4069	0.6443	1.0511	0.1101	0.6197	0.7298	0.0000	2,578.4735	2,578.4735	0.2997	0.0000	2,585.9668
Maximum	**21.1477**	**22.7511**	**21.5691**	**0.0392**	**0.7969**	**1.2882**	**1.7586**	**0.1273**	**1.2218**	**1.3491**	**0.0000**	**3,864.2135**	**3,864.2135**	**0.6831**	**0.0000**	**3,881.2911**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.4732	22.7511	21.5691	0.0392	0.4704	1.2882	1.7586	0.1273	1.2218	1.3491	0.0000	3,864.2135	3,864.2135	0.6831	0.0000	3,881.2910
2020	1.5382	13.5686	13.7385	0.0266	0.4069	0.7561	1.1630	0.1101	0.7273	0.8375	0.0000	2,592.9213	2,592.9213	0.3082	0.0000	2,600.6263
2021	21.1477	12.3140	13.5377	0.0264	0.4069	0.6443	1.0511	0.1101	0.6197	0.7298	0.0000	2,578.4735	2,578.4735	0.2997	0.0000	2,585.9668
Maximum	**21.1477**	**22.7511**	**21.5691**	**0.0392**	**0.4704**	**1.2882**	**1.7586**	**0.1273**	**1.2218**	**1.3491**	**0.0000**	**3,864.2135**	**3,864.2135**	**0.6831**	**0.0000**	**3,881.2910**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**20.27**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6482	0.6666	3.4172	4.1900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	810.3734	810.3734	0.0209	0.0148	815.2930
Energy	0.0196	0.1678	0.0729	1.0700e-003		0.0135	0.0135		0.0135	0.0135		213.8657	213.8657	4.1000e-003	3.9200e-003	215.1366
Mobile	0.3652	1.5013	4.3098	0.0154	1.3367	0.0123	1.3490	0.3572	0.0115	0.3687		1,564.7360	1,564.7360	0.0783		1,566.6937
Total	**2.0331**	**2.3357**	**7.8000**	**0.0207**	**1.3367**	**0.0942**	**1.4308**	**0.3572**	**0.0934**	**0.4506**	**0.0000**	**2,588.9751**	**2,588.9751**	**0.1033**	**0.0187**	**2,597.1233**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6482	0.6666	3.4172	4.1900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	810.3734	810.3734	0.0209	0.0148	815.2930
Energy	0.0155	0.1327	0.0578	8.5000e-004		0.0107	0.0107		0.0107	0.0107		169.1038	169.1038	3.2400e-003	3.1000e-003	170.1087
Mobile	0.3652	1.5013	4.3098	0.0154	1.3367	0.0123	1.3490	0.3572	0.0115	0.3687		1,564.7360	1,564.7360	0.0783		1,566.6937
Total	**2.0290**	**2.3006**	**7.7849**	**0.0204**	**1.3367**	**0.0913**	**1.4280**	**0.3572**	**0.0905**	**0.4478**	**0.0000**	**2,544.2132**	**2,544.2132**	**0.1025**	**0.0179**	**2,552.0953**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.20**	**1.50**	**0.19**	**1.07**	**0.00**	**3.01**	**0.20**	**0.00**	**3.03**	**0.63**	**0.00**	**1.73**	**1.73**	**0.83**	**4.39**	**1.73**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/14/2019	5	10	
2	Grading	Grading	6/15/2019	7/19/2019	5	25	
3	Trenching	Trenching	10/26/2019	11/22/2019	5	20	
4	Building Construction	Building Construction	11/23/2019	4/30/2021	5	375	
5	Paving	Paving	11/23/2019	12/20/2019	5	20	
6	Architectural Coating	Architectural Coating	5/1/2021	6/4/2021	5	25	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 1.23

Residential Indoor: 122,837; Residential Outdoor: 40,946; Non-Residential Indoor: 1,800; Non-Residential Outdoor: 600; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	3	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	135.00	8.00	8.00	5.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	51.00	13.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	2.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	10.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.0177	12.0845	6.6093	0.0133		0.5745	0.5745		0.5286	0.5286		1,315.4812	1,315.4812	0.4162		1,325.8863
Total	**1.0177**	**12.0845**	**6.6093**	**0.0133**	**0.5303**	**0.5745**	**1.1048**	**0.0573**	**0.5286**	**0.5858**		**1,315.4812**	**1,315.4812**	**0.4162**		**1,325.8863**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0258	0.0170	0.1932	5.2000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		52.0601	52.0601	1.7000e-003		52.1028
Total	**0.0258**	**0.0170**	**0.1932**	**5.2000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**52.0601**	**52.0601**	**1.7000e-003**		**52.1028**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	1.0177	12.0845	6.6093	0.0133		0.5745	0.5745		0.5286	0.5286	0.0000	1,315.4812	1,315.4812	0.4162		1,325.8863
Total	**1.0177**	**12.0845**	**6.6093**	**0.0133**	**0.2386**	**0.5745**	**0.8131**	**0.0258**	**0.5286**	**0.5543**	**0.0000**	**1,315.4812**	**1,315.4812**	**0.4162**		**1,325.8863**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0258	0.0170	0.1932	5.2000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		52.0601	52.0601	1.7000e-003		52.1028
Total	**0.0258**	**0.0170**	**0.1932**	**5.2000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**52.0601**	**52.0601**	**1.7000e-003**		**52.1028**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6792	0.0000	0.6792	0.0798	0.0000	0.0798			0.0000			0.0000
Off-Road	1.4402	15.8299	11.1279	0.0198		0.8146	0.8146		0.7495	0.7495		1,958.5980	1,958.5980	0.6197		1,974.0900
Total	**1.4402**	**15.8299**	**11.1279**	**0.0198**	**0.6792**	**0.8146**	**1.4938**	**0.0798**	**0.7495**	**0.8293**		**1,958.5980**	**1,958.5980**	**0.6197**		**1,974.0900**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0196	0.8116	0.1414	1.5000e-003	0.0237	1.8400e-003	0.0255	6.5000e-003	1.7600e-003	8.2600e-003		163.2203	163.2203	0.0190		163.6948
Vendor	9.7800e-003	0.2595	0.0672	5.9000e-004	0.0148	1.8800e-003	0.0167	4.2700e-003	1.8000e-003	6.0700e-003		63.7103	63.7103	4.7900e-003		63.8300
Worker	0.0419	0.0276	0.3140	8.5000e-004	0.0791	5.9000e-004	0.0797	0.0210	5.4000e-004	0.0215		84.5977	84.5977	2.7700e-003		84.6670
Total	**0.0713**	**1.0987**	**0.5226**	**2.9400e-003**	**0.1177**	**4.3100e-003**	**0.1220**	**0.0318**	**4.1000e-003**	**0.0359**		**311.5283**	**311.5283**	**0.0265**		**312.1917**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3056	0.0000	0.3056	0.0359	0.0000	0.0359			0.0000			0.0000
Off-Road	1.4402	15.8299	11.1279	0.0198		0.8146	0.8146		0.7495	0.7495	0.0000	1,958.5980	1,958.5980	0.6197		1,974.0900
Total	**1.4402**	**15.8299**	**11.1279**	**0.0198**	**0.3056**	**0.8146**	**1.1203**	**0.0359**	**0.7495**	**0.7854**	**0.0000**	**1,958.5980**	**1,958.5980**	**0.6197**		**1,974.0900**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0196	0.8116	0.1414	1.5000e-003	0.0237	1.8400e-003	0.0255	6.5000e-003	1.7600e-003	8.2600e-003		163.2203	163.2203	0.0190		163.6948
Vendor	9.7800e-003	0.2595	0.0672	5.9000e-004	0.0148	1.8800e-003	0.0167	4.2700e-003	1.8000e-003	6.0700e-003		63.7103	63.7103	4.7900e-003		63.8300
Worker	0.0419	0.0276	0.3140	8.5000e-004	0.0791	5.9000e-004	0.0797	0.0210	5.4000e-004	0.0215		84.5977	84.5977	2.7700e-003		84.6670
Total	**0.0713**	**1.0987**	**0.5226**	**2.9400e-003**	**0.1177**	**4.3100e-003**	**0.1220**	**0.0318**	**4.1000e-003**	**0.0359**		**311.5283**	**311.5283**	**0.0265**		**312.1917**

3.4 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	7.0121	6.9080	9.3200e-003		0.4681	0.4681		0.4307	0.4307		922.6256	922.6256	0.2919		929.9233
Total	**0.6984**	**7.0121**	**6.9080**	**9.3200e-003**		**0.4681**	**0.4681**		**0.4307**	**0.4307**		**922.6256**	**922.6256**	**0.2919**		**929.9233**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0258	0.0170	0.1932	5.2000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		52.0601	52.0601	1.7000e-003		52.1028
Total	**0.0258**	**0.0170**	**0.1932**	**5.2000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**52.0601**	**52.0601**	**1.7000e-003**		**52.1028**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	7.0121	6.9080	9.3200e-003		0.4681	0.4681		0.4307	0.4307	0.0000	922.6256	922.6256	0.2919		929.9233
Total	**0.6984**	**7.0121**	**6.9080**	**9.3200e-003**		**0.4681**	**0.4681**		**0.4307**	**0.4307**	**0.0000**	**922.6256**	**922.6256**	**0.2919**		**929.9233**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0258	0.0170	0.1932	5.2000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		52.0601	52.0601	1.7000e-003		52.1028
Total	**0.0258**	**0.0170**	**0.1932**	**5.2000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**52.0601**	**52.0601**	**1.7000e-003**		**52.1028**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4825	13.0581	12.3079	0.0195		0.8592	0.8592		0.8266	0.8266		1,873.9416	1,873.9416	0.2776		1,880.8813
Total	**1.4825**	**13.0581**	**12.3079**	**0.0195**		**0.8592**	**0.8592**		**0.8266**	**0.8266**		**1,873.9416**	**1,873.9416**	**0.2776**		**1,880.8813**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0636	1.6864	0.4367	3.8600e-003	0.0964	0.0122	0.1086	0.0278	0.0117	0.0394		414.1168	414.1168	0.0311		414.8947
Worker	0.1643	0.1081	1.2317	3.3300e-003	0.3105	2.3000e-003	0.3128	0.0824	2.1200e-003	0.0845		331.8834	331.8834	0.0109		332.1550
Total	**0.2279**	**1.7946**	**1.6684**	**7.1900e-003**	**0.4069**	**0.0145**	**0.4214**	**0.1101**	**0.0138**	**0.1239**		**746.0002**	**746.0002**	**0.0420**		**747.0497**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4825	13.0581	12.3079	0.0195		0.8592	0.8592		0.8266	0.8266	0.0000	1,873.9416	1,873.9416	0.2776		1,880.8813
Total	**1.4825**	**13.0581**	**12.3079**	**0.0195**		**0.8592**	**0.8592**		**0.8266**	**0.8266**	**0.0000**	**1,873.9416**	**1,873.9416**	**0.2776**		**1,880.8813**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0636	1.6864	0.4367	3.8600e-003	0.0964	0.0122	0.1086	0.0278	0.0117	0.0394		414.1168	414.1168	0.0311		414.8947
Worker	0.1643	0.1081	1.2317	3.3300e-003	0.3105	2.3000e-003	0.3128	0.0824	2.1200e-003	0.0845		331.8834	331.8834	0.0109		332.1550
Total	**0.2279**	**1.7946**	**1.6684**	**7.1900e-003**	**0.4069**	**0.0145**	**0.4214**	**0.1101**	**0.0138**	**0.1239**		**746.0002**	**746.0002**	**0.0420**		**747.0497**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3333	11.9420	12.2191	0.0195		0.7461	0.7461		0.7178	0.7178		1,860.2265	1,860.2265	0.2688		1,866.9463
Total	**1.3333**	**11.9420**	**12.2191**	**0.0195**		**0.7461**	**0.7461**		**0.7178**	**0.7178**		**1,860.2265**	**1,860.2265**	**0.2688**		**1,866.9463**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0515	1.5291	0.3917	3.8300e-003	0.0964	7.8200e-003	0.1042	0.0278	7.4800e-003	0.0352		411.2719	411.2719	0.0296		412.0111
Worker	0.1534	0.0975	1.1277	3.2300e-003	0.3105	2.2600e-003	0.3127	0.0824	2.0800e-003	0.0845		321.4229	321.4229	9.8400e-003		321.6688
Total	**0.2049**	**1.6266**	**1.5194**	**7.0600e-003**	**0.4069**	**0.0101**	**0.4170**	**0.1101**	**9.5600e-003**	**0.1197**		**732.6948**	**732.6948**	**0.0394**		**733.6800**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3333	11.9420	12.2191	0.0195		0.7461	0.7461		0.7178	0.7178	0.0000	1,860.2265	1,860.2265	0.2688		1,866.9463
Total	**1.3333**	**11.9420**	**12.2191**	**0.0195**		**0.7461**	**0.7461**		**0.7178**	**0.7178**	**0.0000**	**1,860.2265**	**1,860.2265**	**0.2688**		**1,866.9463**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0515	1.5291	0.3917	3.8300e-003	0.0964	7.8200e-003	0.1042	0.0278	7.4800e-003	0.0352		411.2719	411.2719	0.0296		412.0111
Worker	0.1534	0.0975	1.1277	3.2300e-003	0.3105	2.2600e-003	0.3127	0.0824	2.0800e-003	0.0845		321.4229	321.4229	9.8400e-003		321.6688
Total	**0.2049**	**1.6266**	**1.5194**	**7.0600e-003**	**0.4069**	**0.0101**	**0.4170**	**0.1101**	**9.5600e-003**	**0.1197**		**732.6948**	**732.6948**	**0.0394**		**733.6800**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1947	10.8494	12.1302	0.0195		0.6390	0.6390		0.6147	0.6147		1,860.3251	1,860.3251	0.2623		1,866.8814
Total	**1.1947**	**10.8494**	**12.1302**	**0.0195**		**0.6390**	**0.6390**		**0.6147**	**0.6147**		**1,860.3251**	**1,860.3251**	**0.2623**		**1,866.8814**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0415	1.3761	0.3535	3.7900e-003	0.0964	3.0200e-003	0.0994	0.0278	2.8800e-003	0.0306		407.5144	407.5144	0.0284		408.2245
Worker	0.1444	0.0885	1.0540	3.1200e-003	0.3105	2.2300e-003	0.3127	0.0824	2.0500e-003	0.0844		310.6340	310.6340	9.0800e-003		310.8610
Total	**0.1859**	**1.4646**	**1.4075**	**6.9100e-003**	**0.4069**	**5.2500e-003**	**0.4121**	**0.1101**	**4.9300e-003**	**0.1151**		**718.1484**	**718.1484**	**0.0375**		**719.0855**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1947	10.8494	12.1302	0.0195		0.6390	0.6390		0.6147	0.6147	0.0000	1,860.3251	1,860.3251	0.2623		1,866.8814
Total	**1.1947**	**10.8494**	**12.1302**	**0.0195**		**0.6390**	**0.6390**		**0.6147**	**0.6147**	**0.0000**	**1,860.3251**	**1,860.3251**	**0.2623**		**1,866.8814**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0415	1.3761	0.3535	3.7900e-003	0.0964	3.0200e-003	0.0994	0.0278	2.8800e-003	0.0306		407.5144	407.5144	0.0284		408.2245
Worker	0.1444	0.0885	1.0540	3.1200e-003	0.3105	2.2300e-003	0.3127	0.0824	2.0500e-003	0.0844		310.6340	310.6340	9.0800e-003		310.8610
Total	**0.1859**	**1.4646**	**1.4075**	**6.9100e-003**	**0.4069**	**5.2500e-003**	**0.4121**	**0.1101**	**4.9300e-003**	**0.1151**		**718.1484**	**718.1484**	**0.0375**		**719.0855**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793		1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7272**	**7.6220**	**7.3324**	**0.0114**		**0.4123**	**0.4123**		**0.3793**	**0.3793**		**1,128.5012**	**1,128.5012**	**0.3571**		**1,137.4274**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.7800e-003	0.2595	0.0672	5.9000e-004	0.0148	1.8800e-003	0.0167	4.2700e-003	1.8000e-003	6.0700e-003		63.7103	63.7103	4.7900e-003		63.8300
Worker	0.0258	0.0170	0.1932	5.2000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		52.0601	52.0601	1.7000e-003		52.1028
Total	**0.0356**	**0.2764**	**0.2604**	**1.1100e-003**	**0.0635**	**2.2400e-003**	**0.0658**	**0.0172**	**2.1300e-003**	**0.0193**		**115.7704**	**115.7704**	**6.4900e-003**		**115.9327**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793	0.0000	1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7272**	**7.6220**	**7.3324**	**0.0114**		**0.4123**	**0.4123**		**0.3793**	**0.3793**	**0.0000**	**1,128.5012**	**1,128.5012**	**0.3571**		**1,137.4274**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.7800e-003	0.2595	0.0672	5.9000e-004	0.0148	1.8800e-003	0.0167	4.2700e-003	1.8000e-003	6.0700e-003		63.7103	63.7103	4.7900e-003		63.8300
Worker	0.0258	0.0170	0.1932	5.2000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		52.0601	52.0601	1.7000e-003		52.1028
Total	**0.0356**	**0.2764**	**0.2604**	**1.1100e-003**	**0.0635**	**2.2400e-003**	**0.0658**	**0.0172**	**2.1300e-003**	**0.0193**		**115.7704**	**115.7704**	**6.4900e-003**		**115.9327**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.4627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6567	4.5805	5.4527	8.9100e-003		0.2823	0.2823		0.2823	0.2823		844.3442	844.3442	0.0579		845.7927
Total	**21.1194**	**4.5805**	**5.4527**	**8.9100e-003**		**0.2823**	**0.2823**		**0.2823**	**0.2823**		**844.3442**	**844.3442**	**0.0579**		**845.7927**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0283	0.0174	0.2067	6.1000e-004	0.0609	4.4000e-004	0.0613	0.0162	4.0000e-004	0.0166		60.9086	60.9086	1.7800e-003		60.9531
Total	**0.0283**	**0.0174**	**0.2067**	**6.1000e-004**	**0.0609**	**4.4000e-004**	**0.0613**	**0.0162**	**4.0000e-004**	**0.0166**		**60.9086**	**60.9086**	**1.7800e-003**		**60.9531**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.4627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6567	4.5805	5.4527	8.9100e-003		0.2823	0.2823		0.2823	0.2823	0.0000	844.3441	844.3441	0.0579		845.7927
Total	**21.1194**	**4.5805**	**5.4527**	**8.9100e-003**		**0.2823**	**0.2823**		**0.2823**	**0.2823**	**0.0000**	**844.3441**	**844.3441**	**0.0579**		**845.7927**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0283	0.0174	0.2067	6.1000e-004	0.0609	4.4000e-004	0.0613	0.0162	4.0000e-004	0.0166		60.9086	60.9086	1.7800e-003		60.9531
Total	**0.0283**	**0.0174**	**0.2067**	**6.1000e-004**	**0.0609**	**4.4000e-004**	**0.0613**	**0.0162**	**4.0000e-004**	**0.0166**		**60.9086**	**60.9086**	**1.7800e-003**		**60.9531**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3652	1.5013	4.3098	0.0154	1.3367	0.0123	1.3490	0.3572	0.0115	0.3687		1,564.7360	1,564.7360	0.0783		1,566.6937
Unmitigated	0.3652	1.5013	4.3098	0.0154	1.3367	0.0123	1.3490	0.3572	0.0115	0.3687		1,564.7360	1,564.7360	0.0783		1,566.6937

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	220.78	215.46	183.92	613,189	613,189
Enclosed Parking with Elevator	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	220.78	215.46	183.92	613,189	613,189

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Racquet Club	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Recreational Swimming Pool	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Condo/Townhouse	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0155	0.1327	0.0578	8.5000e-004		0.0107	0.0107		0.0107	0.0107		169.1038	169.1038	3.2400e-003	3.1000e-003	170.1087
NaturalGas Unmitigated	0.0196	0.1678	0.0729	1.0700e-003		0.0135	0.0135		0.0135	0.0135		213.8657	213.8657	4.1000e-003	3.9200e-003	215.1366

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	1779.75	0.0192	0.1640	0.0698	1.0500e-003		0.0133	0.0133		0.0133	0.0133		209.3829	209.3829	4.0100e-003	3.8400e-003	210.6271
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	38.1041	4.1000e-004	3.7400e-003	3.1400e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		4.4828	4.4828	9.0000e-005	8.0000e-005	4.5095
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0196**	**0.1678**	**0.0729**	**1.0700e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**		**213.8657**	**213.8657**	**4.1000e-003**	**3.9200e-003**	**215.1366**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	1.40327	0.0151	0.1293	0.0550	8.3000e-004		0.0105	0.0105		0.0105	0.0105		165.0910	165.0910	3.1600e-003	3.0300e-003	166.0720
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0341089	3.7000e-004	3.3400e-003	2.8100e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		4.0128	4.0128	8.0000e-005	7.0000e-005	4.0367
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0155**	**0.1327**	**0.0578**	**8.5000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**		**169.1038**	**169.1038**	**3.2400e-003**	**3.1000e-003**	**170.1087**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6482	0.6666	3.4172	4.1900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	810.3734	810.3734	0.0209	0.0148	815.2930
Unmitigated	1.6482	0.6666	3.4172	4.1900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	810.3734	810.3734	0.0209	0.0148	815.2930

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1360					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0738	0.6304	0.2682	4.0200e-003		0.0510	0.0510		0.0510	0.0510	0.0000	804.7059	804.7059	0.0154	0.0148	809.4879
Landscaping	0.0958	0.0363	3.1490	1.7000e-004		0.0174	0.0174		0.0174	0.0174		5.6675	5.6675	5.5100e-003		5.8052

Total	**1.6482**	**0.6666**	**3.4172**	**4.1900e-003**		**0.0683**	**0.0683**		**0.0683**	**0.0683**	**0.0000**	**810.3734**	**810.3734**	**0.0209**	**0.0148**	**815.2930**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1360					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0738	0.6304	0.2682	4.0200e-003		0.0510	0.0510		0.0510	0.0510	0.0000	804.7059	804.7059	0.0154	0.0148	809.4879
Landscaping	0.0958	0.0363	3.1490	1.7000e-004		0.0174	0.0174		0.0174	0.0174		5.6675	5.6675	5.5100e-003		5.8052
Total	**1.6482**	**0.6666**	**3.4172**	**4.1900e-003**		**0.0683**	**0.0683**		**0.0683**	**0.0683**	**0.0000**	**810.3734**	**810.3734**	**0.0209**	**0.0148**	**815.2930**

Watermark (Option 2)

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	100.00	Space	1.23	53,430.00	0
Racquet Club	1.20	1000sqft	0.03	1,200.00	0
Recreational Swimming Pool	1.85	1000sqft	0.04	1,850.00	0
Condo/Townhouse	38.00	Dwelling Unit	1.07	60,660.00	109

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Watermark Del Mar Project (Option 2). CO2 intensity factor adjusted to refect 33% RPS.

Land Use - Project consists of 38 dwelling units, 1,850 sf pool, and 100 space parking structure on a 2.37 acre site.

Construction Phase - Construction to begin June 2019 and would be completed by June 2021.

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Trips and VMT - 135 haul trips. Worker and vendor trip length = 8 miles, hauling trip length = 5 miles. Assumed water and asphalt trucks as vendor trips.

Grading - Export of 26,500 cy of soil

Architectural Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Vehicle Trips - Recreational amentites would not generate trips

Woodstoves - assumes all units have gas fireplaces

Area Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Energy Use - Default energy use intensity

Water And Wastewater - Default water and wastewater

Solid Waste - Default solid waste

Construction Off-road Equipment Mitigation - water exposed area 2x per day

Energy Mitigation - Meet 2016 Title 24 standards (28% more efficient than 2013).

Water Mitigation - 20% indoor and outdoor water consumption reduction per City CAP goal.

Waste Mitigation - 80% waste diversion consistent with the City's CAP.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	375.00
tblConstructionPhase	NumDays	6.00	25.00

tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	10.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	20.90	38.00
tblFireplaces	NumberNoFireplace	3.80	0.00
tblFireplaces	NumberWood	13.30	0.00
tblGrading	MaterialExported	0.00	26,500.00
tblLandUse	BuildingSpaceSquareFeet	40,000.00	53,430.00
tblLandUse	BuildingSpaceSquareFeet	38,000.00	60,660.00
tblLandUse	LandUseSquareFeet	40,000.00	53,430.00
tblLandUse	LandUseSquareFeet	38,000.00	60,660.00
tblLandUse	LotAcreage	0.90	1.23
tblLandUse	LotAcreage	2.38	1.07
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	OperationalYear	2018	2022
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	3,313.00	135.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripLength	7.30	8.00

tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.4971	22.7711	21.5671	0.0389	0.7969	1.2884	1.7589	0.1273	1.2220	1.3493	0.0000	3,829.5762	3,829.5762	0.6848	0.0000	3,846.6948
2020	1.5576	13.5817	13.7339	0.0263	0.4069	0.7563	1.1632	0.1101	0.7275	0.8376	0.0000	2,563.5084	2,563.5084	0.3095	0.0000	2,571.2464
2021	21.1509	12.3232	13.5301	0.0261	0.4069	0.6444	1.0512	0.1101	0.6198	0.7299	0.0000	2,549.7720	2,549.7720	0.3010	0.0000	2,557.2966
Maximum	**21.1509**	**22.7711**	**21.5671**	**0.0389**	**0.7969**	**1.2884**	**1.7589**	**0.1273**	**1.2220**	**1.3493**	**0.0000**	**3,829.5762**	**3,829.5762**	**0.6848**	**0.0000**	**3,846.6948**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.4971	22.7711	21.5671	0.0389	0.4704	1.2884	1.7589	0.1273	1.2220	1.3493	0.0000	3,829.5762	3,829.5762	0.6848	0.0000	3,846.6948
2020	1.5576	13.5817	13.7339	0.0263	0.4069	0.7563	1.1632	0.1101	0.7275	0.8376	0.0000	2,563.5084	2,563.5084	0.3095	0.0000	2,571.2464
2021	21.1509	12.3232	13.5301	0.0261	0.4069	0.6444	1.0512	0.1101	0.6198	0.7299	0.0000	2,549.7720	2,549.7720	0.3010	0.0000	2,557.2966
Maximum	**21.1509**	**22.7711**	**21.5671**	**0.0389**	**0.4704**	**1.2884**	**1.7589**	**0.1273**	**1.2220**	**1.3493**	**0.0000**	**3,829.5762**	**3,829.5762**	**0.6848**	**0.0000**	**3,846.6948**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**20.27**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6482	0.6666	3.4172	4.1900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	810.3734	810.3734	0.0209	0.0148	815.2930
Energy	0.0196	0.1678	0.0729	1.0700e-003		0.0135	0.0135		0.0135	0.0135		213.8657	213.8657	4.1000e-003	3.9200e-003	215.1366
Mobile	0.3542	1.5428	4.2215	0.0146	1.3367	0.0124	1.3490	0.3572	0.0116	0.3688		1,484.4271	1,484.4271	0.0786		1,486.3914
Total	**2.0221**	**2.3772**	**7.7116**	**0.0199**	**1.3367**	**0.0943**	**1.4309**	**0.3572**	**0.0934**	**0.4507**	**0.0000**	**2,508.6663**	**2,508.6663**	**0.1036**	**0.0187**	**2,516.8210**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6482	0.6666	3.4172	4.1900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	810.3734	810.3734	0.0209	0.0148	815.2930
Energy	0.0155	0.1327	0.0578	8.5000e-004		0.0107	0.0107		0.0107	0.0107		169.1038	169.1038	3.2400e-003	3.1000e-003	170.1087
Mobile	0.3542	1.5428	4.2215	0.0146	1.3367	0.0124	1.3490	0.3572	0.0116	0.3688		1,484.4271	1,484.4271	0.0786		1,486.3914
Total	**2.0180**	**2.3421**	**7.6966**	**0.0196**	**1.3367**	**0.0914**	**1.4281**	**0.3572**	**0.0906**	**0.4478**	**0.0000**	**2,463.9043**	**2,463.9043**	**0.1027**	**0.0179**	**2,471.7931**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.20**	**1.48**	**0.20**	**1.11**	**0.00**	**3.00**	**0.20**	**0.00**	**3.03**	**0.63**	**0.00**	**1.78**	**1.78**	**0.83**	**4.39**	**1.79**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/14/2019	5	10	
2	Grading	Grading	6/15/2019	7/19/2019	5	25	
3	Trenching	Trenching	10/26/2019	11/22/2019	5	20	
4	Building Construction	Building Construction	11/23/2019	4/30/2021	5	375	
5	Paving	Paving	11/23/2019	12/20/2019	5	20	
6	Architectural Coating	Architectural Coating	5/1/2021	6/4/2021	5	25	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 1.23

Residential Indoor: 122,837; Residential Outdoor: 40,946; Non-Residential Indoor: 1,800; Non-Residential Outdoor: 600; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	3	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	135.00	8.00	8.00	5.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	51.00	13.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	2.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	10.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.0177	12.0845	6.6093	0.0133		0.5745	0.5745		0.5286	0.5286		1,315.4812	1,315.4812	0.4162		1,325.8863
Total	**1.0177**	**12.0845**	**6.6093**	**0.0133**	**0.5303**	**0.5745**	**1.1048**	**0.0573**	**0.5286**	**0.5858**		**1,315.4812**	**1,315.4812**	**0.4162**		**1,325.8863**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0286	0.0191	0.1859	4.9000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		48.8923	48.8923	1.6300e-003		48.9331
Total	**0.0286**	**0.0191**	**0.1859**	**4.9000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**48.8923**	**48.8923**	**1.6300e-003**		**48.9331**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	1.0177	12.0845	6.6093	0.0133		0.5745	0.5745		0.5286	0.5286	0.0000	1,315.4812	1,315.4812	0.4162		1,325.8863
Total	**1.0177**	**12.0845**	**6.6093**	**0.0133**	**0.2386**	**0.5745**	**0.8131**	**0.0258**	**0.5286**	**0.5543**	**0.0000**	**1,315.4812**	**1,315.4812**	**0.4162**		**1,325.8863**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0286	0.0191	0.1859	4.9000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		48.8923	48.8923	1.6300e-003		48.9331
Total	**0.0286**	**0.0191**	**0.1859**	**4.9000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**48.8923**	**48.8923**	**1.6300e-003**		**48.9331**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6792	0.0000	0.6792	0.0798	0.0000	0.0798			0.0000			0.0000
Off-Road	1.4402	15.8299	11.1279	0.0198		0.8146	0.8146		0.7495	0.7495		1,958.5980	1,958.5980	0.6197		1,974.0900
Total	**1.4402**	**15.8299**	**11.1279**	**0.0198**	**0.6792**	**0.8146**	**1.4938**	**0.0798**	**0.7495**	**0.8293**		**1,958.5980**	**1,958.5980**	**0.6197**		**1,974.0900**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0209	0.7996	0.1683	1.4300e-003	0.0237	1.9900e-003	0.0257	6.5000e-003	1.9000e-003	8.4000e-003		155.3558	155.3558	0.0205		155.8681
Vendor	0.0102	0.2601	0.0741	5.8000e-004	0.0148	1.9100e-003	0.0167	4.2700e-003	1.8300e-003	6.1000e-003		62.2070	62.2070	5.0800e-003		62.3340
Worker	0.0465	0.0310	0.3021	8.0000e-004	0.0791	5.9000e-004	0.0797	0.0210	5.4000e-004	0.0215		79.4500	79.4500	2.6500e-003		79.5163
Total	**0.0776**	**1.0906**	**0.5445**	**2.8100e-003**	**0.1177**	**4.4900e-003**	**0.1221**	**0.0318**	**4.2700e-003**	**0.0360**		**297.0128**	**297.0128**	**0.0282**		**297.7183**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3056	0.0000	0.3056	0.0359	0.0000	0.0359			0.0000			0.0000
Off-Road	1.4402	15.8299	11.1279	0.0198		0.8146	0.8146		0.7495	0.7495	0.0000	1,958.5980	1,958.5980	0.6197		1,974.0900
Total	**1.4402**	**15.8299**	**11.1279**	**0.0198**	**0.3056**	**0.8146**	**1.1203**	**0.0359**	**0.7495**	**0.7854**	**0.0000**	**1,958.5980**	**1,958.5980**	**0.6197**		**1,974.0900**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0209	0.7996	0.1683	1.4300e-003	0.0237	1.9900e-003	0.0257	6.5000e-003	1.9000e-003	8.4000e-003		155.3558	155.3558	0.0205		155.8681
Vendor	0.0102	0.2601	0.0741	5.8000e-004	0.0148	1.9100e-003	0.0167	4.2700e-003	1.8300e-003	6.1000e-003		62.2070	62.2070	5.0800e-003		62.3340
Worker	0.0465	0.0310	0.3021	8.0000e-004	0.0791	5.9000e-004	0.0797	0.0210	5.4000e-004	0.0215		79.4500	79.4500	2.6500e-003		79.5163
Total	**0.0776**	**1.0906**	**0.5445**	**2.8100e-003**	**0.1177**	**4.4900e-003**	**0.1221**	**0.0318**	**4.2700e-003**	**0.0360**		**297.0128**	**297.0128**	**0.0282**		**297.7183**

3.4 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	7.0121	6.9080	9.3200e-003		0.4681	0.4681		0.4307	0.4307		922.6256	922.6256	0.2919		929.9233
Total	**0.6984**	**7.0121**	**6.9080**	**9.3200e-003**		**0.4681**	**0.4681**		**0.4307**	**0.4307**		**922.6256**	**922.6256**	**0.2919**		**929.9233**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0286	0.0191	0.1859	4.9000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		48.8923	48.8923	1.6300e-003		48.9331
Total	**0.0286**	**0.0191**	**0.1859**	**4.9000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**48.8923**	**48.8923**	**1.6300e-003**		**48.9331**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	7.0121	6.9080	9.3200e-003		0.4681	0.4681		0.4307	0.4307	0.0000	922.6256	922.6256	0.2919		929.9233
Total	**0.6984**	**7.0121**	**6.9080**	**9.3200e-003**		**0.4681**	**0.4681**		**0.4307**	**0.4307**	**0.0000**	**922.6256**	**922.6256**	**0.2919**		**929.9233**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0286	0.0191	0.1859	4.9000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		48.8923	48.8923	1.6300e-003		48.9331
Total	**0.0286**	**0.0191**	**0.1859**	**4.9000e-004**	**0.0487**	**3.6000e-004**	**0.0491**	**0.0129**	**3.3000e-004**	**0.0133**		**48.8923**	**48.8923**	**1.6300e-003**		**48.9331**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Off-Road	1.4825	13.0581	12.3079	0.0195		0.8592	0.8592		0.8266	0.8266		1,873.9416	1,873.9416	0.2776		1,880.8813
Total	**1.4825**	**13.0581**	**12.3079**	**0.0195**		**0.8592**	**0.8592**		**0.8266**	**0.8266**		**1,873.9416**	**1,873.9416**	**0.2776**		**1,880.8813**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0662	1.6904	0.4817	3.7700e-003	0.0964	0.0124	0.1088	0.0278	0.0119	0.0396		404.3455	404.3455	0.0330		405.1707
Worker	0.1825	0.1215	1.1850	3.1300e-003	0.3105	2.3000e-003	0.3128	0.0824	2.1200e-003	0.0845		311.6885	311.6885	0.0104		311.9484
Total	**0.2486**	**1.8119**	**1.6667**	**6.9000e-003**	**0.4069**	**0.0147**	**0.4216**	**0.1101**	**0.0140**	**0.1241**		**716.0341**	**716.0341**	**0.0434**		**717.1191**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4825	13.0581	12.3079	0.0195		0.8592	0.8592		0.8266	0.8266	0.0000	1,873.9416	1,873.9416	0.2776		1,880.8813
Total	**1.4825**	**13.0581**	**12.3079**	**0.0195**		**0.8592**	**0.8592**		**0.8266**	**0.8266**	**0.0000**	**1,873.9416**	**1,873.9416**	**0.2776**		**1,880.8813**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0662	1.6904	0.4817	3.7700e-003	0.0964	0.0124	0.1088	0.0278	0.0119	0.0396		404.3455	404.3455	0.0330		405.1707
Worker	0.1825	0.1215	1.1850	3.1300e-003	0.3105	2.3000e-003	0.3128	0.0824	2.1200e-003	0.0845		311.6885	311.6885	0.0104		311.9484
Total	**0.2486**	**1.8119**	**1.6667**	**6.9000e-003**	**0.4069**	**0.0147**	**0.4216**	**0.1101**	**0.0140**	**0.1241**		**716.0341**	**716.0341**	**0.0434**		**717.1191**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3333	11.9420	12.2191	0.0195		0.7461	0.7461		0.7178	0.7178		1,860.2265	1,860.2265	0.2688		1,866.9463
Total	**1.3333**	**11.9420**	**12.2191**	**0.0195**		**0.7461**	**0.7461**		**0.7178**	**0.7178**		**1,860.2265**	**1,860.2265**	**0.2688**		**1,866.9463**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0538	1.5302	0.4325	3.7400e-003	0.0964	7.9500e-003	0.1044	0.0278	7.6100e-003	0.0354		401.4207	401.4207	0.0313		402.2040
Worker	0.1705	0.1095	1.0824	3.0300e-003	0.3105	2.2600e-003	0.3127	0.0824	2.0800e-003	0.0845		301.8613	301.8613	9.3900e-003		302.0960
Total	**0.2243**	**1.6397**	**1.5149**	**6.7700e-003**	**0.4069**	**0.0102**	**0.4171**	**0.1101**	**9.6900e-003**	**0.1198**		**703.2820**	**703.2820**	**0.0407**		**704.3001**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3333	11.9420	12.2191	0.0195		0.7461	0.7461		0.7178	0.7178	0.0000	1,860.2265	1,860.2265	0.2688		1,866.9463
Total	**1.3333**	**11.9420**	**12.2191**	**0.0195**		**0.7461**	**0.7461**		**0.7178**	**0.7178**	**0.0000**	**1,860.2265**	**1,860.2265**	**0.2688**		**1,866.9463**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0538	1.5302	0.4325	3.7400e-003	0.0964	7.9500e-003	0.1044	0.0278	7.6100e-003	0.0354		401.4207	401.4207	0.0313		402.2040
Worker	0.1705	0.1095	1.0824	3.0300e-003	0.3105	2.2600e-003	0.3127	0.0824	2.0800e-003	0.0845		301.8613	301.8613	9.3900e-003		302.0960
Total	**0.2243**	**1.6397**	**1.5149**	**6.7700e-003**	**0.4069**	**0.0102**	**0.4171**	**0.1101**	**9.6900e-003**	**0.1198**		**703.2820**	**703.2820**	**0.0407**		**704.3001**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1947	10.8494	12.1302	0.0195		0.6390	0.6390		0.6147	0.6147		1,860.3251	1,860.3251	0.2623		1,866.8814
Total	**1.1947**	**10.8494**	**12.1302**	**0.0195**		**0.6390**	**0.6390**		**0.6147**	**0.6147**		**1,860.3251**	**1,860.3251**	**0.2623**		**1,866.8814**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0436	1.3744	0.3916	3.7000e-003	0.0964	3.1300e-003	0.0995	0.0278	2.9900e-003	0.0307		397.7219	397.7219	0.0301		398.4740
Worker	0.1607	0.0994	1.0083	2.9300e-003	0.3105	2.2300e-003	0.3127	0.0824	2.0500e-003	0.0844		291.7249	291.7249	8.6500e-003		291.9412
Total	**0.2043**	**1.4739**	**1.3999**	**6.6300e-003**	**0.4069**	**5.3600e-003**	**0.4122**	**0.1101**	**5.0400e-003**	**0.1152**		**689.4469**	**689.4469**	**0.0387**		**690.4152**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1947	10.8494	12.1302	0.0195		0.6390	0.6390		0.6147	0.6147	0.0000	1,860.3251	1,860.3251	0.2623		1,866.8814
Total	**1.1947**	**10.8494**	**12.1302**	**0.0195**		**0.6390**	**0.6390**		**0.6147**	**0.6147**	**0.0000**	**1,860.3251**	**1,860.3251**	**0.2623**		**1,866.8814**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0436	1.3744	0.3916	3.7000e-003	0.0964	3.1300e-003	0.0995	0.0278	2.9900e-003	0.0307		397.7219	397.7219	0.0301		398.4740
Worker	0.1607	0.0994	1.0083	2.9300e-003	0.3105	2.2300e-003	0.3127	0.0824	2.0500e-003	0.0844		291.7249	291.7249	8.6500e-003		291.9412
Total	**0.2043**	**1.4739**	**1.3999**	**6.6300e-003**	**0.4069**	**5.3600e-003**	**0.4122**	**0.1101**	**5.0400e-003**	**0.1152**		**689.4469**	**689.4469**	**0.0387**		**690.4152**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793		1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7272**	**7.6220**	**7.3324**	**0.0114**		**0.4123**	**0.4123**		**0.3793**	**0.3793**		**1,128.5012**	**1,128.5012**	**0.3571**		**1,137.4274**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0102	0.2601	0.0741	5.8000e-004	0.0148	1.9100e-003	0.0167	4.2700e-003	1.8300e-003	6.1000e-003		62.2070	62.2070	5.0800e-003		62.3340
Worker	0.0286	0.0191	0.1859	4.9000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		48.8923	48.8923	1.6300e-003		48.9331
Total	**0.0388**	**0.2791**	**0.2600**	**1.0700e-003**	**0.0635**	**2.2700e-003**	**0.0658**	**0.0172**	**2.1600e-003**	**0.0194**		**111.0993**	**111.0993**	**6.7100e-003**		**111.2670**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793	0.0000	1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7272**	**7.6220**	**7.3324**	**0.0114**		**0.4123**	**0.4123**		**0.3793**	**0.3793**	**0.0000**	**1,128.5012**	**1,128.5012**	**0.3571**		**1,137.4274**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0102	0.2601	0.0741	5.8000e-004	0.0148	1.9100e-003	0.0167	4.2700e-003	1.8300e-003	6.1000e-003		62.2070	62.2070	5.0800e-003		62.3340
Worker	0.0286	0.0191	0.1859	4.9000e-004	0.0487	3.6000e-004	0.0491	0.0129	3.3000e-004	0.0133		48.8923	48.8923	1.6300e-003		48.9331
Total	**0.0388**	**0.2791**	**0.2600**	**1.0700e-003**	**0.0635**	**2.2700e-003**	**0.0658**	**0.0172**	**2.1600e-003**	**0.0194**		**111.0993**	**111.0993**	**6.7100e-003**		**111.2670**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.4627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6567	4.5805	5.4527	8.9100e-003		0.2823	0.2823		0.2823	0.2823		844.3442	844.3442	0.0579		845.7927
Total	**21.1194**	**4.5805**	**5.4527**	**8.9100e-003**		**0.2823**	**0.2823**		**0.2823**	**0.2823**		**844.3442**	**844.3442**	**0.0579**		**845.7927**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0315	0.0195	0.1977	5.7000e-004	0.0609	4.4000e-004	0.0613	0.0162	4.0000e-004	0.0166		57.2010	57.2010	1.7000e-003		57.2434
Total	**0.0315**	**0.0195**	**0.1977**	**5.7000e-004**	**0.0609**	**4.4000e-004**	**0.0613**	**0.0162**	**4.0000e-004**	**0.0166**		**57.2010**	**57.2010**	**1.7000e-003**		**57.2434**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.4627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6567	4.5805	5.4527	8.9100e-003		0.2823	0.2823		0.2823	0.2823	0.0000	844.3441	844.3441	0.0579		845.7927
Total	**21.1194**	**4.5805**	**5.4527**	**8.9100e-003**		**0.2823**	**0.2823**		**0.2823**	**0.2823**	**0.0000**	**844.3441**	**844.3441**	**0.0579**		**845.7927**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0315	0.0195	0.1977	5.7000e-004	0.0609	4.4000e-004	0.0613	0.0162	4.0000e-004	0.0166		57.2010	57.2010	1.7000e-003		57.2434
Total	**0.0315**	**0.0195**	**0.1977**	**5.7000e-004**	**0.0609**	**4.4000e-004**	**0.0613**	**0.0162**	**4.0000e-004**	**0.0166**		**57.2010**	**57.2010**	**1.7000e-003**		**57.2434**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3542	1.5428	4.2215	0.0146	1.3367	0.0124	1.3490	0.3572	0.0116	0.3688		1,484.4271	1,484.4271	0.0786		1,486.3914
Unmitigated	0.3542	1.5428	4.2215	0.0146	1.3367	0.0124	1.3490	0.3572	0.0116	0.3688		1,484.4271	1,484.4271	0.0786		1,486.3914

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	220.78	215.46	183.92	613,189	613,189
Enclosed Parking with Elevator	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	220.78	215.46	183.92	613,189	613,189

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Racquet Club	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Recreational Swimming Pool	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Condo/Townhouse	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0155	0.1327	0.0578	8.5000e-004		0.0107	0.0107		0.0107	0.0107		169.1038	169.1038	3.2400e-003	3.1000e-003	170.1087
NaturalGas Unmitigated	0.0196	0.1678	0.0729	1.0700e-003		0.0135	0.0135		0.0135	0.0135		213.8657	213.8657	4.1000e-003	3.9200e-003	215.1366

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	1779.75	0.0192	0.1640	0.0698	1.0500e-003		0.0133	0.0133		0.0133	0.0133		209.3829	209.3829	4.0100e-003	3.8400e-003	210.6271
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	38.1041	4.1000e-004	3.7400e-003	3.1400e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		4.4828	4.4828	9.0000e-005	8.0000e-005	4.5095
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0196**	**0.1678**	**0.0729**	**1.0700e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**		**213.8657**	**213.8657**	**4.1000e-003**	**3.9200e-003**	**215.1366**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	1.40327	0.0151	0.1293	0.0550	8.3000e-004		0.0105	0.0105		0.0105	0.0105		165.0910	165.0910	3.1600e-003	3.0300e-003	166.0720
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0341089	3.7000e-004	3.3400e-003	2.8100e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		4.0128	4.0128	8.0000e-005	7.0000e-005	4.0367
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0155**	**0.1327**	**0.0578**	**8.5000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**		**169.1038**	**169.1038**	**3.2400e-003**	**3.1000e-003**	**170.1087**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6482	0.6666	3.4172	4.1900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	810.3734	810.3734	0.0209	0.0148	815.2930
Unmitigated	1.6482	0.6666	3.4172	4.1900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	810.3734	810.3734	0.0209	0.0148	815.2930

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1360					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	1.3427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0738	0.6304	0.2682	4.0200e-003		0.0510	0.0510		0.0510	0.0510	0.0000	804.7059	804.7059	0.0154	0.0148	809.4879
Landscaping	0.0958	0.0363	3.1490	1.7000e-004		0.0174	0.0174		0.0174	0.0174		5.6675	5.6675	5.5100e-003		5.8052
Total	**1.6482**	**0.6666**	**3.4172**	**4.1900e-003**		**0.0683**	**0.0683**		**0.0683**	**0.0683**	**0.0000**	**810.3734**	**810.3734**	**0.0209**	**0.0148**	**815.2930**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1360					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0738	0.6304	0.2682	4.0200e-003		0.0510	0.0510		0.0510	0.0510	0.0000	804.7059	804.7059	0.0154	0.0148	809.4879
Landscaping	0.0958	0.0363	3.1490	1.7000e-004		0.0174	0.0174		0.0174	0.0174		5.6675	5.6675	5.5100e-003		5.8052
Total	**1.6482**	**0.6666**	**3.4172**	**4.1900e-003**		**0.0683**	**0.0683**		**0.0683**	**0.0683**	**0.0000**	**810.3734**	**810.3734**	**0.0209**	**0.0148**	**815.2930**

APPENDIX D

Report of Biological Assessment

Report of a Biological Assessment Over APNs 299-100-47 and 299-100- 48 City of Del Mar, California

Prepared For:

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Revised 5 June 2017
Revised 24 July 2015
Revised 22 July 2015
Revised 21 October 2014
4 October 2012
Job Number 1650.22B

Report of a Biological Assessment Over APNs 299-100-47 and 299-100-48 in the City of Del Mar, California

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I. SUMMARY

Assessor's Parcel Numbers 299-100-47 and 299-100-48 encompass approximately 2.4-acres and are located at 2100 Jimmy Durante Boulevard within the City of Del Mar (see Figures 1 and 2). A proposed project at this location involves the construction of multifamily residential units with associated parking (see Preliminary Grading Plan in Figure 3).

The 2.4-acre site is undeveloped, but a majority of the site is disturbed and used as a parking lot for the Del Mar Fairgrounds (see Disturbed Habitat on Figure 4). The remainder of the site is occupied by a small Coastal Brackish Marsh in the eastern part of the property, Non-Native Vegetation in the southwestern section of the site, Southern Coastal Bluff Scrub in the southeastern corner of the property, and Disturbed Southern Coastal Bluff Scrub along the southern edge of the site (see Figures 3 and 4). Portions of the Disturbed Southern Coastal Bluff Scrub will be impacted as result of completion of this proposed project and will require mitigation (see section VI below). Within this habitat are two sensitive plant species (Del Mar Mesa Sand Aster and Torrey Pine) that will similarly be impacted and will require mitigation (again see section VI below). The Coastal Brackish Marsh is a wetland habitat that contains a sensitive plant species (Southwestern Spiny Rush). This wetland is proposed to be avoided, protected in place, and buffered from the proposed development by the replacement of the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer. Given the small size of the wetland, the fact that the existing wetland buffer area is an unvegetated dirt parking lot that will be enhanced with native vegetation, and that the design of the project has an access road at the edge of the new buffer, a reduced wetland buffer width of 50-feet, consistent with the approved Riverview Office Project for this site, is proposed. The replacement of the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer will be subject to approval from the California Department of Fish and Wildlife (CDFW) as required of any wetland buffer proposal of less than 100-feet.

During the course of the field effort, three sensitive plant species and one sensitive wildlife species were noted on the property. The three sensitive plant species are the Torrey Pine (*Pinus torreyana*), Del Mar Mesa Sand Aster (*Corethrogyne filaginifolia* var. *linifolia*), and Southwestern Spiny Rush (*Juncus acutus* var. *leopoldii*) as mentioned above. The sensitive wildlife species observed was the threatened California Gnatcatcher (*Polioptila californica*), but it was only observed in 2012. Two of the plants (Torrey Pine and Del Mar Mesa Sand Aster), and sensitive upland habitat will be impacted as result of completion of this proposed project and will require mitigation (again, see section VI below).

II. INTRODUCTION, BACKGROUND, PROJECT DESCRIPTION

This Biological Assessment addresses the proposed construction of multifamily residential units with associated parking on a 2.4-acre property within the City of Del Mar. The proposed project is located in the northern part of the City of Del Mar, south of the Del Mar Race Track, west of Interstate 5 on the corner of San Dieguito Drive and Jimmy Durante Boulevard (see Figures 1 and 2). The proposed development will be accessed off of San Dieguito Drive (see Figure 3).

This property has been previously surveyed for biological resources. Specifically, Merkel & Associates, Inc. prepared a Biological Resources Report in June 2004 and conducted a focused federal protocol California Gnatcatcher survey in October 2004. Subsequently, Dudek &Associates, Inc. updated the work done by Merkel & Associates, Inc. by conducting a focused federal protocol California Gnatcatcher survey in November 2005 and preparing an updated Biological Resources Survey Letter Report in January 2006. Cummings and Associates was recently hired to conduct a current biological survey, wetland delineation, and protocol California Gnatcatcher survey, and prepare an updated biological report. This Biological Assessment serves to document the biological resources that currently exist on the subject property.

III. METHODOLOGY

Thirteen field visits were made to the subject property on 2 July 2012, 21 August 2012, 27 September 2012, 11 August 2014, 14 October 2016, 28 October 2016, 11 November 2016, 25 November, 2016, 9 December 2016, 27 December 2016, 10 January 2017, 24 January 2017, and 14 February 2017. The July 2012 site visit comprised an initial site assessment to discuss the project with the project proponent. The August 2012 visit comprised the general biological field work and wetland delineation, and the September 2012 site visit entailed a discussion with the project proponent regarding mitigation measures. The August 2014 site visit included an assessment of the wetland delineation post-completion of the Vector Control Project along San Dieguito Drive. One sampling point, A-1, was re-sampled during this visit. The nine visits that occurred in 2016 and 2017 comprised a federal protocol survey for the California Gnatcatcher.

The goals of the survey effort were: (1) to identify and delineate the changes in the habitats on-site since the 2004 and 2006 surveys, (2) to identify and delineate the changes to the previously identified sensitive plant species on-site, (3) to determine the presence or absence of any other sensitive wildlife or plant species on-site, (4) to determine if the Vector Control Project along San Dieguito Drive changed the wetland delineation on-site, and (5) to determine the presence/absence of the California Gnatcatcher on the property.

In order to meet the above outlined goals, all signs (including track, scat, and others), direct observation, and auditory inputs (such as songs and calls) were utilized to identify the species present. Standard naming references are cited in the References Cited section of this report. Plant species were generally identified in the field with some material being collected for laboratory identification.

IV. PHYSICAL ENVIRONMENT

The subject property lies on undifferentiated alluvium and slopewash, the Bay Point Formation, and Torrey Sandstone (Kennedy and Peterson, 1975).

Surficial soils overlying the subject property are mapped by Bowman (1973) as the following:

- Tujunga sand, 0 to 5 percent slopes (TuB) - these are deep, excessively drained sands derived from granitic alluvium found on alluvial fans and flood plains. On-site, these soils occupy the majority of the property.

- Loamy alluvial land - Huerhuero complex, 9 to 50 percent slopes, severely eroded (LvF3) - these soils occur on old coastal ridges. They are strongly sloping to steep soils with many barren exposures of soft marine sediments, sandstone and shale. On-site, these soils occur only in the extreme southwestern part of the property on the steep slopes.

It should be noted that the majority of the site is currently utilized as a dirt parking lot for the Del Mar Fairgrounds. This area is classified as Disturbed Habitat and has been amended with some gravel fill and compacted through years of use. Therefore, these soils have been severely disturbed, and/or altered, to the point that the historical mapping is no longer all that meaningful.

A wetland in the southeast portion of the site was previously identified by Merkel & Associates, Inc. in 2004. The northern edge of these wetlands was surveyed again by Cummings and Associates in 2012 in order to map the changes that occurred within the previous 8 years, and was reassessed in 2014 after completion of the Vector Control Project along San Dieguito Drive. Since it was our understanding that the project proponent intends to avoid these wetlands, protect them in place, and preserve a 50-foot wetland buffer in between the wetlands and the proposed development, the outermost jurisdictional edge of the wetlands was staked for planning purposes. In other words, the difference between federal and state jurisdictional wetlands was not defined. If any one of the three wetland characteristics were noted — hydric soils, a predominance of hydrophytic vegetation, and/or a hydrological regime that results in two weeks of saturated, anaerobic growing conditions (see Environmental Laboratory, 1987) — then a stake was placed in the ground representing the outermost edge of the wetland, be it state or federally defined. Please refer to Appendix A for the results of the wetland delineation.

V. BIOLOGICAL RESOURCES

A. Vegetation and Flora

The vegetation within the bounds of the 2.4-acre property can be classified into five types. Each of these types is described below and, to the extent possible, each type is assigned an element code from Holland (1986). Vegetation maps are included in this report as Figures 3 and 4.

Coastal Brackish Marsh (Holland, 1986; Element Code 52200). The Coastal Brackish Marsh (CBM) has increased slightly since 2004, but it still very small. The marsh currently occupies only 4,570-square feet (0.10-acre) of the property (see top photo of Figure 5 and bottom photo of Figure 6). Plants indicative of this habitat include:

Broad-leaved Cattail *Typha latifolia*

Southwestern Spiny Rush	*Juncus acutus* var. *leopoldii*
Pickleweed	*Salicornia pacifica*
Salty Susan	*Jaumea carnosa*
Salt Grass	*Distichlis spicata*

Southern Coastal Bluff Scrub (Holland, 1986; Element Code 31200). At present, the undisturbed Southern Coastal Bluff Scrub (SCBS) occurs as a very small patch (0.04-acre) in the extreme southeast corner of the property (see Figures 3 and 4 and the top photo of Figure 5). Dominant shrub species within this community include:

California Sage	*Artemisia californica*
California Buckwheat	*Eriogonum fasciculatum*
Lemonadeberry	*Rhus integrifolia*

Plant species indicative of this habitat type that were noted on-site include:

Ladies' Fingers	*Dudleya edulis*
Lance-leaved Dudleya	*Dudleya lanceolata*

Disturbed Southern Coastal Bluff Scrub (Holland, 1986; Element Code 31200). The Disturbed Southern Coastal Bluff Scrub (DSCBS) occupies approximately 0.49-acre of the site and occurs on the sandstone slopes along the southern part of the property. During the previous biological assessments by Merkel & Associates, Inc. and Dudek & Associates, Inc., the "disturbed" qualifier was assigned to a portion of the scrub habitat that contained an abundance of non-native invasive plants, such as Hottentot Fig (*Carpobrotus edulis*), and Pampas Grass (*Cortaderia jubata*) intermixed with the native species. However, since the 2004 survey, not only have the non-native exotic plant species spread, but human encroachment has also led to other disturbances, such as foot paths and garbage (see bottom photo of Figure 5 and Figure 6). As such, the amount of Disturbed Southern Coastal Bluff Scrub has increased since 2004.

Non-Native Vegetation (Holland, 1986 as modified by Oberbauer, 1996; Element Code 11000). The Non-Native Vegetation (NNV) occurs along the southwestern property boundary adjacent to existing residences (see Figures 3 and 4 and the bottom photo of Figure 5). Included in this mapping is a ground cover of Hottentot Fig (*Carpobrotus edulis*) and a "hedge row" of Acacia shrubs/trees (*Acacia* sp.).

Disturbed Habitat (Holland, 1986 as modified by Oberbauer, 1996; Element Code 11300). The existing parking lot on the property is classified as Disturbed Habitat (DH) - see Figure 4. This area occupies 1.52-acres and is nearly devoid of vegetation (see Figure 5 and the top photo of Figure 6). The few remnant plant species remaining within the parking lot are mostly non-native with the exception being three or four California Buckwheat shrubs.

B. Sensitive Plant Species

One principal goal of the biological survey was to determine the presence or absence of sensitive plant species. Prior to initiation of the field work, a search was made of the on-line California Native Plant Society Electronic Database to determine those plant species considered sensitive and known to occur within an approximately 10-mile radius of the subject property (CNPS, 2012). This search produced a list of sixty-nine species. This list of sixty-nine plant species was then augmented with six additional plant species generated from a search of the California Natural Diversity Database (CNDDB, 2012). An additional plant identified on the property, but not found in either the CNPS or CNDDB lists was also added. This new list of seventy-six plant species is presented as Table 1 and the reader's attention is directed to that Table for additional information. Each entry in the table has been annotated as to whether or not the species would be expected on the property given the habitats, soils and elevations present on-site. Of the seventy-six species that are listed, three were found: the Torrey Pine (*Pinus torreyana*); Del Mar Mesa Sand Aster (*Corethrogyne filaginifolia* var. *linifolia*); and Southwestern Spiny Rush (*Juncus acutus* var. *leopoldii*). Of the remaining seventy-three species, fifty-five would not be anticipated given their specific habitat, soil and elevational requirements, ten have a low potential to be found on-site, and eight have a medium potential of occurrence on the property. Those eight medium potential species are:

Del Mar Manzanita	*Arctostaphylos glandulosa* ssp. *crassifolia*
San Diego Sand Aster	*Corethrogyne filaginifolia* var. *incana*
Shortleaved Dudleya	*Dudleya brevifolia*
Sand-loving Wallflower	*Erysimum ammophilum*
Beach Goldenaster	*Heterotheca sessiliflora* ssp. *sessiliflora*
Sea Dahlia	*Leptosyne maritima*
Estuary Seablite	*Suaeda esteroa*
Woven Spored Lichen	*Texosporium sancti-jacobi*

All eight of the medium potential species are either a shrub, lichen, or perennial herbs with some form of above-ground expressions throughout the year. As such, these eight species would have been detected, if present, during the four site visits to the property in 2012 and 2014.

C. Wildlife

The limited number and kind of wildlife observations made during the four site visits were typical of a property that is largely disturbed with only small patches of native habitats. With the high degree of surrounding, urban development, it is not surprising that the wildlife diversity is low and relatively few species were seen.

Amphibians. No amphibians were either heard or seen during any of the site visits.

Reptiles. No lizard species were seen during any of the field visits. However, certain common lizard species are probable on-site, such as the Western Fence Lizard (*Sceloporus occidentalis*) and Side-blotched Lizard (*Uta stansburiana*). The lack of reptilian sightings are probably due to the degree

of surrounding development, the human encroachment into the patches of native habitats on-site, and the lack of connectivity to other wild lands.

Mammals. Due to the small size and limited native habitats on the site, the mammalian fauna is also extremely limited. The only mammal observed during the four surveys was a single Audubon's Cottontail (*Sylvilagus audubonii*) within the Disturbed Southern Coastal Bluff Scrub.

Birds. The avifauna was the most visible wildlife resource on the subject property. Bird species noted during the field efforts included, Song Sparrow, Anna's Hummingbird, House Wren, Black Phoebe, Spotted Towhee, House Finch, Virginia Rail (yes, a rail in that tiny marsh), and a California Gnatcatcher in August 2012 (for specifics on the 2012 California Gnatcatcher sighting and the current negative status of this species on the property, please see section D below and Appendix B).

D. Sensitive Wildlife Species

Another goal of the biological survey effort was the identification and delineation of populations of sensitive wildlife species. Prior to the site visits, a list of sixty sensitive species known to occur within a ten-mile radius of the subject property was generated from a search of the CNDDB. Of the sixty sensitive wildlife species known to occur within a ten-mile radius of the subject property (see the attached Table 2), one was found during the course of the field effort, forty-eight are unlikely on-site given the types of habitats and soils present, and eleven have varying levels of potential to occur on-site.

Of the eleven "potential" sensitive wildlife species, one has a "high" occurrence potential, five have a "medium" occurrence potential, and five have a "low" occurrence potential. The one species with a "high" occurrence potential is the Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*). The presence or absence of the species could only be determined by a trapping program. However, since the species is not listed under the California or federal Endangered Species Act, there is no requirement for a focused survey. *If* this species were to occur on the property, its loss would be mitigated through the loss of its habitat, not through species-specific means. As such, the mitigation for the loss of the Disturbed Southern Coastal Bluff Scrub below is deemed sufficient for any potential loss of this species *if* it does indeed occur on the property.

The five species with a "medium" potential to occur on the property include, Orange-throated Whiptail (*Aspidoscelis hyperythra*), Coastal Western Whiptail (*Aspidoscelis tigris stejnegeri*), San Diego Ringneck Snake (*Diadophis punctatus similis*), Coast Horned Lizard (*Phrynosoma coronatum*), and Coronado Island Skink (*Plestiodon skiltonianus interparietalis*). Like the mouse species with the "high" occurrence potential, none of the five species with a "medium" occurrence potential are listed species. *If* these species were to occur on the property, their loss would be mitigated through the loss of their habitat, which in this case is the Disturbed Southern Coastal Bluff Scrub.

The five species with a "low" potential to occur on the property include, Mimic Tryonia (*Tryonia imitator*), Cooper's Hawk (*Accipiter cooperi*), Rufous-crowned Sparrow (*Aimophila ruficeps* ssp.

canescens), White-tailed Kite (*Elanus leucurus*), and Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*). *If* the Mimic Tryonia occurs on-site, it would be within the Coastal Brackish Marsh which is not proposed to be impacted (i.e. no harm, no foul). The four bird species will be protected during the avian breeding season if any grading/clearing is proposed during that time (see section VI. B. below).

California Gnatcatcher. The one sensitive wildlife species observed was a California Gnatcatcher (*Polioptila californica*) incidentally detected during other surveys on the property. During the 21 August 2012 site visit, a single California Gnatcatcher was heard off-site to the south at 1115 hours during the general biological assessment. At 1200 hours, while conducting the wetland delineation, the undersigned heard and briefly saw a California Gnatcatcher foraging along the southern property boundary on the top of the bluff (not a good or long enough view of the bird to distinguish between an adult female or a juvenile). On that particular day, the undersigned (who has a Section 10(a) United States Fish and Wildlife Service recovery permit to conduct federal protocol surveys for this species, permit TE-031850-4) was on the property for four and a half hours, but only those two California Gnatcatcher observations were made. Only 45 minutes had passed between the two observations, and the observations were located quite close together, but it would only be speculation whether the two observations were of the same bird or two separate birds.

Of note are the two previous negative federal protocol surveys for the California Gnatcatcher conducted by Merkel & Associates, Inc. in October of 2004 and by Dudek & Associates, Inc. in November of 2005.

Given the two previous negative protocol surveys for this species, the timing of the sighting in late August, the disturbed, < 1-acre, less than high quality habitat on-site, and the lack of any other site visit sightings either previous or subsequent to the 21 August observation, the undersigned believes this 2012 observation to have been a dispersing juvenile.

In order to document the current status of the California Gnatcatcher on the property, Cummings and Associates was hired to conduct a federal protocol survey for the California Gnatcatcher. Per the federal protocol, nine visits were conducted between October 2016 and February 2017 spaced at least two weeks apart. No California Gnatcatchers were detected during the surveys. As such, the site is considered unoccupied by the California Gnatcatcher in 2016/2017.

VI. PROJECT IMPACTS AND MITIGATION MEASURES

A. Project Impacts

Due to the presence of native vegetation on the site, and the proposed wetland preservation on-site, there is a potential for both direct and indirect effects to biological resources.

Direct Effects. Below is a table summarizing the acreage of each of the vegetative communities on-site, the acreage of anticipated direct impacts to these communities, and the proposed compensatory mitigation for their loss:

Vegetation Impact and Mitigation Summary

Vegetative Community	Acreage On-site	Acres Impacted By Project[1]	Area Conserved On-site	Mitigation Ratio	Mitigation Required (acres)	Actual Mitigation
Coastal Brackish Marsh	0.10 (4,570sqft)	None	0.10 (4,570sqft)	N/A	None	None
Southern Coastal Bluff Scrub	0.04	None	0.04	N/A	None	None
Disturbed Southern Coastal Bluff Scrub	0.49	0.34	0.15	3:1	1.02	0.15-acres of DSCBS on-site; 0.04-acres of SCBS on-site; 0.19-acres of DH enhanced to SCBS on-site; and 0.64-acres of SCBS or equivalent habitat off-site
Disturbed Habitat	1.52	1.32	0.20[2]	None	None	None
Non-Native Vegetation	0.25	0.25	None	None	None	None
TOTALS:	2.4	1.91	0.49		1.02	See above

[1] See dashed red line for limits of proposed construction on Figure 3. Please note that the impacts to Disturbed Habitat were calculated outside of the wetland buffer area even though the limits of proposed construction encroach temporarily during construction into that wetland buffer area. Since this area is currently a barren dirt parking lot, this temporal impact is not relevant and is therefore, not included in the acres impacted.

[2] Approximately 0.01-acre of the 0.20-acre of Disturbed Habitat includes the gravel associated with the Vector Control Project. This 0.01-acre will not be enhanced to SCBS as the gravel is needed to remain for vector control.

To summarize, the completion of the proposed project will have the following direct effects on biological resources:

1. Approximately 0.34-acres of Disturbed Southern Coastal Bluff Scrub will be lost; and

2. 13 Torrey Pine trees will be lost; and

3. Approximately 40 Del Mar Mesa Sand Asters will be impacted.

Indirect Effects. In addition to the direct effects above, indirect effects to biological resources within the proposed open space on-site were analyzed:

1. Increased public use/edge effects — Approximately 0.49-acre will be preserved on-site. This area includes a very small Coastal Brackish Marsh, Southern Coastal Bluff Scrub habitat, and currently Disturbed Habitat that will be used to create additional Southern Coastal Bluff Scrub habitat to function as a buffer to the marsh. This 0.49-acre area is located in the southeastern portion of the site (see Figure 3). To the south, this area is bounded by steep slopes that prevent public access. Currently, the Disturbed Habitat is utilized as a parking area where people park their cars and can walk right up to the Coastal Brackish Marsh. With implementation of the project, the Disturbed Habitat will be converted to Southern Coastal Bluff Scrub habitat and protected via fencing and signage. As such, the project will actually decrease public use and create additional native habitat to buffer the marsh, thereby decreasing the edge effects to the marsh.

2. Lighting — The property is an in-fill lot surrounded by development, including the Del Mar Fairgrounds to the northeast. As such, the site is already subject to indirect urban lighting. In order to keep the new development from increasing this indirect light , the sides the buildings facing the proposed open space on-site will have lighting that is shielded and/or directed away from the open space.

3. Noise — The 2.4-acre property is an in-fill lot surrounded by development, including the Del Mar Fairgrounds to the northeast. The site is bounded by Jimmy Durante Boulevard on the northwest side and San Dieguito Road along the northeast side (see Figure 2). In addition, 1.52-acres of the 2.4-acre property is currently utilized as a parking lot. The proposed open space will be located in the southeast portion of the site. With the current design, buildings will act as a noise buffer between Jimmy Durante Boulevard and the proposed open space.

4. Drainage — The runoff from the project is proposed to be directed into a bioswale within the wetland buffer area adjacent to the marsh (see Figure 3). The marsh itself will continue to function and flow as it currently does. No runoff from the project will be directed into the marsh.

5. Landscaping and Revegetation Area — Whenever new vegetation is planted in areas, such as the proposed residential landscaping and the proposed created wetland buffer habitat on-site, it is imperative to ensure that no exotic invasive species are planted that could invade adjacent native habitats. In order to ensure that invasive, exotic plant species are not inadvertently planted, plant palettes for landscape plans and revegetation plans shall be cross-referenced with the California Invasive Plant Inventory Database maintained by the California Invasive Plant Council (Cal-IPC). No plants in the California Invasive Plant Inventory Database will be used in the landscaping or the revegetation area. As an added cross-check, the California Department of Fish and Wildlife (CDFW) will be provided copies of the landscape plans for their review (please see mitigation measure number seven below).

6. Construction-related runoff and dust — Standard best management practices (BMPs) will be implemented during construction to minimize runoff and dust, including, but not limited to silt fences, and watering during grading.

Compliance with the Local and Regional Conservation Planning Efforts of the Natural Communities Conservation Planning (NCCP). In addition to the analysis of the direct and indirect effects above, an analysis of compliance with the local and regional conservation planning efforts of the NCCP was analyzed. The NCCP is a statewide program established to preserve habitat and species by implementing regional and local planning efforts. The City of Del Mar is a participant in the regional NCCP plan, the Multiple Species Conservation Program (MSCP). At this time, the City of Del Mar only has a draft Subarea Plan that is not finalized. According to the MSCP, the San Dieguito Lagoon, located to the east of the property in the City of Del Mar, is part of the MSCP's Biological Core Area 13, an essential preserve area that contains a high concentration of sensitive biological resources which, if lost, could not be replaced or mitigated elsewhere. The property itself is not part of this Biological Core Area, nor is it part of a Habitat Linkage. As such, completion of the proposed project will not impede the efforts of the MSCP.

B. Mitigation Measures

In order to compensate for the above direct biological effects, and to avoid other potential direct and indirect biological impacts, the following mitigation measures are proposed:

1. The loss of 0.34-acres of Disturbed Southern Coastal Bluff Scrub will be mitigated at a 3:1 ratio (1.02-acres). Approximately 0.04-acres of Southern Coastal Bluff Scrub and 0.15-acres of Disturbed Southern Coastal Bluff Scrub will be conserved on-site via a Land Conservation Easement. In addition, 0.19-acres of Disturbed Habitat will be conserved on-site via a Land Conservation Easement. This currently Disturbed Habitat will be the 50-foot wetland buffer to the Coastal Brackish Marsh. It will be revegetated with Southern Coastal Bluff Scrub species that are deemed acceptable by the Fire Marshall as this area will also be within a fuel modification zone. The remaining 0.64-acres of Southern Coastal Bluff Scrub of required mitigation will be mitigated at the Manchester Avenue Conservation Bank by purchasing 0.7-acre of Tier I habitat. Although this is not in-kind habitat mitigation, the Tier level is the same and the bank is located within the City of Encinitas and provides mitigation credits for impacts within the MSCP.

2. According to the MSCP, the only naturally occurring population of Torrey Pines occurs at Torrey Pines State Preserve. As such, the Torrey Pines on-site are considered planted and are not naturally occurring. For the loss of the 13 Torrey Pine trees, the project proponent shall submit a Tree Removal Permit to the Planning and Community Development Department with the appropriate processing fee according to the City's Municipal Code Section 23.50.080. To mitigate for the loss of these 13 trees, the project proponent proposes to pay a fee to the City of Del Mar's Tree Mitigation Fund in accordance with the City's Municipal Code sections 23.50.030(D)(2) and 23.50.090(A)(2).

3. For the impacts to the 40 Del Mar Mesa Sand Asters, we recommend transplanting these individuals from the impact area to a preserved area on-site within the Disturbed Southern Coastal Bluff Scrub or within the Disturbed Habitat to be enhanced to Southern Coastal Bluff Scrub within the 50-foot wetland buffer. A monitoring program shall be implemented for 2 years to monitor the survivability of the individual Sand Asters. If the Sand Asters do not survive the transplant, new container plants will be replanted, grown from the seeds previously collected from the Sand Asters that did not survive at a 3:1 ratio (120 plants).

4. Although the on-site wetland is proposed to be preserved, and a 50-foot wetland buffer is proposed between the wetland and the development, we further recommend that a permanent fence with signage be erected along the edge of the wetland buffer.

5. Although no avian nests were observed on the property, the clearing and grading of trees and shrubs should occur outside of the avian breeding season of 1 January to 31 August (including raptors). This prohibition is necessary to preclude the potential for damage to nests and nesting birds, which would be a violation of the Migratory Bird Treaty Act. If clearing and grading during the avian breeding season is proposed, then a focused nest survey would need to be conducted by a qualified biologist 72 hours prior to the vegetation removal. If active nests are discovered during the nest survey, then those nests will be avoided until the young have fledged. The qualified biologist will recommend appropriate nest setback distances based upon the species of bird, the topography between the nest and the proposed disturbance activity, and the surrounding vegetation.

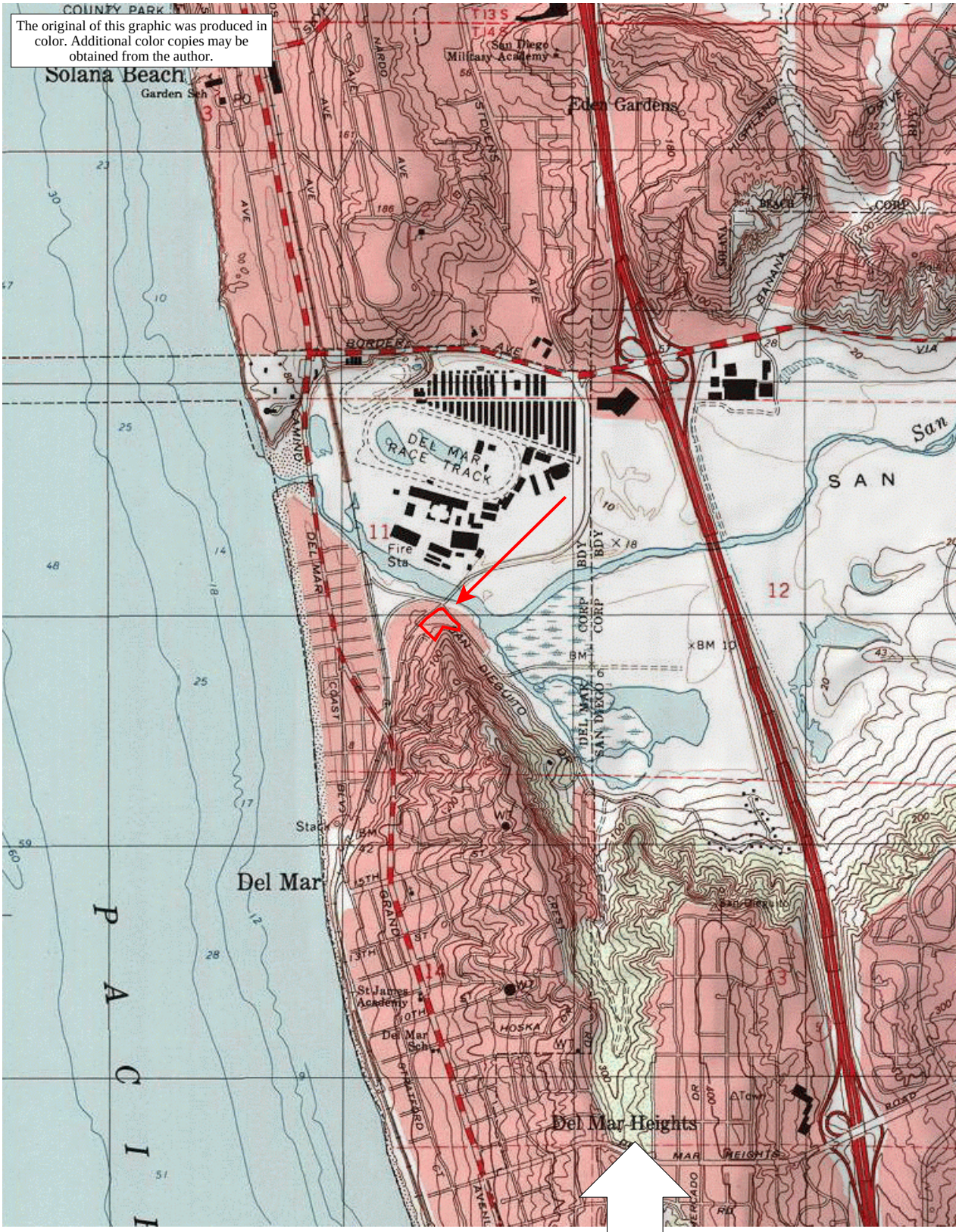
6. The landscaping and/or revegetation plan for the project will not include any exotic and/or invasive plant species listed on the Cal-IPC California Invasive Plant Inventory Database. In addition, the native plants chosen should not require intensive irrigation. In order to ensure the protection of the on-site preservation areas from invasive plants, the landscaping and revegetation plans for the areas adjacent to the preservation areas shall be submitted to the California Department of Fish and Wildlife (CDFW) for their approval 60 days prior to initiating any project impacts.

VII. CERTIFICATION

This report is based on an independent field examination and analysis of APNs 299-100-47 and 299-100-48 located in the northern portion of the City of Del Mar. Any errors or omissions in this report are solely the responsibility of the author.

Gretchen B. Cummings
Principal/Consulting Biologist

[:\1650bio-rpt-rev-4th.wpd]

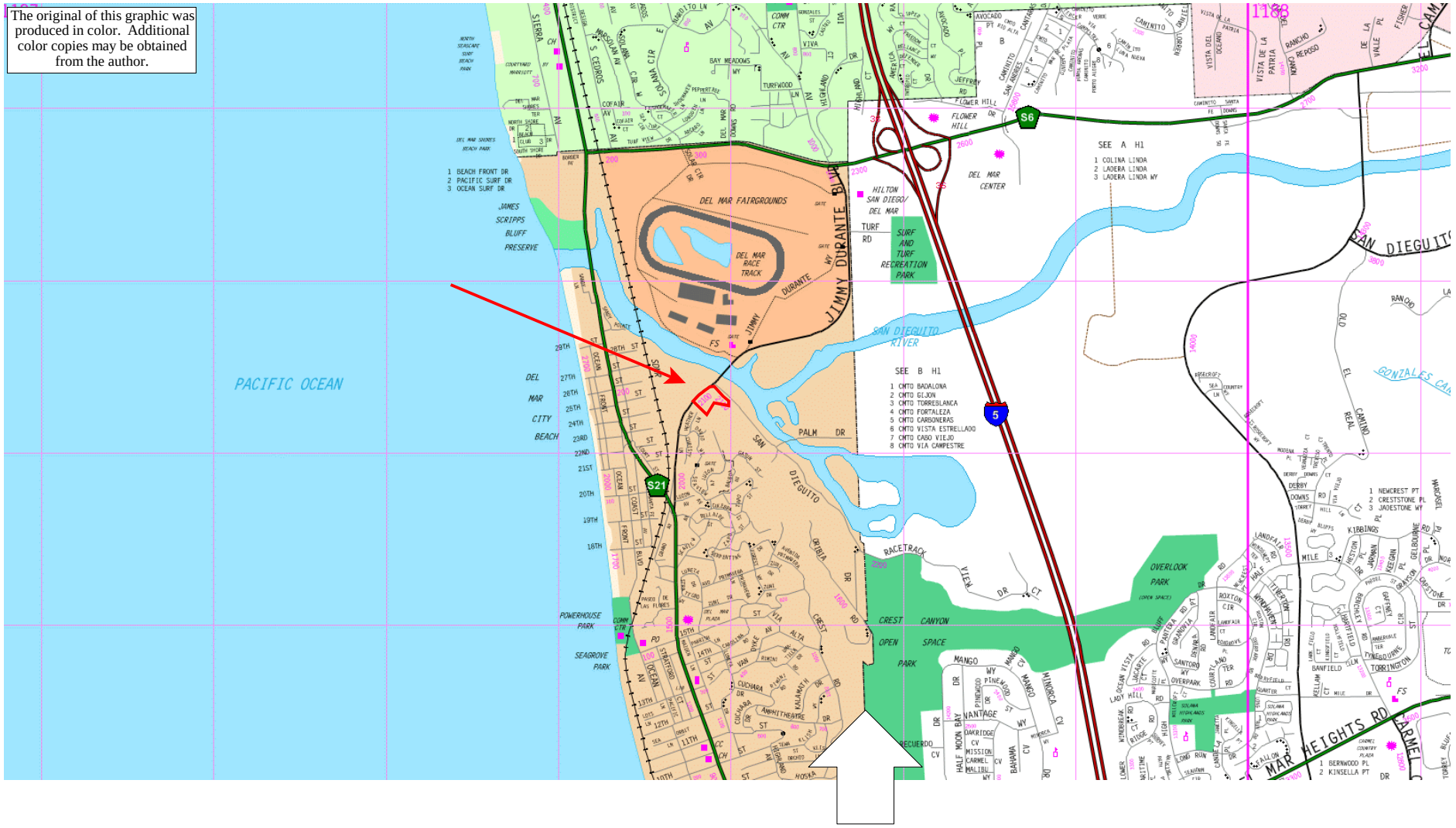


Scale: 1-inch = 2,000-feet

Cummings and Associates Job Number 1650.22B 14 August 2012 [:\1650-Fig-1.wpg]

Cummings and Associates	APNs 299-100-47 and -48 Shown on the U.S.G.S. 7½-min Del Mar Quad Map [Base Map Created with TOPO!® ©2006 National Geographic; ©2005 TeleAtlas]	Figure 1

The original of this graphic was produced in color. Additional color copies may be obtained from the author.



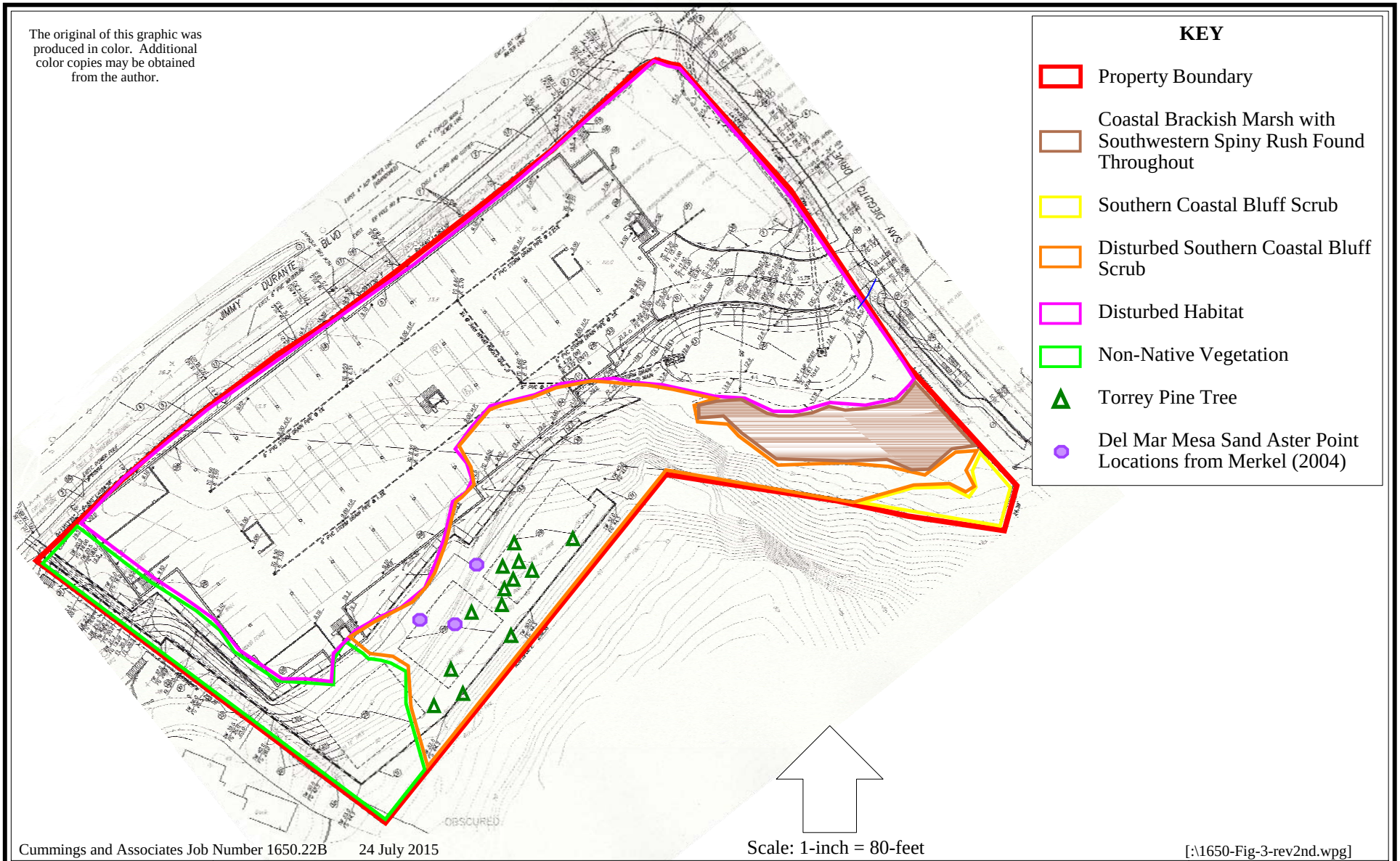
Cummings and Associates Job Number 1650.22B 20 September 2012

Scale: 1-inch = 2,250-feet

[:\1650-Fig-2.wpg]

Cummings and Associates	APNs 299-100-47 and 299-100-48 Shown on a Thomas Brothers Base Map of Northern Del Mar [Base Map © 2007 Rand McNally & Company]	Figure 2

The original of this graphic was produced in color. Additional color copies may be obtained from the author.



Cummings and Associates Job Number 1650.22B 24 July 2015

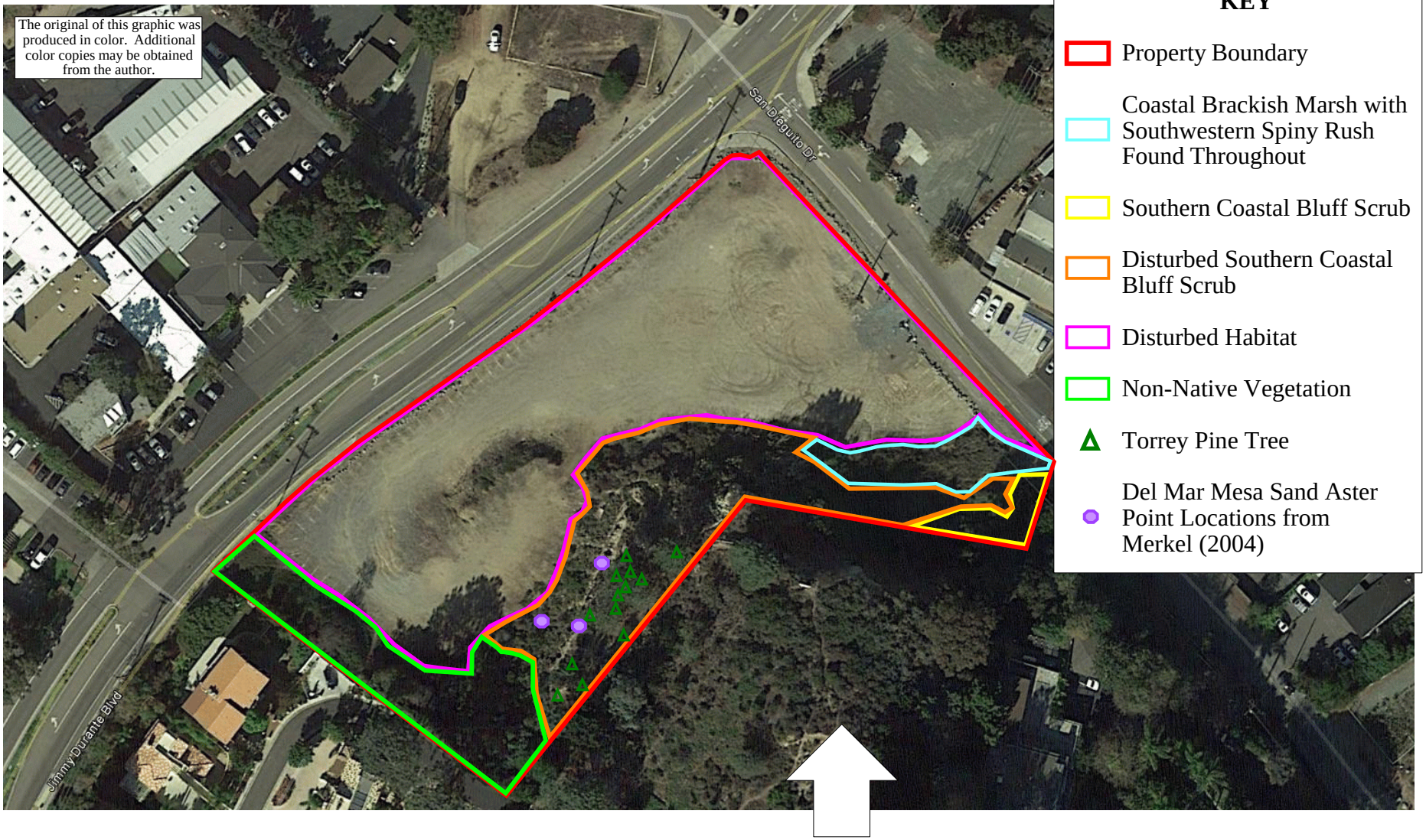
Scale: 1-inch = 80-feet

[:\1650-Fig-3-rev2nd.wpg]

Cummings and Associates

Vegetation Map and Sensitive Plant Species Locations Shown on a Preliminary Grading Plan [Base Preliminary Grading Plan Prepared by Sowards & Brown Engineering]

Figure 3



Cummings and Associates Job Number 1650.22B 21 October 2014

Scale: 1-inch = 100-feet

[:\1650-Fig-4-rev.wpg]

Cummings and Associates

Vegetation Map and Sensitive Plant Species Locations Shown on an Aerial Photo [Base Photo © 2014 Google; Imagery Date 11/13/13]

Figure 4

The original of this graphic was produced in color. Additional color copies may be obtained from the author.

Cummings and Associates Job Number 1650.22B 24 September 2012 [:\1650-Fig-5.wpg]

Cummings and Associates	**Site Photos: Top photo of marsh and bluff scrub taken from top of the bluff facing east; Bottom photo of disturbed bluff scrub, parking lot and non-native vegetation taken from middle of property facing west**	**Figure 5**

Cummings and Associates Job Number 1650.22B 24 September 2012 [:\1650-Fig-6.wpg]

Cummings and Associates	**Site Photos: Top photo of disturbed bluff scrub taken from the southwestern part of the property facing north; Bottom photo of marsh and disturbed bluff scrub taken from San Dieguito Drive facing west**	**Figure 6**

Table 1

Sensitive Plant Species Known to Occur Within an Approximate 10-mile Radius[1] of the 2.4-Acre Del Mar Property - 2100 Jimmy Durante Boulevard

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Acanthomintha ilicifolia San Diego Thornmint	List1B.1/S2/CE/FT	Occurs on heavy clay soils in a variety of habitats. Known elevations are 30 - 3,000 feet.	N	U	There are no heavy clay soils mapped on the property (Bowman, 1973 and Kennedy and Peterson, 1975).
Acmispon prostratus Nuttall's Acmispon	List 1B.1/S1.1/-/-	A species found in Coastal Dunes and Coastal Scrub along the immediate coast at elevations of 0 - 30 feet.	N	U	There are no Coastal Dunes on the property, but there is Southern Coastal Bluff Scrub on-site. However, the only extant occurrence of this species within the Del Mar quad is at Torrey Pines State Reserve (Fish and Game, 2012). NOTE: A synonym is *Lotus nuttallianus*.
Adolphia californica California Adolphia	List 2.1/S2/-/-	Typically found on metavolcanic and/ or clay soils in Sage Scrub habitats. Known elevations are 300 - 1,000 feet.	N	U	There are no metavolcanic or clay soils mapped on the property (Bowman, 1973 and Kennedy and Peterson, 1975). Also, the lowest known elevation for the species is ±240-feet above the highest elevation on-site.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Agave shawii var. *shawii* Shaw Agave	List 2.1/S1/-/-	A component of Maritime Succulent Scrub at elevations of 30 -250 feet. Known in California from fewer than ten native occurrences.	N	U	There is no Maritime Succulent Scrub on the property.
Ambrosia monogyra Singlewhorl Burrobrush	List 2.2/S2.2/-/-	Found in sandy washes in the south coastal portion of San Diego County. Known elevations range from 32 - 1645 feet.	N	U	There is a standing wetland on the property that forms a marsh, not a "wash". Also, the only CNDDB record of this species within 10-miles of the site is within the La Mesa quad (Fish and Game, 2012). NOTE: *Hymenoclea monogyra* is a synonym.
Ambrosia pumila San Diego Ambrosia	List 1B.1/S1/-/FE	Found in mesic open areas, often adjacent to drainages. Elevations range from 60 - 1,370 feet.	N	U	Due to the disturbances adjacent to the wetland on-site (i.e. the parking lot), this species is not anticipated on the property. Also, the only two CNDDB records within the Del Mar quad are along Los Penasquitos Creek several miles to the southeast (Fish and Game, 2012).
Aphanisma blitoides Aphanisma	List 1B.2/S3/-/-	Found in dune/bluff habitats at elevations of 0- 1,000 feet.	N	L	There are no dune habitats on the property, but there is Southern Coastal Bluff Scrub. Also, there are two CNDDB records of this species within 1-mile of the site, but these records are from 1894 and 1936 (Fish and Game, 2012).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Arctostaphylos glandulosa ssp. *crassifolia* Del Mar Manzanita	List 1B.1/S2/-/FE	Found on sandy soils derived from marine sandstones within Chaparral and Torrey Pine Forest habitats. Elevations range from 0 - 1,200 feet.	N	M	There are sandy soils derived from marine sandstones on the property, but there are no Chaparral habitats. However, there are 13 Torrey Pines on-site (not a "forest") and a CNDDB record of this species within 1-mile of the site (Fish and Game, 2012).
Artemisia palmeri San Diego Sagewort	List 4.2/S3.2/-/-	Found primarily along creeks and drainages near the coast; inland it may occur in mesic Chaparral conditions. Found in elevations from 50 - 3,010 feet.	N	L	There is a marsh on the property, but none of the CNDDB records within the Del Mar quad are within 1-mile of the site (Fish and Game, 2012).
Astragalus tener var. *titi* Coastal Dunes Milkvetch	List 1B.1/S1/CE/FE CA-Endemic	Found on Coastal Dunes at elevations of 1 - 165 feet.	N	U	There are no Coastal Dunes on the property.
Atriplex coulteri Coulter's Saltbush	List 1B.2/S2/-/-	This species is associated with alkaline or clay soils in a variety of habitats. Found at elevations of 9 - 1,513 feet.	N	U	There are no alkaline or clay soils mapped on the property (Bowman, 1973 and Kennedy and Peterson, 1975). Also, there are no CNDDB records of this species within the Del Mar quad (Fish and Game, 2012).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Atriplex pacifica South Coast Saltscale	List 1B.2/S2/-/-	Although most populations occur immediately along the coast or on saltpans, one or two populations do occur within inland Sage Scrub habitats. Grows at elevations of 0 - 461 feet.	N	U	The site is not located immediately on the coast, nor is it located on a saltpan. There is only one CNDDB record of this species within the Del Mar quad and it is located 3-miles to the southeast of the site.
Atriplex serenana var. *davidsonii* Davidson's Saltscale	List 1B.2/S2?/-/-	Known from Coastal Scrub and Coastal Bluff Scrub at elevations ranging from 32 - 658 feet. It is found in only two quads in San Diego County; La Jolla and San Luis Rey.	N	U	There is Southern Coastal Bluff Scrub on the property. However, this species is not known from the Del Mar quad (Fish and Game, 2012). NOTE: Subspecies *davidsonii* was not identified during the field work for the SD County Plant Atlas (Rebman and Simpson, 2006).
Baccharis vanessae Encinitas Baccharis	List 1B.1/S1/CE/FT CA-Endemic	Found locally in Chaparral habitats, close to the coast and on soils derived from marine sandstones. Grows at elevations from 197 - 2,369 feet.	N	U	There are no Chaparral habitat on the property.
Berberis nevinii Nevin's Barberry	List 1B.1/S1/CE/FE CA-Endemic	Known from a variety of habitats including Chaparral, Riparian Scrub, and Sage Scrub at elevations ranging from 901 - 2,715 feet.	N	U	Although there is Southern Coastal Bluff Scrub on the property, the lowest known elevation of the species is ±841-feet above the highest elevation on-site.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Bergerocactus emoryi Golden-Spined Cereus	List 2.2/S2.1/-/-	Found locally along the immediate coast on sandy soils derived from marine sandstones at elevations of 9 - 1,300 feet. A component of Maritime Succulent Scrub.	N	U	There is no Maritime Succulent Scrub on the property.
Bloomeria clevelandii San Diego Goldenstar	List 1B.1/S2/-/-	Found in a variety of habitats on clay soils at elevations of 164 - 1,530 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973 and Kennedy and Peterson, 1975). NOTE: *Muilla clevelandii* is a synonym.
Brodiaea filifolia Thread-Leaved Brodiaea	List 1B.1/S1/CE/FT CA-Endemic	Found on clay soils in a variety of habitats at 82 - 4,011 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973 and Kennedy and Peterson, 1975).
Brodiaea orcuttii Orcutt's Brodiaea	List 1B.1/S1/-/-	Found on heavy clay soils at elevations that range from 98 - 5,567 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973 and Kennedy and Peterson, 1975).
Camissoniopsis lewisii Lewis' Evening-Primrose	List 3/S1S3/-/-	Found in fine sandy soils along the beach at elevations from 0 - 987 feet.	N	U	The site is not located on the beach. NOTE: *Camissonia lewisii* is a synonym.
Ceanothus cyaneus Lakeside Ceanothus	List 1B.2/S2.2/-/-	Found in Chaparral and Cismontane Woodlands at elevations ranging from 775 - 4,985 feet.	N	U	There are no Chaparral or Cismontane Woodlands on the property.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Ceanothus verrucosus Wart-stemmed Ceanothus	List 2.2/S2.2/-/-	Associated with Chaparral habitats, it is frequently an indicator of Southern Maritime Chaparral. Known elevations range from 3 - 1,250 feet.	N	U	There are no Chaparral habitats on the property.
Centromadia parryi ssp. *australis* Southern Tarplant	List 1B.1/S2/-/-	Found in mesic areas, such as adjacent to marshes, in vernal pools, and in vernally mesic grasslands. Known elevations range from 0 - 1,400 feet.	N	L	There are two CNDDB records of this species within 1-mile of the site along the edge of the San Dieguito Lagoon (Fish and Game, 2012). However, due to the disturbances adjacent to the marsh on-site (i.e. the parking lot), this species has a low probability of occurring on-site.
Centromadia pungens ssp. *laevis* Smooth Tarplant	List 1B.1/S2.1/-/- CA-Endemic	Found on alkaline soils in mesic habitats, such as Meadows and Seeps, Playas, and Riparian Woodlands. Known elevation is 0 - 1,580 feet.	N	U	There are no CNDDB records of this species within the Del Mar quad (Fish and Game, 2012).
Chaenactis glabriuscula var. *orcuttiana* Orcutt's Pincushion	List 1B.1/S1/-/-	Found on sandy soils associated with Coastal Bluff Scrub and Coastal Dune habitats below 500-feet in elevation.	N	L	The site does contain sandy soils and Southern Coastal Bluff Scrub habitat. Also, there is a CNDDB record of this species within 1-mile of the site, but this record is from a 1917 collection.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Chorizanthe orcuttiana Orcutt's Spineflower	List 1B.1/S1/CE/FE CA-Endemic	Grows in Coastal Chaparral openings with a distinctive loose sandy substrate. Known elevations range from 9 - 412 feet.	N	U	There are no Chaparral habitats on the property.
Chorizanthe polygonoides var. *longispina* Long-Spined Spineflower	List 1B.2/S3/-/-	Found on clay soils in a variety of habitats. Known elevations of 987 - 5,034 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973 and Kennedy and Peterson, 1975).
Clarkia delicata Delicate Clarkia	List 1B.2/S2.2/-/-	Found in Chaparral and Cismontane Woodlands at elevations ranging from 775 - 4,200 feet.	N	U	There are no Chaparral or Cismontane Woodland habitats on the property.
Comarostaphylis diversifolia ssp. *diversifolia* Summer Holly	List 1B.2/S2/-/-	Found in coastal and inland Chaparral habitats, as well as Cismontane Woodlands. Known elevations range from 98 - 1,809 feet.	N	U	There are no Chaparral or Cismontane Woodland habitats on the property.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Corethrogyne filaginifolia var. *incana* San Diego Sand Aster	List 1B.1/S1.1/-/-	Grows in Coastal sandy areas at elevations of 9 - 379 feet.	N	M	There is a CNDDB record of this variety within 1-mile of the property in habitat quite similar to that on-site (Fish and Game, 2012). Please note that the Flora of North America (Volume 20) and the 2nd Edition of the Jepson Manual (2012) unite this variety and *C. f.* var. *linifolia* as a single species, *Corethrogyne filaginifolia*. If treated as a single species, then see entry below for occurrences on-site.
Corethrogyne filaginifolia var. *linifolia* Common Sand Aster	List 1B.1/S1.1/-/- CA-Endemic	Found in Coastal Scrub areas at elevations of 49 - 494 feet.	Y	Observed	Merkel and Associates, Inc. documented 40 individuals of this variety along the southeastern edge of the property. This species was observed during the 2012 updated biological survey by Cummings and Associates. NOTE: The Flora of North America (Volume 20)and the 2nd Edition of the Jepson Manual unite this variety and *C. f.* var. *incana* as a single species, *Corethrogyne filaginifolia*. NOTE: Another common name for this variety is the Del Mar Mesa Sand Aster.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Cylindropuntia californica var. *californica* Snake Cholla	List 1B.1/S1.1/-/-	Found in Coastal Scrub and Chaparral habitats at elevations of 98 - 494 feet.	N	L	There is Southern Coastal Bluff Scrub habitat on-site, and there is one CNDDB record of this variety within the Del Mar quad, but it is 5.5-miles to the southeast of the property (Fish and Game, 2012). NOTE: Synonyms are *Opuntia californica var. californica* and *Opuntia parryi* var. *serpentina*.
Dudleya blochmaniae ssp. *insularis* Santa Rosa Island Dudleya	List 1B.1/S1.1/-/- CA-Endemic	Found in coastal bluff scrub. Known from only one occurrence near Old Ranch Point. The population has been fenced.	N	U	Although the site contains Southern Coastal Bluff Scrub habitat, this subspecies is known from only one occurrence in the La Jolla quad (CNPS, 2012). NOTE: Subspecies *insularis* was not identified during the field work for the SD County Plant Atlas (Rebman and Simpson, 2006).
Dudleya brevifolia Shortleaved Dudleya	List 1B.1/S1/CE/- CA-Endemic	Found in open or bare areas on sandstone. Known elevations range from 98 -823 feet.	N	M	There are a few bare areas of sandstone on the property, and there are CNDDB records of this species within 1-mile of the property (Fish and Game, 2012). NOTE: Synonym for *Dudleya blochmaniae* ssp. *brevifolia*.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Dudleya variegata Variegated Dudleya	List 1B.2/S2.2/-/-	Found on clay soils and clay lenses in sunny openings in a variety of habitats. It also occurs on sandy soils in Sage Scrub habitats. Known at elevations of 9 - 1,909 feet.	N	L	There are no clay soils mapped on the property (Bowman, 1973 and Kennedy and Peterson, 1975), but there are sand soils and Southern Coastal Bluff Scrub habitat on-site. None of the CNDDB records within the Del Mar quad are within 1-mile of the site (Fish and Game, 2012).
Dudleya viscida Sticky Dudleya	List 1B.2/S2.2/-/- CA-Endemic	Found on rocky substrates within Chaparral, Coastal Scrub and Coastal Bluff Scrub habitats. Known at elevations of 32 - 1,810 feet.	N	U	There are no rocky substrates on the property.
Ericameria palmeri ssp. *palmeri* Palmer's Goldenbush	List 1B.1/S1/-/-	Associated with mesic soils in Chaparral and Sage Scrub habitats. Seasonally wet/moist locales are strongly preferred. Grows at elevations of 98 - 1,974 feet.	N	U	There are no CNDDB records of this subspecies within the Del Mar quad (Fish and Game, 2012).
Eryngium aristulatum var. *hooveri* Hoover's Button-Celery	List 1B.1/S2.1/—/— CA Endemic	Found in vernal pools.	N	U	There are no vernal pools on the property. NOTE: Variety *hooveri* was not identified during the field work for the SD County Plant Atlas (Rebman and Simpson, 2006).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Eryngium aristulatum var. *parishii* San Diego Button-Celery	List 1B.1/S1/CE/FE	Typically found in Vernal Pools, but this species is also tolerant of some of the habitats adjacent to Vernal Pools, such as Coastal Scrub and Valley and Foothill Grassland habitats. Grows at elevations of 65 - 2,040 feet.	N	U	There are no vernal pools on or in the vicinity of the property.
Erysimum ammophilum Sand-loving Wallflower	List 1B.2/S2.2/-/- CA-Endemic	Found in sandy openings within Chaparral, Coastal Dunes and Coastal Scrub habitats along the immediate coast. Known elevations range from 0 - 198 feet.	N	M	There are sandy openings amongst the Southern Coastal Bluff Scrub on-site, and there is a CNDDB record of this species within 1-mile of the property (Fish and Game, 2012).
Euphorbia misera Cliff Spurge	List 2.2/S1/-/-	In San Diego County, this species is found in Maritime Succulent Scrub often with a high incidence of cactus. Grows at elevations of 32 - 1,645 feet.	N	U	There is no Maritime Succulent Scrub on the property.
Ferocactus viridescens San Diego Barrel Cactus	List 2.1/S2/-/-	Found in a variety of habitats, such as Sage Scrub, Chaparral, and Valley and Foothill Grassland. Often found on south-facing slopes at elevations ranging from 9 - 1,481 feet.	N	U	Although there is Southern Coastal Bluff Scrub on-site, there are no south-facing slopes on the property.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Frankenia palmeri Palmer's Frankenia	List 2.1/S1.1/-/-	A species found in Coastal Dunes, Salt Marshes and Swamps, and Playas along the immediate coast in San Diego County at elevations of 0 - 35 feet.	N	U	There are no CNDDB records of this species within 10-miles of the property (Fish and Game, 2012).
Geothallus tuberosus Campbell's Liverwort	List 1B.1/S1/-/- CA-Endemic	Found in Coastal Scrub and Vernal Pool habitats. Recently reported at Camp Pendleton. Elevations range from 32 - 1,974 feet.	N	L	Although there is Southern Coastal Bluff Scrub habitat on the property, the CNDDB records of this species within the Del Mar quad are more than 1-mile from the property (Fish and Game, 2012).
Githopsis diffusa ssp. *filicaulis* Mission Canyon Bluecup	List 3.1/S1.1/-/- CA-Endemic	Found in isolated, sandy openings in Chaparral habitats at elevations of 1,480 - 2,300 feet.	N	U	There are no Chaparral habitats on the property, and this species is found at elevations much higher than those represented on-site.
Grindelia hallii San Diego Gumplant	List 1B.2/S2.2/-/- CA-Endemic	Grows in Montane Meadows and Lower Montane Coniferous Forests with sunny openings. Prefers locales which are quite wet in the early spring. Known elevations range from 608 - 5,742 feet.	N	U	There are no Montane Meadows or Lower Montane Coniferous Forests on the property. NOTE: Synonym for *Grindelia hirsutula* var. *hallii.*

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Harpagonella palmeri Palmer's Grapplinghook	List 4.2/S3.2/-/-	Found in clay vertisols with open grassy slopes or in open Diegan Sage Scrub. Diablo clays are favored along the coast. Elevations range from 658 - 3,142 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973 and Kennedy and Peterson, 1975).
Hazardia orcuttii Orcutt's Hazardia	List 1B.1/S1/CT/FC	Open Chaparral with Chamise is the habitat for the one known U.S. site in Lux Canyon. Found on loamy alluvial soil of the Huerhuero complex between 263 - 280 feet.	N	U	Although there is alluvial soil of the Huerhuero complex on the property, there is no Chaparral habitat on this site. Also, this species is known from only one U.S. site in Lux Canyon.
Heterotheca sessiliflora ssp. *sessiliflora* Beach Goldenaster	List 1B.1/S2.1?/-/-	Found on sandy soils within Sage Scrub habitats, typically along the coast.	N	M	There are sandy soils and Southern Coastal Bluff Scrub on the property, and there is a CNDDB record of this subspecies within 1-mile of the property (Fish and Game, 2012).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Isocoma menziesii var. *decumbens* Decumbent Goldenbush	List 1B.2/S2.2/-/-	Associated with Sage Scrub habitats at elevations ranging from 30 -440 feet.	N	L	There is Southern Coastal Bluff Scrub on-site, but the one CNDDB record of this species within the Del Mar quad is more than 1-mile from the site (Fish and Game, 2012). NOTE: The Flora of North America (volume 20) has eliminated all varieties and just calls the plant *Isocoma menziesii.* Rebman identifies the plant as *Isocoma menziesii* var. *menziesii* and calls it Spreading Goldenbush.
Iva hayesiana San Diego Marsh-Elder	List 2.2/S2.2?/-/-	A species found in marshy habitats in slow moving waters. Found at elevations of 32 - 1,645 feet.	N	U	Although there is a marsh on the property, the water in it is standing, not slow moving.
Juncus acutus var. *leopoldii* Southwestern Spiny Rush	List 4.2/S3.2/-/-	Found in Coastal Salt Marsh at brackish locales, Alkaline Meadows, and Riparian Marshes. At mid-elevations may occur in limited numbers along drainages with willow riparian vegetation or Sycamore Woodland. On the desert it may grow at Palm Oases. Found at elevations that range from 9 - 2,961 feet.	Y	Observed	Merkel and Associates, Inc. documented 183 individuals within the Coastal Brackish Marsh on the property. This variety of Spiny Rush was observed during the 2012 updated biological survey by Cummings and Associates.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Lasthenia glabrata ssp. *coulteri* Coulter's Goldfields	List 1B.1/S2.1/-/-	A species of Salt Marshes, Playas and Vernal Pools. Found at elevations of 3 - 4,014 feet.	N	L	There is a Coastal Brackish Marsh on the property, and there is a CNDDB record of this subspecies at the mouth of the San Dieguito River within 1-mile of the site (Fish and Game, 2012).
Lepidium virginicum ssp. *menziesii* Poor Man's Pepper	List 1B.2/S3/-/-	Found in Coastal Scrub and Chaparral habitats generally well away from the coast in foothill elevations. It grows in relatively dry, exposed locales at elevations of 3 - 2,912 feet.	N	U	Although there is Southern Coastal Bluff Scrub on the property, the site is located ½-mile from the coast. Also, none of the CNDDB records within the Del Mar quad are within 1-mile of the site (Fish and Game, 2012). NOTE: A synonym is *Lepidium virginicum* var. *robinsonii.*
Leptosyne maritima Sea Dahlia	List 2.2/S2.2/-/-	Found on sandstone cliffs near the ocean. Known in elevations of 16 - 494 feet.	N	M	There are a few areas on the property occupied by sandstone bluffs. Also, there is a CNDDB record of the species within 1-mile of the property (Fish and Game, 2012). NOTE: Synonym for *Coreopsis maritima.*
Mobergia calculiformis Light Gray Lichen	—/S1.1/-/-	Found on acidic rocks, and basalt above oceanic cliffs to 1,300 feet.	N	U	There are no CNDDB records of this lichen within the Del Mar quad (Fish and Game, 2012).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Monardella hypoleuca ssp. *lanata* Felt-Leaved Monardella	List 1B.2/S2.2/-/-	Found in Chaparral and Cismontane Woodlands at elevations ranging from 980 - 3,900 feet.	N	U	There are no Chaparral or Cismontane Woodland habitats on the property.
Monardella viminea Willowy Monardella	List 1B.1/S1/CE/FE CA-Endemic	A species found in canyons and washes. Associated with riparian, Sage Scrub and Chaparral habitats. Found at 164 - 741 feet in elevation.	N	U	There are no suitable microhabitats on the property.
Myosurus minimus Little Mousetail	List 3.1/S2.2/-/-	Found in Vernal Pools and occasionally in Valley and Foothill Grasslands adjacent to Vernal Pools at elevations of 65 - 2,106 feet.	N	U	There are no vernal pools on or in the immediate vicinity of the site. NOTE: A synonym is *Myosurus minimus* ssp. *apus.*
Navarretia fossalis Spreading Navarretia	List 1B.1/S1/-/FT	In San Diego County, the preferred habitat of this species is Vernal Pools. Found at elevations of 987 - 4,277 feet.	N	U	There are no vernal pools on or in the immediate vicinity of the site.
Navarretia prostrata Prostrate Vernal Pool Navarretia	List 1B.1/S2/-/- CA-Endemic	Primarily found in mesic habitats, such as Vernal Pools, Meadows and Seeps, but also found in Coastal Scrub and Valley and Foothill Grassland habitats. Elevations range from 49 - 2303 feet.	N	U	There are no vernal pools on or in the immediate vicinity of the site. Also, there are no CNDDB records of this species within the Del Mar quad (Fish and Game, 2012).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Nemacaulis denudata var. *denudata* Coast Woolly-Heads	List 1B.2/S2.2/-/-	A species found in Coastal Dunes along the immediate coast at elevation ranging from 0 - 330 feet.	N	U	There are no Coastal Dunes on the property.
Orcuttia californica California Orcutt Grass	List 1B.1/S1/CE/FE	A Vernal Pool obligate. Grows at elevations of 49 - 2,171 feet.	N	U	There are no vernal pools on or in the immediate vicinity of the site.
Orobanche parishii ssp. *brachyloba* Short-lobed Broomrape	List 4.2/S3.2/-/-	Grows in Coastal Bluff Scrub and Coastal Dunes at elevations of 9 - 1,004 feet. Can be parasitic on shrubs such as *Isocoma menziesii.*	N	L	Although there is Southern Coastal Bluff Scrub habitat on the property, the only CNDDB record of this species within the Del Mar quad is located in Torrey Pines State Reserve (Fish and Game, 2012).
Phacelia ramosissima South Coast Branching Phacelia	List 3.2/S3.2/—/—	Found in chaparral, coastal dunes and scrub and in marshes and swamps at elevations of 19 - 987 feet.	N	U	Although there is Southern Coastal Bluff Scrub habitat on the property, there are no CNDDB records of this species within the Del Mar quad (Fish and Game, 2012). NOTE: A synonym is *Phacelia ramosissima* var. *austrolitoralis.*
Phacelia stellaris Brand's Star Phacelia	List 1B.1/S1/-/FC	Found in sandy openings within Sage Scrub near the coast. Known from approximately 10 occurrences. Known at elevations of 3 - 1,316 feet.	N	U	Although there is Southern Coastal Bluff Scrub habitat and sandy soils on the property, there are no CNDDB records of this species within the Del Mar quad (Fish and Game, 2012).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Pinus torreyana ssp. *torreyana* Torrey Pine	List 1B.2/S1.2/-/- CA-Endemic	Found in Closed-cone Coniferous Forest, and Chaparral along the coast near Del Mar. Mainland, naturally occurring, populations are in Torrey Pines State Preserve at elevations of 246 - 527 feet..	Y	Observed	Merkel and Associates, Inc. documented 12 Torrey Pine trees on the property in 2004, and 13 Torrey Pine trees were identified during the updated biological survey by Cummings and Associates.
Pogogyne abramsii San Diego Mesa Mint	List 1B.1/S1/CE/FE CA-Endemic	A Vernal Pool obligate. Found at elevations of 296 - 658 feet.	N	U	There are no vernal pools on or in the immediate vicinity of the site.
Pogogyne nudiuscula Otay Mesa Mint	List 1B.1/S1/CE/FE	A Vernal Pool obligate known from approximately 10 occurrences on Otay Mesa. Found at elevations of 296 - 823 feet.	N	U	There are no vernal pools on or in the immediate vicinity of the site.
Quercus dumosa Nuttall's Scrub Oak	List 1B.1/S1.1/-/-	A coastal form of the Scrub Oak typically found in Chaparral habitats at elevations of 49 - 1,316 feet.	N	U	There are no Chaparral habitats on the property.
Senecio aphanactis Chaparral Ragwort	List 2.2/S1.2/-/-	Found on alkaline soils in Chaparral, Coastal Scrub and Cismontane Woodland habitats. Grows at elevations of 49 - 2,632 feet.	N	U	Although there is Southern Coastal Bluff Scrub on the property, there is only one CNDDB record of this species within 1-mile of the site, and this record is from 1894 (Fish and Game, 2012).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Sphaerocarpos drewei Bottle Liverwort	List 1B.1/S1/-/- CA-Endemic	Found in openings within Chaparral and Coastal Scrub at elevations ranging from 296 - 1974 feet.	N	U	Although there is Southern Coastal Bluff Scrub on the property, this liverwort has been found at elevations higher than those on-site.
Stemodia durantifolia Purple Stemodia	List 2.1/S2.1?/-/-	A species of mesic, sandy areas. Grows at elevations of 592 - 987 feet.	N	U	There are no CNDDB records of this species within the Del Mar quad (Fish and Game, 2012).
Stylocline citroleum Oil Neststraw	List 1B.1/S2/-/- CA-Endemic	Found in clay soil at elevations from 164 - 1,316 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973 and Kennedy and Peterson, 1975). Also, the historic specimen from San Diego County is believed to be a variant of *Stylocline gnaphaloides*. NOTE: *Stylocline citroleum* is not found in Rebman and Simpson (2006).
Suaeda esteroa Estuary Seablite	List 1B.2/S2/-/-	A species of Coastal Salt Marshes and Swamps. Grows at elevations of 0 - 17 feet.	N	M	There is a Coastal Brackish Marsh on the property, not a Salt Marsh, but there are two CNDDB records of this species in the immediate vicinity of the site (Fish and Game, 2012).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Texosporium sancti-jacobi Woven Spored Lichen	—/S1.1/-/-	Typically found on rabbit pellets, but also found on wood rat dung and soil within Chaparral and Sage Scrub habitats.	N	M	There is Southern Coastal Bluff Scrub habitat on the property and *Sylvilagus* sp. pellets were observed on-site. Also, there are CNDDB records of this species within the Del Mar quad (Fish and Game, 2012).

[1] This plant list was generated by the nine quad search function of the on-line California Native Plant Society (CNPS) inventory that was updated through September 13, 2012. This list was augmented with plants from a nine quad search of the California Natural Diversity Data Base (CNDDB) and with an additional plant found at the site, but not on either the CNPS or CNDDB lists.

[2] The Common Names were taken from Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., and Wilken, D.H. eds. 2012. The Jepson Manual Vascular Plants of California, 2nd Edition. University of California Press, Berkeley, xxii + 1568 pp.

[3] The first line in the "Sensitivity Code and Status" column shows the California Rare Plant Rank with threat code extensions/the state ranking of the California Natural Diversity Database (CNDDB) with the threat rank extension/the California state threatened and endangered status code/the federal threatened and endangered status code. The second line in the "Sensitivity Code and Status" column identifies whether the species is a California Endemic as identified by the CNPS or not (blank second line). Following is a key to the codes in the table.

Key to the California Rare Plant Ranking System

List 1A — Presumed extinct in California
List 1B — Plants threatened or endangered in California and elsewhere
List 2 — Plants rare, threatened or endangered in California but more common elsewhere
List 3 — Plants about which more information is needed; a watch list
List 4 — Limited distribution (a watch list)

Key to the California Rare Plant Rank Threat Code Extensions

.1 — Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 — Fairly endangered in California (20-80% occurrences threatened)
.3 — Not very endangered in California (<20% of occurrences threatened or no current threats known)

Key to the State Ranking of the CNDDB

S1 — Less than 6 element occurrences OR less than 1,000 individuals OR less than 2,000 acres*
S2 — 6 - 20 element occurrences OR 1,000 - 3,000 individuals OR 2,000 - 10,000 acres*

S3 — 21 - 80 element occurrences OR 3,000 - 10,000 individuals OR 10,000 - 50,000 acres*
S4 — Apparently secure within California, but factors do exist to cause some concern
S5 — Demonstrably secure in California
S? OR S2? OR S2S3 — Uncertainty about the rank of an element
SXC — All sites in California are extirpated, but the species exists in cultivation

Key to the Threat Rank Extensions of S1, S2 or S3 (if assigned)

.1 — very threatened
.2 — threatened
.3 — that no current threats are known

State and Federal Threatened and Endangered Species Status Codes

CR — State of California listed as rare
CE — State of California listed as endangered
CT — State of California listed as threatened
PT — Proposed for Listing as Threatened under the Federal Endangered Species Act
PE — Proposed for Listing as Endangered under the Federal Endangered Species Act
FC — Candidate for Listing under the Federal Endangered Species Act
FE — Designated Endangered under Federal Endangered Species Act
FT — Designated as Threatened under the Federal Endangered Species Act

[4] The "Potential On-site" column assesses the potential for the particular species to occur on the subject property given the known habitat preferences and distribution of that species. The codes used in this column are defined as follows:

Observed — Individuals of this species were found within the bounds of the site
H — The potential for occurrence is "high". Habitats on-site are considered suitable for the species, and the species is known from the immediate vicinity.
M — The potential for occurrence is "medium". Habitats and conditions on-site are considered possible for the species.
L — The potential for occurrence is "low". The habitats present on-site are marginal for the species and/or extremely limited in extent. In other words, the species is not anticipated, but it's occurrence can not be precluded.
U — The potential for occurrence is "unlikely". The habitat requirements of the species are not present on the subject property.

[:\1650 Sensitive Plant List.wpd]

Table 2

Sensitive Wildlife Species Known to Occur Within an Approximate 10-mile Radius[1] of the 2.4 Acre Del Mar Property - 2100 Jimmy Durante Boulevard

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Insects					
Cicindela hirticollis gravida Sandy Beach Tiger Beetle	—/—/— CA Endemic	This species is found in bright sunlight in open sandy areas adjacent to non-brackish waters.	N	U	Although close to the coast, this property contains brackish waters only.
Cicindela latesignata latesignata Western Beach Tiger Beetle	—/—/—	This insect is found on coastal mudflats and beaches.	N	U	This property is not found on the immediate coast.
Cicindela senilis frosti Senile Tiger Beetle	—/—/—	This beetle inhabits marine shoreline.	N	U	This property is not found on the immediate coast.
Coelus globosus Globose Dune Beetle	—/—/—	Inhabits foredunes and sand hummocks immediately bordering the coast from Bodega Bay Head to Ensenada, Baja California and all of the Channel Islands except San Clemente.	N	U	This property is not found on the immediate coast.
Danaus plexippus Monarch Butterfly	—/—/—	This species is found in a variety of open habitats typically where the larval host plants, the true Milkweeds (*Asclepias* spp.), are found.	N	U	No Milkweeds were identified on the property.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Euphydryas editha quino Quino Checkerspot Butterfly	FE/—/X-CI	The Quino is found in a variety of open canopy habitats where the butterfly's primary and secondary larval host food plants are found. These host plants include, Dot-seed Plantain (*Plantago erecta*), Desert Plantain (*Plantago patagonica*), Owl's Clover (*Castilleja exserta*), Coulter's Snapdragon (*Antirrhinum coulterianum*), and Thread-leaved Bird's Beak (*Cordylanthus rigidus*). It is precluded from closed canopy situations and is a hilltopping species.	N	U	The property is located outside of a recommended survey area (U.S. Fish and Wildlife Service, 2005).
Lycaena hermes Hermes Copper Butterfly	—/—/—	Associated closely with the larval food plant, Redberry (*Rhamnus crocea*). Recent studies indicate that the butterfly prefers those Redberry that are roughly 18-years and older.	N	U	Although a few Redberry bushes were found on the property, Marschalek and Klein (2010) do not show any occurrences of the Hermes Copper Butterfly west of Interstate 5.
Melitta californica California Mellitid Bee	—/—/—	Locally collected from Sea Dahlia (*Leptosyne maritima*) at Torrey Pines.	N	U	There were no Sea Dahlias on the property. Also, the Torrey Pines population is possibly extirpated.
Crustaceans					
Branchinecta sandiegonenis San Diego Fairy Shrimp	FE/—/—	A Vernal Pool obligate.	N	U	There are no Vernal Pools on the property.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Streptocephalus woottoni Riverside Fairy Shrimp	FE/—/—	A Vernal Pool obligate.	N	U	There are no Vernal Pools on the property.
Gastropoda					
Helminthoglypta coelata Mesa Shoulderband	—/—/—	Found along the coast in rock slides, beneath bark and rotten logs and among coastal vegetation.	N	U	There are no CNDDB records of this species in the Del Mar quad (Fish and Game, 2012).
Tryonia imitator Mimic Tryonia	—/—/— CA Endemic	This aquatic gastropod is found in coastal lagoons, estuaries, and salt marshes.	N	L	There are CNDDB records of this species in the San Dieguito Lagoon within 1-mile from the property (Fish and Game, 2012) and there is a very small, isolated Coastal Brackish Marsh on the property. NOTE: Another common name for this species is California Brackish Water Snail.
Amphibians					
Spea hammondii Western Spadefoot Toad	—/CSC/BLM Sensitive	A cryptic species, this toad probably occurs throughout the coastal plain and foothills, anywhere ephemeral water sources develop.	N	U	The two CNDDB records from the Del Mar quad are both east of Interstate 5 (Fish and Game, 2012).

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Reptiles					
Actinemys marmorata pallida Southwestern Pond Turtle	—/CSC/FS and BLM Sensitive	Most often found in environments where water persists year-round. It has also been found at two drainages in the desert. It prefers lakes, streams, ponds or other areas with emergent or floating vegetation and often basks on rocks or protruding logs.	N	U	The water on the property is not deep enough to anticipate Pond Turtles. NOTE: Synonyms are *Clemmys marmorata pallida* and *Emys marmorata*.
Aspidoscelis hyperythra Orange-throated Whiptail	—/CSC/—	Occupies scrub habitats on the coastal plain and lower foothills where Subterranean Termites (*Reticulitermes* sp.), the principal prey species, is found. Shrub cover with openings are required for thermoregulation.	N	M	The property contains Coastal Bluff Scrub and there are numerous CNDDB records within the Del Mar quad (Fish and Game, 2012). NOTE: Synonyms are *Aspidoscelis hyperythrus beldingi* and *Cnemidophorus hyperythrus*.
Aspidoscelis tigris stejnegeri Coastal Western Whiptail	—/—/—	Occupies scrub habitats on the coastal plain and lower foothills where shrub cover with openings is required for thermoregulation.	N	M	The property contains Coastal Bluff Scrub and there are numerous CNDDB records within the Del Mar quad (Fish and Game, 2012). NOTE: A synonym is *Cnemidophorus tigris multiscutatus*.
Charina trivirgata Rosy Boa	—/—/FS Sensitive	A cryptic species found in a variety of habitats, including sage scrubs, Chaparrals and Pinyon-Juniper Woodlands.	N	U	There are no CNDDB records of this species in the Del Mar quad (Fish and Game, 2012).

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Crotalus ruber Red Diamond Rattlesnake	—/CSC/—	In a variety of habitats, although most frequently found in Sage Scrub and Chaparral. It is found throughout the County except for the low desert.	N	U	There are no CNDDB records of this species in the Del Mar quad (Fish and Game, 2012).
Diadophis punctatus similis San Diego Ringneck Snake	—/—/FS Sensitive	In San Diego, this snake is found in a variety of habitats from the coast to the mountains. It is typically found under rotting logs, bark, rocks and damp leaves.	N	M	The property contains Coastal Bluff Scrub and there are several CNDDB records within the Del Mar quad (Fish and Game, 2012).
Phrynosoma coronatum Coast Horned Lizard	—/CSC/BLM and FS Sensitive	Found throughout the County (except the low deserts) anywhere the primary prey species, harvester ants (*Pogonomyrmex* sp. and *Messor* sp.) are found. It requires some openings in vegetation for thermoregulation.	N	M	The property contains Coastal Bluff Scrub and there are numerous CNDDB records within the Del Mar quad (Fish and Game, 2012). NOTE: A synonym is *Phrynosoma blainvillii.*
Plestiodon skiltonianus interparietalis Coronado Island Skink	—/CSC/BLM Sensitive	In a variety of habitats ranging from coastal scrub, to Chaparral and forested slopes, into the denser desert scrub and Pinyon-Juniper Woodlands.	N	M	The property contains Coastal Bluff Scrub and there are several CNDDB records within the Del Mar quad (Fish and Game, 2012). NOTE: A synonym is *Eumeces skiltonianus interparietalis.*
Salvadora hexalepis virgultea Coast Patch-nosed Snake	—/CSC/—	Found in arid Sage Scrub and Chaparral habitats.	N	U	There are no CNDDB records of this species in the Del Mar quad (Fish and Game, 2012).

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Thamnophis hammondii Two-striped Garter Snake	—/CSC/FS and BLM Sensitive	An aquatic snake found in association with fluvial and lacustrine environments, even cattle tanks. Aestivating individuals may be found some distance from water sources.	N	U	This property contains brackish waters only, not freshwater.
Mammals					
Antrozous pallidus Pallid Bat	—/CSC/FS and BLM Sensitive; WBWG High Priority	A bat that feeds on the ground (Jerusalem Crickets and scorpions are typical fare). This species will roost in any cavity (natural or man-made) that affords a considerable modicum of darkness.	N	U	There are no CNDDB records of this species in the Del Mar quad (Fish and Game, 2012).
Chaetodipus californicus femoralis Dulzura California Pocket Mouse	—/CSC/—	Frequent in arid Chaparral habitats in the foothills and lower mountain slopes of the County.	N	U	There are no CNDDB records of this species in the Del Mar quad (Fish and Game, 2012).
Chaetodipus fallax fallax Northwestern San Diego Pocket Mouse	—/CSC/—	Found in coastal sage scrub, sage scrub/grassland ecotones and chaparral communities. Found in open, sandy areas.	N	H	There is a CNDDB record of this species approximately 1-mile to the southeast of the property (Fish and Game, 2012). Between 20 and 123 individuals were trapped in the area during different survey events in 1994, 2000, and 2002.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Choeronycteris mexicana Mexican Long-tongued Bat	—/CSC/WBWG High Priority	This bat feeds on the nectar of night-blooming succulents. Occurs occasionally in extreme southern California at the northern edge of its range. Roosts in caves and buildings.	N	U	There are no suitable roosting sites on the property.
Euderma maculatum Spotted Bat	—/CSC/BLM Sensitive; WBWG High Priority	Found in both montane open coniferous forests and low deserts. This species dwells primarily in caves.	N	U	There are no suitable roosting sites on the property.
Eumops perotis californicus Greater Western Mastiff Bat	—/CSC/BLM Sensitive; WBWG High Priority	Frequently associated with cliffs or abandoned buildings that afford a considerable vertical drop from the roost to become airborne.	N	U	There are no suitable roosting sites on the property.
Lasionycteris noctivagans Silver-haired Bat	—/—/WBWG Medium Priority	During the winter, this species is found in forested areas as this is mainly a tree-dwelling bat.	N	U	There are no CNDDB records of this species in the Del Mar quad (Fish and Game, 2012).
Lasiurus blossevillii Western Red Bat	—/CSC/FS Sensitive; WBWG High Priority	It is found in and near deciduous trees, frequently in orchards.	N	U	There are no deciduous trees on the property.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Lasiurus cinereus Hoary Bat	—/—/WBWG Medium Priority	Seasonally found in forested areas.	N	U	There are approximately eight Torrey Pines of suitable size on the property, but the property would not be considered "forested". Also, the only CNDDB record of this species within the Del Mar quad is from Penasquitos Creek approximately 5½-miles to the southeast (Fish and Game, 2012).
Lasiurus xanthinus Western Yellow Bat	—/CSC/WBWG High Priority	Expected in the desert region of San Diego County. Roosts in trees.	N	U	There are no CNDDB records of this species in the Del Mar quad (Fish and Game, 2012).
Lepus californicus bennettii San Diego Black-tailed Jackrabbit	—/CSC/—	Found in a variety of habitats throughout the County, but requires open or semi-open vegetation.	N	U	The only CNDDB record of this species within the Del Mar quad is from Carmel Mountain approximately 5-miles to the southeast (Fish and Game, 2012). Also, the Coastal Bluff Scrub in which this species would occur is mostly located on steep sandstone cliffs.
Myotis yumanensis Yuma Myotis	—/—/BLM Sensitive; WBWG Low to Medium Priority	This species roosts in caves and man-made structures, and is closely associated with water sources.	N	U	There are no suitable roosting sites on the property.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Neotoma lepida intermedia San Diego Desert Woodrat	—/CSC/—	An inhabitant of Sage Scrubs and Chaparral, especially with yuccas and cactus. Typical nests are embedded in rock crevices and partially underground.	N	U	The site is underlain by sandstone and there are no rocky crevices or outcrops on the property.
Nyctinomops femorosaccus Pocketed Free-tailed Bat	—/CSC/—;WBWG Medium Priority	Roosting in a variety of situations, this species is associated with desert shrub and pine-oak woodlands.	N	U	There are no CNDDB records of this species in the Del Mar quad (Fish and Game, 2012).
Nyctinomops macrotis Big Free-tailed Bat	—/CSC/WBWG Medium to High Priority	Associated with desert shrub, woodlands, and evergreen forests, where there are high cliffs and rocky outcrops for roosting.	N	U	There are no suitable roosting sites on the property.
Perognathus longimembris pacificus Pacific Pocket Mouse	FE/CSC/—	Lives on fine, sandy soils near the ocean.	N	U	Although the one CNDDB record of this species within the Del Mar quad is within 1-mile to the southeast of the property, the CNDDB record states that the identification is unsubstantiated and that follow up trapping surveys four months later resulted in no Pacific Pocket Mouse captures during 312 trap-nights of effort (Fish and Game, 2012).
Taxidea taxus American Badger	—/CSC/—	A fossorial species of open deserts and grassland habitats.	N	U	The site is too developed to anticipate this species.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Birds					
Accipiter cooperii Cooper's Hawk (nesting)	—/WL/—	Nesting Cooper's generally use taller trees, including a number of horticultural species and native Oaks.	N	L	Although this species is a confirmed breeder in the immediate vicinity (Unitt, 2004), the only trees on the property are the 13 Torrey Pine trees that are not that dense or tall.
Aimophila ruficeps ssp. *canescens* Rufous-crowned Sparrow	—/WL/—	This species nests in Sage Scrub, open or burned Chaparral, and in Non-Native Grasslands with scattered shrubs.	N	L	There is Coastal Bluff Scrub on the property and breeding birds are possible in the immediate vicinity (Unitt, 2004).
Amphispiza belli belli Bell's Sage Sparrow	—/WL/—	This species prefers Sage Scrub and Chaparral habitats with an open canopy and areas of bare soil.	N	U	This species is not known from the immediate vicinity (Unitt, 2004).
Athene cunicularia Burrowing Owl (burrow sites)	BCC/CSC/BLM Sensitive	This owl requires relatively flat terrain to enable the bird to survey its territory from the burrow hole. There are only five known nesting sites within the County. At these locations, the owl occurs in open grasslands, and open Sage Scrub habitats.	N	U	The habitat on-site within which this species would occur is located on steep terrain not suitable for the species. Also, the Burrowing Owl is not known from the immediate vicinity (Unitt, 2004).
Campylorhynchus brunneicapillus sandiegensis Coastal Cactus Wren	BCC/CSC/FS Sensitive	Found in association with stands of *Opuntia* sp. and/or *Cylindropuntia* sp. along the coastal strip and lower foothills.	N	U	There are no suitable clumps or stands of cacti for this wren. Also, according to Unitt (2004), this species has not been seen in the area since before 1997.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Charadrius alexandrinus nivosus Western Snowy Plover (nesting)	FT; BCC/CSC/—	Found on beaches, dunes, salt flats, and at some shallow inland lakes. Most populations concentrated in Camp Pendleton and the Silver Strand.	N	U	The property is mostly disturbed (utilized as a parking lot) with a very small, isolated Coastal Brackish Marsh with no suitable edge for this shorebird. Also, according to Unitt (2004), this species has not been seen in the area since before 1997.
Circus cyaneus Northern Harrier (nesting)	—/CSC/—	This raptor is found in open wetlands and grasslands. It nests on the ground usually hidden in a patch of taller vegetation.	N	U	The small, isolated Coastal Brackish Marsh on the property occupies 0.10-acre adjacent to a dirt parking lot.
Dendroica petechia brewsteri Yellow Warbler (nesting)	BCC/CSC/—	Breeding occurs in mature riparian habitats, primarily along the coastal slope.	N	U	There are no mature riparian habitats on the property.
Elanus leucurus White-tailed Kite (nesting)	—/Fully Protected/—	This species nests in tall trees adjacent to foraging habitat that contains its primary prey, the California Vole (*Microtus californicus*).	N	L	Although this species is a confirmed breeder in the immediate vicinity (Unitt, 2004), the only trees on the property are the 13 Torrey Pine trees which are not particularly dense or tall.
Empidonax traillii extimus Southwestern Willow Flycatcher (nesting)	FE/CE/—	This species is restricted to wide riparian habitats, generally with flowing water.	N	U	There are no mature riparian habitats on the property.
Eremophila alpestris actia California Horned Lark	—/WL/—	A species of open (often disturbed), arid habitats, such as grasslands, coastal strand, and sandy deserts.	N	U	The flat portion of the property is utilized as a parking lot for the Del Mar Fairgrounds. The remainder of the site is steep terrain not suitable for this species.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Falco mexicanus Prairie Falcon (nesting)	—/WL/—	This falcon nests on cliff ledges, and forages in open desert or grassland.	N	U	The site does not contain appropriate nesting habitat in that the cliff ledges are easily accessible to predators. Also, according to Unitt (2004), . . . "all known or likely current nest sites are at least 23 miles from the coast."
Icteria virens Yellow-breasted Chat (nesting)	—/CSC/—	In San Diego County, this bird is typically found in the coastal lowland where riparian woodlands occur.	N	U	There are no mature riparian habitats on the property.
Ixobrychus exilis Least Bittern (nesting)	—/CSC/—	The Least Bittern nests in marshes with Cattails.	N	U	Although the site does contain Coastal Brackish Marsh with Cattails, this marsh occupies only 0.09-acre and of that 0.09-acre, only half of that contains Cattails.
Laterallus jamaicensis coturniculus California Black Rail	BCC/CT; Fully Protected/—	Found in coastal and freshwater wetlands.	N	U	This rail is extirpated in San Diego County. The last vagrant was seen in 1983 (Unitt, 2004).
Passerculus sandwichensis beldingi Belding's Savannah Sparrow	—/CE/—	A non-migratory subspecies endemic to the coast of southern California and northern Baja California, is narrowly restricted to coastal marshes dominated by Pickleweed.	N	L	Although the site does contain Coastal Brackish Marsh with some Pickleweed, the Pickleweed is not dominant. This subspecies is a confirmed breeder in the immediate vicinity (Unitt, 2004).

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Plegadis chihi White-faced Ibis (nesting colony)	—/WL/—	This Ibis nests in freshwater marshes and forages in shallow water and wet grass.	N	U	In San Diego County, there were two known active colonies during the period from 1997 to 2001; one at Guajome Lake and one in a pond at the mouth of Keys Canyon in the San Luis Rey River valley.
Polioptila californica Coastal California Gnatcatcher	FT/CSC/—	An obligate inhabitant of Sage Scrub or sometimes Chaparral where the two habitats intermix.	Y	Observed	A California Gnatcatcher was first heard off-site to the south of the property and then one was seen on the bluff above the wetland foraging in the Coastal Bluff Scrub. It is unknown whether this was the same bird or not.
Rallus longirostris levipes Light-footed Clapper Rail	FE/CE; Fully Protected/—	Habitat preferred is coastal salt marshes. The Tijuana River estuary is an especially critical site. A few individuals have colonized some new brackish or freshwater sites.	N	U	There is a small Coastal Brackish Marsh on the property, but the preferred habitat is coastal salt marshes. According to Unitt (2004), only migrants or non-breeders are known from the immediate area.
Sternula antillarum browni California Least Tern (nesting colony)	FE/CE; Fully Protected/—	Found on sand dunes and sandbars close to water among scattered debris and grass.	N	U	There are no sand dunes or sand bars on the property.
Vireo bellii pusillus Least Bell's Vireo (nesting)	FE/CE/—	An obligate inhabitant of dense, fairly broad, riparian woodlands with adjacent uplands that provide foraging habitat.	N	U	There are no mature riparian habitats on the property.

[1] This sensitive wildlife list is based on a search of the California Natural Diversity Database (CNDDB), and Fish and Game, California Department of. 2011. California Natural Diversity Data Base: Special Animals. The Author, Sacramento, California, 60 pp. [available at http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPAnimals.pdf], edition of January 2011.

[2] The status codes are given in the sequence "County Group, federal/state/other." A "—" indicates no status at that level. The codes used are defined as follows:

FE — Federal Endangered
pFE — A petition for Federal Endangerment status has been submitted
FT — Federal Threatened
D — Delisted from the Endangered Species Act
BCC — Birds of Conservation Concern on the BCC 2008 list within BCR 32
CE — State Endangered
CT — State Threatened
CSC — California Special Concern species
WL — California Department of Fish and Game Watch List
AFS EN — defined as an endangered species by the American Fisheries Society
Fully Protected — A species for which special state legislation exists protecting the species
FS Sensitive — defined as a sensitive species by the USDA Forest Service
BLM Sensitive — defined as a sensitive species by the Bureau of Land Management
WBWG — priority status as defined by the multi-agency Western Bat Working Group
X-CI — defined as critically imperiled by the Xerces Society

[3] The "Potential On-site" column assesses the potential for the particular species to occur on the subject property given the known habitat preferences and distribution of that species. The codes used in this column are defined as follows:

Observed — Individuals of this species were found within the bounds of the site.
H — The potential for occurrence is "high". Habitats on-site are considered suitable for the species, and the species is known from the immediate vicinity.
M — The potential for occurrence is "medium". Habitats and conditions on-site are considered possible for the species.
L — The potential for occurrence is "low". The habitats present on-site are marginal for the species and/or extremely limited in extent. In other words, the species is not anticipated, but it's occurrence can not be precluded.
U — The potential for occurrence is "unlikely". The habitat and/or food requirements of the species are not present on the subject property.

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[:\1650ref-cit.wpd]

Appendix A

Wetland Delineation Over APNs 299-100-47 and 299-100-48

Prepared by
Cummings and Associates
Revised October 2014

Wetland Delineation for the Over APNs 299-100-47 and 299-100-48 City of Del Mar, California

Prepared For:

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Revised 21 October 2014
4 October 2012
Job Number 1650.22B

Cummings and Associates

Wetland Delineation
Over APNs 299-100-47 and 299-100-48
City of Del Mar, California

Introduction. Construction of a multifamily residential project is proposed on a 2.4-acre property within the City of Del Mar. The proposed project is located in the northern part of the City of Del Mar, south of the Del Mar Race Track, west of Interstate 5 on the corner of San Dieguito Drive and Jimmy Durante Boulevard (see Figure 1). This property has been previously surveyed for biological resources, including a wetland delineation in 2004. The only wetlands on the property occur in the eastern portion of the site on APN 299-100-48. Cummings and Associates was hired to update the wetland delineation in 2012 to determine what changes, if any, had occurred to the wetlands in the intervening 8 years that may or may not affect the proposed residential project. Since the 2012 wetland delineation, the San Dieguito Drive Vector Control Project occurred in 2013 which caused a slight change in the eastern edge of the wetland delineation. This Wetland Delineation report serves to document the northern edge of the wetland resources that currently exist on the subject property.

Methodology. For the purposes of federal regulatory programs, federal wetlands are defined as areas meeting all three of the following criteria:

1. A predominance of hydrophytic vegetation; and

2. Sufficient hydrology (or water flow) such that there is an anaerobic growing condition in the soil for at least one week during the growing season; and

3. A predominance of hydric soils.

The California Coastal Commission (CCC), the California Department of Fish and Wildlife (CDFW), and the Regional Water Quality Control Board (RWQCB) also use the same three criteria to define wetlands. However, for CDFW and the CCC, the presence of one or more of the indicators is sufficient to define an area as a "wetland".

Given the location of the wetlands in a corner of the property, and the project proponents' intent to avoid impacts to the wetlands, it was determined that a delineation of only the northern edge of the wetland would be necessary. In total, eight delineation stations were marked and assessed (see Figure 2 and Wetland Determination Data Forms). Since the purpose of the delineation was to identify the edge of the wetland (be it jurisdictional to ACOE, CCC, CDFW, or RWQCB) in order to determine the 50-foot wetland buffer setback from development, if any one of the wetland criterion were identified, they were used to mark this edge with a wooden stake. The assessment included identification of surrounding vegetation, documentation of hydric soils, and digging pits to identify the limits of hydric soils and hydrologic indicators.

Results and Conclusions. The on-site wetland is a Coastal Brackish Marsh situated at the toe of slope of a sandstone bluff in the southeastern corner of the property. The source of the water in the marsh is unknown. Dominant plant species within this habitat include Broad-leaved Cattail

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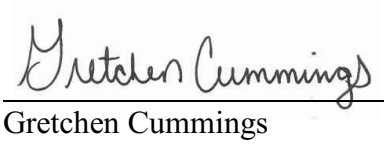
(*Typha latifolia*) and Southwestern Spiny Rush (*Juncus acutus* ssp. *leopoldii*). Compared with the wetland delineation results from 2004, the northern edge of the wetland on APN 299-100-48 has expanded slightly.

Since the project proponent intends to avoid the wetlands and protect them in place with an additional 50-foot wetland buffer, no impacts to the wetlands will occur. The northern edge of the "wetlands" was identified (see Figure 2) in order to determine the appropriate location of building setbacks 50-feet from this wetland edge.



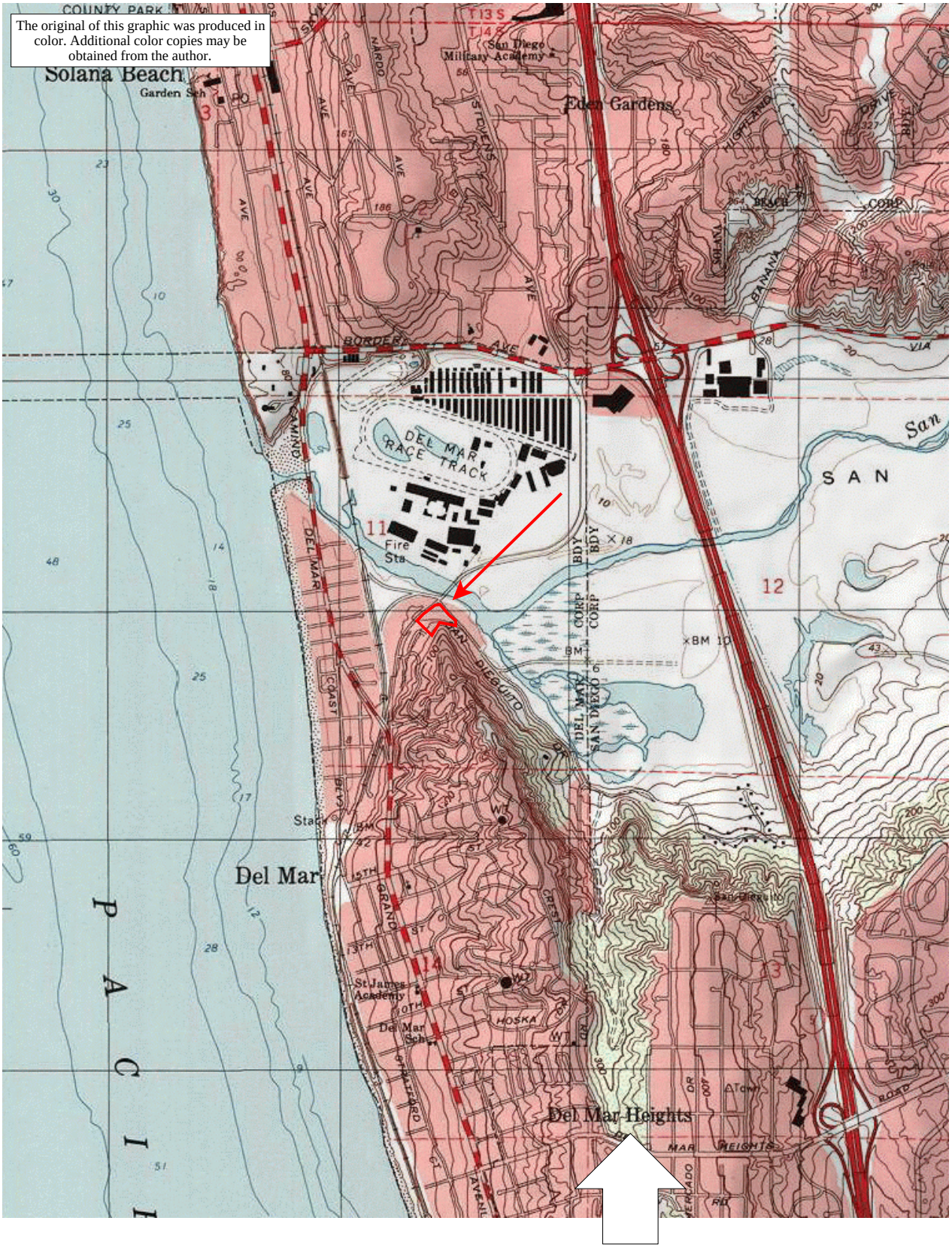
Gretchen Cummings
Principal/Biological Consultant

Job Number 1650.22B
4 October 2012
Revised 21 October 2014

Attachments:

1. Figure 1 — APNs 299-100-47 and 299-100-48 Shown on the U.S.G.S. 7½-minute Del Mar Quadrangle Map
2. Figure 2 — Results of the Wetland Delineation
3. Wetland Delineation Data Forms

[:\1650 Wetland Text-rev.wpd]



Cummings and Associates Job Number 1650.22B 14 August 2012

Scale: 1-inch = 2,000-feet

[:\1650-Wet-Fig-1.wpg]

Cummings and Associates	**APNs 299-100-47 and -48 Shown on the U.S.G.S. 7½-min Del Mar Quad Map** [Base Map Created with TOPO!® ©2006 National Geographic; ©2005 TeleAtlas]	**Figure 1**

Cummings and Associates Job Number 1650.22B 21 October 2014

Scale: 1-inch = 100-feet

[:\1650-Wet-Fig-2-rev.wpg]

Cummings and Associates

Wetland Stakes/Sampling Points A-1 Through A-8 Shown on an Aerial Photo [Base Photo © 2014 Google; Imagery Date 11/13/13]

Figure 2

The original of this graphic was produced in color. Additional color copies may be obtained from the author.

Cummings and Associates Job Number 1650.22B 21 October 2014 [:\1650-Wet-Fig-3-rev.wpg]

Cummings and Associates	Site Photos: Top photo of Wetland Stake/Sampling Point A-1; Bottom photo of Wetland Stake/Sampling Point A-2	**Figure 3**

The original of this graphic was produced in color. Additional color copies may be obtained from the author.

Cummings and Associates Job Number 1650.22B 4 October 2012 [:\1650-Wet-Fig-4.wpg]

Cummings and Associates	Site Photos: Top photo of Wetland Stake/Sampling Point A-3; Bottom photo of Wetland Stake/Sampling Point A-4	**Figure 4**

The original of this graphic was produced in color. Additional color copies may be obtained from the author.

Cummings and Associates Job Number 1650.22B 4 October 2012 [:\1650-Wet-Fig-5.wpg]

Cummings and Associates	Site Photos: Top photo of Wetland Stake/Sampling Point A-5; Bottom photo of Wetland Stake/Sampling Point A-6	**Figure 5**

The original of this graphic was produced in color. Additional color copies may be obtained from the author.

Cummings and Associates Job Number 1650.22B 4 October 2012 [:\1650-Wet-Fig-6.wpg]

Cummings and Associates	Site Photos: Top photo of Wetland Stake/Sampling Point A-7; Bottom photo of Wetland Stake/Sampling Point A-8	**Figure 6**

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 2100 Jimmy Durante City/County: Del Mar / San Diego Sampling Date: 8/11/14
Applicant/Owner: Glatthorn / Cessolato State: CA Sampling Point: A-1
Investigator(s): G. Cummings Section, Township, Range: 11, 14 S, 4W
Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR): C Lat: 32°58.188 Long: 117°15.748 Datum: NAD83
Soil Map Unit Name: Tujunga sand, 0-5% slopes NWI classification: Emergent Vegetation
Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
- drought conditions
- source of water unknown

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 10'x10')			
1. Juncus acutus ssp. leopoldii	10	Y	FACW
2. Cyperus niger	1	N	FAC
3.			
4.			
5.			
	11 = Total Cover		
Herb Stratum (Plot size: 10'x10')			
1. ~~Torrey~~ Jaumea carnosa	10	Y	OBL
2. Distichlis spicata	1	N	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	11 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
The Vector Control Project along San Dieguito Road has reduced the wetland at this sampling point from the previous data taken in 2012.

SOIL

Sampling Point: A-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4"	10YR 3/3							
4-12"	10 GY 4/1							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- X Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: roots

Depth (inches): 12"

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The Vector Control Project has modified the hydrology at this sampling point.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 2100 Jimmy Durante City/County: Del Mar / San Diego Sampling Date: 8/21/12
Applicant/~~Owner~~: Glatthorn / Cassolato State: CA Sampling Point: A-2
Investigator(s): G. Cummings Section, Township, Range: 11, 14S, 4W
Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR): C Lat: 32°58.187 Long: 117°15.748 Datum: NAD83
Soil Map Unit Name: Tujunga sand, 0-5% slopes NWI classification: Emergent Vegetation
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology X naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:
- drought conditions
- source of water unknown
- soil at edge of wetland vege has been amended with gravel fill

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 10'x10')			
1. Juncus acutus ssp leopoldii	70	Y	FACW
2. Typha latifolia	1	N	OBL
3. Cyperus niger	1	N	FACW
4.			
5.			
	72 = Total Cover		
Herb Stratum (Plot size: 10'x10')			
1. Jaumea carnosa	5	Y	OBL
2. Distichlis spicata	3	N	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	8 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 1 % Cover of Biotic Crust 5

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: A-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: gravel

Depth (inches): 2"

Hydric Soil Present? Yes X No ___

Remarks:

Tujunga Sand, 0-5% slopes is considered a hydric soil by NRCS, but soils at edge of wetland vege have been amended with gravel fill

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- X Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 2100 Jimmy Durante City/County: Del Mar / San Diego Sampling Date: 8/21/12
Applicant/~~Owner~~: Glatthorn & Cassolato State: CA Sampling Point: A-3
Investigator(s): G. Cummings Section, Township, Range: 11, 14S, 4W
Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR): C Lat: 32°58.186 Long: 117°15.752 Datum: NAD83
Soil Map Unit Name: Tujunga sand, 0-5% slopes NWI classification: Emergent Vegetation
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology X naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
- drought conditions
- source of water unknown
- soil at edge of wetland vege has been amended with gravel fill

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 10'x10')			
1. Juncus acutus ssp. leopoldii	20	Y	FACW
2. Cyperus niger	20	Y	FACW
3. Typha latifolia	1	N	OBL
4.			
5.			
	41 = Total Cover		
Herb Stratum (Plot size: 10'x10')			
1. Jaumea carnosa	25	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	25 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: A-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: gravel

Depth (inches): 2"

Hydric Soil Present? Yes X No ___

Remarks:

Tujunga sand, 0-5% slopes is considered a hydric soil by NRCS, but soils at the edge of the wetland vege has been amended with gravel fill

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 2"

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 2100 Jimmy Durante City/County: Del Mar / San Diego Sampling Date: 8/21/12
Applicant/~~Owner~~: Glatthorn / Cassolato State: CA Sampling Point: A-4
Investigator(s): G. Cummings Section, Township, Range: 11, 14S, 4W
Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR): C Lat: 32°58.187 Long: 117° 15.759 Datum: NA83
Soil Map Unit Name: Tujunga sand, 0-5% slopes NWI classification: Emergent Vegetation
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology X naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
- drought conditions
- source of water unknown
- soil at edge of wetland vege has been amended with gravel fill

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 10'x10')			
1. Typha latifolia	80	Y	OBL
2. Juncus acutus leopoldii	5	N	FACW
3. Cyperus niger	1	N	FACW
4.			
5.			
	86 = Total Cover		
Herb Stratum (Plot size: 10'x10')			
1. Jaumea carnosa	5	Y	OBL
2. Hordeum marinum gussoneanum	3	N	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	8 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust 2

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: A-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: gravel

Depth (inches): 3"

Hydric Soil Present? Yes X No ___

Remarks:

Tujunga sand, 0-5% slopes TS considered a hydric soil by NRCS, but soils at edge of wetland vege have been amended with gravel fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- X Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 1"

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 2100 Jimmy Durante City/County: Del Mar / San Diego Sampling Date: 8/21/12
Applicant/~~Owner~~: Glatthorn / Cassolato State: CA Sampling Point: A-5
Investigator(s): G. Cummings Section, Township, Range: 11, 14S, 4W
Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR): C Lat: 32°58.186 Long: 117°15.762 Datum: NAD83
Soil Map Unit Name: Tujunga sand, 0-5% slopes NWI classification: Emergent Vegetation
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology X naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____
Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
- drought conditions
- source of water unknown
- soil at edge of wetland vege has been amended with gravel fill

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10'x10')	Absolute % Cover	Dominant Species?	Indicator Status
1. Myoporum laetum	1	Y	FACU
2.			
3.			
4.			
	1 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10'x10')			
1. Typha latifolia	30	Y	OBL
2. Juncus acutus leopoldii	20	N	FACW
3. Salicornia pacifica	1	N	OBL
4.			
5.			
	51 = Total Cover		
Herb Stratum (Plot size: 10'x10')			
1. Jaumea carnosa	25	Y	OBL
2. Carpobrotus edulis	5	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: A-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: gravel

Depth (inches): 2"

Hydric Soil Present? Yes X No ___

Remarks:

Tujunga sand, 0-5% slopes is considered a hydric soil by NRCS, but soils at edge of wetland vege have been amended with gravel fill

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 1"

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 2100 Jimmy Durante City/County: Del Mar / San Diego Sampling Date: 8/21/12
Applicant/~~Owner~~: Glatthorn / Cessolato State: CA Sampling Point: A-6
Investigator(s): G. Cummings Section, Township, Range: 11, 14S, 4W
Landform (hillslope, terrace, etc.): flood plain Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR): C Lat: 32°58.186 Long: 117°15.766 Datum:
Soil Map Unit Name: Tujunga Sand, 0-5% slopes NWI classification: Emergent Vegetation
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology X naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
- drought conditions
- source of water unknown
- soil at edge of wetland rege has been amended with gravel fill

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 10'x10')			
1. Myoporum laetum	70	Y	FACW
2.			
3.			
4.			
	70 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10'x10')			
1. Juncus acutus leopoldii	10	Y	FACW
2.			
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: 10'x10')			
1. Jaumea carnosa	20	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	20 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: A-6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: gravel

Depth (inches): 2"

Hydric Soil Present? Yes X No ___

Remarks:

Tujunga sand, 0-5% slopes is considered a hydric soil by NRCS but soils at edge of wetland vege have been amended with gravel fill

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 4"

Wetland Hydrology Present? Yes ___ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 2100 Jimmy Durante City/County: Del Mar / San Diego Sampling Date: 8/21/12
Applicant/~~Owner~~: Glatthorn / Cassolato State: CA Sampling Point: A-7
Investigator(s): G. Cummings Section, Township, Range: 11, 14S, 4W
Landform (hillslope, terrace, etc.): flood plain Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR): C Lat: 32°58.187 Long: 117°15.771 Datum: NAD83
Soil Map Unit Name: Tujunga sand, 0-5% slopes NWI classification: Emergent Vegetation
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology X naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____
Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
- drought conditions
- source of water unknown
- soil at edge of wetland vege has been amended with gravel fill

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 10'x10')			
1. Salicornia pacifica	30	Y	OBL
2. Juncus acutus leopoldii	10	N	FACW
3. Arundo donax	1	N	FACW
4.			
5.			
	41 = Total Cover		
Herb Stratum (Plot size: 10'x10')			
1. Carpobrotus edulis	40	Y	FACU
2. Ambrosia psilostachya	1	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	41 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: A-7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Tujunga sand, 0-5% slopes is considered a hydric soil by NRCS, but soils at edge of wetland vege have been amended with gravel fill

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 2100 Jimmy Durante City/County: Del Mar/San Diego Sampling Date: 8/21/12
Applicant/~~Owner~~: Glatthorn / Cassolato State: CA Sampling Point: A-8
Investigator(s): G. Cummings Section, Township, Range: 11, 14S, 4W
Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR): C Lat: 32°58.186 Long: 117°15.775 Datum: NAD83
Soil Map Unit Name: Tujunga sand, 0-5% slopes NWI classification: Emergent Vegetation
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology X naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:
- drought conditions
- source of water unknown
- soil at edge of wetland vege has been amended with gravel fill

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 10'x10')			
1. Arundo donax	40	Y	FACW
2. Juncus acutus leopoldii	20	N	FACW
3.			
4.			
5.			
	60 = Total Cover		
Herb Stratum (Plot size: 10x10')			
1. Carpobrotus edulis	50	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	50 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: A-8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Tujunga sand, 0-5% slopes is considered a hydric soil by NRCS, but soils at the edge of the wetland rege have been amended with gravel fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ____ Depth (inches): _____

Water Table Present? Yes ____ No ____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 3"

Wetland Hydrology Present? Yes ____ No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix B

As Assessment of the California Gnatcatcher Over the Watermark Project, City of Del Mar, California

Prepared by
Cummings and Associates
April 2017

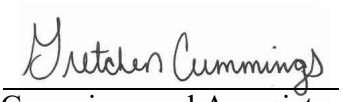
An Assessment of the California Gnatcatcher Over the Watermark Project, City of Del Mar, California

Prepared For:

WATERMARK DM, L.P.
853 Camino Del Mar, Suite 200
Del Mar, CA 92014

Prepared By:

Gretchen Cummings



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8 April 2017
Job Number 1650.22B

Cummings and Associates

An Assessment of the California Gnatcatcher Over the Watermark Project City of Del Mar, California

SUMMARY

A federal protocol survey for the California Gnatcatcher (*Polioptila californica*) was conducted within suitable Southern Coastal Bluff Scrub habitat on Assessor's Parcel Numbers 299-100-47 and 299-100-48, and within 100-feet of the parcels during 2016-2017 under permit TE-031850-5. The purpose of the protocol Gnatcatcher survey was to determine the presence or the absence of the species on the property, as well as, to provide data for the environmental analysis associated with the project proposed for the property. The subject property is located at the corner of Jimmy Durante Boulevard and San Dieguito Drive at 2100 Jimmy Durante Boulevard within the City of Del Mar (see attached Figures 1 and 2). Based on the results of this federal protocol survey, the property is not occupied by the California Gnatcatcher.

PHYSICAL ENVIRONMENT

The subject property lies on undifferentiated alluvium and slopewash, the Bay Point Formation, and Torrey Sandstone (Kennedy and Peterson, 1975). The surficial soils mapped by Bowman (1973) are recorded as Tujunga sand, 0 to 5 percent slopes (TuB) over the majority of the property and as Loamy alluvial land - Huerhuero complex, 9 to 50 percent slopes, severely eroded (LvF3) in the extreme southwestern part of the property on the steep slopes.

It should be noted that the majority of the site is currently utilized as a dirt parking lot for the Del Mar Fairgrounds. This area is classified as Disturbed Habitat and has been amended with some gravel fill and compacted through years of use. Therefore, these soils have been severely disturbed, and/or altered, to the point that the historical mapping is no longer all that meaningful.

The Watermark project is located just over ¼-mile east of the coastline (see Figure 1). There is an elevation difference across the property of approximately 48-feet. The lowest elevation occurs along the northeastern property edge at 12-feet, and the highest elevation occurs along the southwestern parcel boundary at 60-feet.

FLORAL ENVIRONMENT

Approximately ½-acre of the property is occupied by Southern Coastal Bluff Scrub habitat (Holland, 1986; Element Code 31200). On-site, this habitat contains California Sagebrush (*Artemisia californica*), California Buckwheat (*Eriogonum fasciculatum*), Lemonadeberry (*Rhus integrifolia*), Ladies' Fingers (*Dudleya edulis*), and Lance-leaved Dudleya (*Dudleya lanceolata*). Other portions of the property are occupied by Coastal Brackish Marsh (Holland, 1986; Element Code 52200),

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Disturbed Habitat (Holland, 1986 as modified by Oberbauer, 1996; Element Code 11300), and Non-Native Vegetation (Holland, 1986 as modified by Oberbauer, 1996; Element Code 11300). Generally, the disturbed and non-native vegetation areas are located in the northern and western portions of the property, the marsh is located in the southeastern edge along San Dieguito Drive, and the Southern Coastal Bluff Scrub is located along the extreme southern edges of the property.

METHODS

The survey was conducted to determine the presence or absence of the California Gnatcatcher (*Polioptila californica*) in accordance with the current federal protocol (U.S. Fish and Wildlife Service, 1997). On each field date, the Southern Coastal Bluff Scrub habitat was surveyed for California Gnatcatchers. The recorded call of the California Gnatcatcher was utilized as a location technique (calls obtained through the Cornell Laboratory of Ornithology; the recording is of a Type I call, in the sense of Atwood (1988)).

The dates, times of survey, and weather conditions for each of the nine California Gnatcatcher site visits were as follows:

2.4-Acre Watermark Project								
Date	Times of survey	Observer	Beginning of Observational Period			End of Observational Period		
			Wind	Air Temp	Cloud Cover	Wind	Air Temp	Cloud Cover
14 Oct 2016	1015 to 1100 hours	G. Cummings	< 4.8 mph	69.4°F	20%	1.1 - 5.0 mph	70.2°F	5%
28 Oct 2016	1020 to 1100 hours	G. Cummings	< 3.9 mph	70.5°F	100%	< 5.9 mph	70.3°F	100%
11 Nov 2016	1045 to 1130 hours	G. Cummings	< 4.6 mph	82.0°F	Clear	< 3.6 mph	82.4°F	Clear
25 Nov 2016	1045 to 1130 hours	G. Cummings	3.9 - 5.8 mph	70.4°F	Clear	3.9 - 6.2 mph	70.7°F	Clear
9 Dec 2016	0930 to 1015 hours	G. Cummings	< 1.0 mph	62.6°F	100%	1.6 - 4.9 mph	63.2°F	95%
27 Dec 2016	0825 to 0905 hours	G. Cummings	< 1.6 mph	49.7°F	Clear	< 1.3 mph	49.7°F	Clear
10 Jan 2017	0635 to 0715 hours	G. Cummings	Calm	54.2°F	100%	< 1.0 mph	54.1°F	100%

2.4-Acre Watermark Project								
Date	Times of survey	Observer	Beginning of Observational Period			End of Observational Period		
			Wind	Air Temp	Cloud Cover	Wind	Air Temp	Cloud Cover
24 Jan 2017	0945 to 1030 hours	G. Cummings	< 2.5 mph	56.8°F	90%	< 1.6 mph	56.2°F	90%
14 Feb 2017	0940 to 1025 hours	G. Cummings	< 1.2 mph	62.7°F	80%	< 3.3 mph	62.9°F	85%

All birds heard and/or seen during the course of the survey were noted and that information is presented as Table 1. The reader is directed to that table for information about the avifauna present within the bounds of the property.

RESULTS

A total of thirty bird species were observed during the nine site visits. A number of year-round resident species were noted on-site and in the immediate vicinity, such as the Great Blue Heron, Killdeer, Mourning Dove, Anna's Hummingbird, Nuttall's Woodpecker, Black Phoebe, Cassin's Kingbird, American Crow, Bushtit, Wrentit, Northern Mockingbird, Spotted Towhee, California Towhee, Song Sparrow, House Finch, and Lesser Goldfinch (please see the attached Table 1 for more details).

California Gnatcatcher. The California Gnatcatcher (*Polioptila californica*) is a threatened species under the federal Endangered Species Act (ESA). It is an obligate inhabitant of Sage Scrub vegetation types and is also found in Chaparral habitat where it integrates with Sage Scrub. Preston, et al. (1998), Atwood (1988), and Braden (1998) have demonstrated that the typical breeding territory of the Gnatcatcher is on the order of 20-acres. This is especially true where the habitats are more xeric and less diverse. Where the habitats are more mesic and have a higher shrub diversity, such as coastal San Diego County, the territories may be significantly less than 20-acres in size.

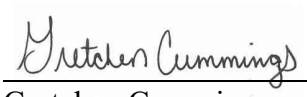
No California Gnatcatchers were observed during any of the nine visits comprising the protocol survey.

CONCLUSIONS

The suitable ½-acre of Southern Coastal Bluff Scrub habitat on APNs 299-100-47 and 299-10-48, and other suitable habitat within 100-feet of the parcels was surveyed during 2016-2017 for the California Gnatcatcher. In accordance with the federal protocol for the species, a total of nine site visits were made to determine the presence or absence of the bird species. Based on the results of the protocol survey, the Watermark project is not occupied by the California Gnatcatcher.

SURVEYOR CERTIFICATION

I certify that the information in this survey report and attached exhibits fully and accurately represents my work. Any errors or omissions are solely my responsibility.



Gretchen Cummings — 4/8/17

Gretchen Cummings
Principal/Consulting Biologist
(TE-031850-5)

Date

Attachments

1. Figure 1 — APNs 299-100-47 and -48 Shown on the U.S.G.S. 7½-minute Del Mar Quad Map
2. Figure 2 — APNs 299-100-47 and 299-100-48 Shown on an Aerial Photo
3. Table 1 — Birds Observed During the Protocol California Gnatcatcher Presence/Absence Survey Over the Watermark Project
4. References Cited

[:\1650CAGN-rpt.wpd]

Cummings and Associates Job Number 1650.22B 26 September 2016 [:\1650-CAGN-Fig-1.pptx]

Cummings and Associates	**APNs 299-100-47 and -48 Shown on the U.S.G.S. 7 ½-minute Del Mar Quad Map [Base Map Created with TOPO!® ©2006 National Geographic; ©2005 TeleAtlas]**	**Figure 1**

Cummings and Associates Job Number 1650.22B 26 September 2016 Scale: 1-inch = 100-feet [:\1650-CAGN-Fig-2.pptx]

Cummings and Associates	**APNs 299-100-47 and 299-100-48 Shown on an Aerial Photo [Base Photo © 2016 Google; Imagery Date 3/22/2016]**	**Figure 2**

Table 1
Bird Species Observed During the Protocol California Gnatcatcher Presence/Absence Survey Over the Watermark Project in the City of Del Mar, California

Species	14 Oct 2016	28 Oct 2016	11 Nov 2016	25 Nov 2016	9 Dec 2016	27 Dec 2016	10 Jan 2017	24 Jan 2017	7 Feb 2017	Notes
Double-crested Cormorant *(Phalacrocorax auritus)*	—	—	—	—	—	10	110	—	—	Non-breeding visitor. On the 12/27/16 and 1/10/17 visits, the Double-crested Cormorants were sen on the telephone wires off-site to the east over the lagoon.
Great Blue Heron *(Ardea herodias)*	—	1	—	—	1	—	1	—	1	Year-round resident in the vicinity. During four of the visits, a single Great Blue Heron was seen as an overflight.
Great Egret (*Ardea alba*)	—	—	—	—	—	—	—	1	—	Non-breeding visitor. On 1/24/17, a single Great Egret was seen as an overflight.
Red-tailed Hawk (*Buteo jamaicensis*)	—	—	1	—	—	—	—	—	—	Migrant or winter visitor in the vicinity. A single Red-tailed Hawk was seen on a telephone pole off-site to the south on 11/11/16.
Killdeer *(Charadrius vociferus)*	—	—	2	—	—	—	—	—	—	Year-round resident in the vicinity. On 11/11/16, two Killdeer were seen in the western part of the site in the open parking area.
Ring-billed Gull (*Larus delawarensis*)	—	—	—	—	—	—	6	—	—	Winter visitor. On 1/10/17, six Ring-billed Gulls were seen as overflights.
Western Gull (*Larus occidentalis)*	—	—	—	—	1	—	2	—	—	Winter visitor. On 12/9/16 and 1/10/17, Western Gulls were seen as overflights.

Species	14 Oct 2016	28 Oct 2016	11 Nov 2016	25 Nov 2016	9 Dec 2016	27 Dec 2016	10 Jan 2017	24 Jan 2017	7 Feb 2017	Notes
Eurasian Collared-Dove (*Streptopelia decaocto*)	—	1	—	—	—	6	—	2	—	This introduced species has been steadily increasing over the last ten years throughout San Diego County. This species was seen during three of the nine visits.
Mourning Dove (*Zenaida macroura*)	—	2	—	—	—	—	—	—	1	Year-round resident in the vicinity. During the 10/28/16 and 2/7/17 visits, this species was seen off-site to the southeast.
Anna's Hummingbird *(Calypte anna*)	2	1	—	2	1	1	2	1	1	Year-round resident. Anna's Hummingbirds were seen during eight of the nine visits in the native vegetation on-site.
Rufous Hummingbird *(Selasphorus rufus)*	—	—	—	1	—	2	—	2	3	Winter visitor. This species was identified based on direct observation or by the distinctive stuttering sounds made during the dive display.
Selasphorus sp. (*Selasphorus* hummingbird)	—	—	1	—	1	—	1	—	—	Winter visitor. Given the dates of the observations (when the Rufous Hummingbird was not a confirmed sighting), these observations were most likely Rufous Hummingbirds, but this could not be confirmed as only the wing sound was heard identifying it to the genus.
Belted Kingfisher *(Megaceryle alcyon)*	—	—	—	—	1	—	1	—	1	Winter visitor to the lagoon off-site to the east/southeast. A single individual was seen fishing off-site to the east on 12/9/16, 1/10/17 and 2/7/17.
Nuttall's Woodpecker (*Picoides nuttallii*)	—	—	—	—	—	—	—	—	1	Year-round resident in the vicinity. During the last visit, a single individual was heard off-site to the south.

Species	14 Oct 2016	28 Oct 2016	11 Nov 2016	25 Nov 2016	9 Dec 2016	27 Dec 2016	10 Jan 2017	24 Jan 2017	7 Feb 2017	Notes
Black Phoebe (*Sayornis nigricans*)	1	2	—	1	—	—	1	—	—	Year-round resident in the vicinity. On 10/14/16 and 11/25/16, individuals were seen flycatching. On 10/28/16, two were seen in a territorial dispute and on 1/10/17, an individual was seen off-site to the southeast.
Say's Phoebe (*Sayornis saya*)	1	1	—	—	1	—	—	—	1	Winter visitor. During the 10/28/16 and 12/9/16 visits, a single Say's Phoebe was seen flycatching from the gate posts. On 10/14/16 and 2/7/17, a single Say's Phoebe was seen off-site to the southeast.
Cassin's Kingbird (*Tyrannus vociferans)*	—	—	2	—	—	—	—	1	—	Year-round resident in the vicinity. On 11/11/16, two Cassin's Kingbirds were seen as overflights. On 1/24/17, a single Cassin's Kingbird was seen off-site to the southeast.
American Crow (*Corvus brachyrhynchos*)	2	1	—	—	2	—	—	—	2	Year-round resident in the vicinity. During four of the surveys, this species was seen overflying the property.
Bushtit (*Psaltriparus minimus*)	—	—	—	—	—	17	8	—	—	Year-round resident in the vicinity. During the 12/9/16 and 12/27/16 visits, winter flocks of this species were seen off-site to the southeast.
California Gnatcatcher (*Polioptila californica*)	—	—	—	—	—	—	—	—	—	**See text for discussion.**
Western Bluebird (*Sialia mexicana*)	—	—	—	—	—	—	—	—	2	A pair of Western Bluebirds were seen on 2/7/17 in a dead tree at the west end of the site. This species does not breed along the coast in this location, but it is known to spread into these areas during the winter (Unitt, 2004).

Species	14 Oct 2016	28 Oct 2016	11 Nov 2016	25 Nov 2016	9 Dec 2016	27 Dec 2016	10 Jan 2017	24 Jan 2017	7 Feb 2017	Notes
Wrentit (*Chamaea fasciata*)	—	—	—	—	—	—	1	—	—	Year-round resident in the vicinity. On 1/10/17, a single Wrentit was heard off-site to the south.
Northern Mockingbird (*Mimus polyglottos*)	1	—	1	—	—	—	—	—	—	Year-round resident in the vicinity. On 10/14/16, a single individual was seen in the southwest portion of the site. On 11/11/16, a single individual was seen in the Arundo in the southeast portion of the site.
Orange-crowned Warbler *(Oreothlypis celata)*	—	—	—	1	—	—	—	—	—	Winter visitor. A single individual was seen on 11/25/16 off-site to the southeast in the vegetation along San Dieguito Drive.
Yellow-rumped Warbler (*Dendroica coronata*)	—	1	2	2	4	2	2	3	4	Winter visitor. This species was seen during eight of the nine visits either off-site to the south and southeast, or as overflights.
Spotted Towhee (*Pipilo maculatus*)	—	—	—	—	—	—	1	—	—	Year-round resident in the vicinity. On 1/10/17, a single individual was heard off-site to the south.
California Towhee (*Pipilo crissalis*)	1	—	—	1	1	—	—	—	—	Year-round resident in the vicinity. During the 10/14/16 and 11/25/16 visits, a single individual was seen in the southwest portion of the site. On 12/9/16, one California Towhee was seen off-site to the southeast.
Song Sparrow (*Melospiza melodia*)	—	—	—	—	—	—	2	2	—	Year-round resident in the lagoon to the east/southeast. During the 1/10/17 and 1/24/17 visits, this species was heard in the lagoon to the east/southeast.
White-crowned Sparrow (*Zonotrichia leucophrys*)	—	2	—	—	5	4	3	—	—	Winter visitor. During four of the nine visits, this species was seen/heard off-site to the southeast.

Species	14 Oct 2016	28 Oct 2016	11 Nov 2016	25 Nov 2016	9 Dec 2016	27 Dec 2016	10 Jan 2017	24 Jan 2017	7 Feb 2017	Notes
House Finch (*Carpodacus mexicanus*)	2	1	1	4	3	4	3	3	2	Year-round resident. This species was seen/heard during all nine of the visits either on-site or off-site to the south/southeast.
Lesser Goldfinch (*Carduelis psaltria*)	—	—	—	—	—	—	2	—	—	Year-round resident in the vicinity. On 1/10/17, two Lesser Goldfinch were seen as overflights.

Total Species: 30

[:\1650 CAGN Table.wpd]

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APPENDIX E

Cultural Resource Evaluation of the Riverpark Office Project

APPENDIX 3.9

CULTURAL RESOURCES

CULTURAL RESOURCE EVALUATION OF THE RIVERPARK OFFICE PROJECT CITY OF DEL MAR, CALIFORNIA

(AFFINIS, OCTOBER 2004)

CULTURAL RESOURCE EVALUATION OF THE RIVERPARK OFFICE PROJECT, CITY OF DEL MAR, CALIFORNIA

Submitted to:

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Affinis Job No. 1953

October 2004

USGS quadrangle:	Del Mar7.5' Quad
Acreage:	2.5 acres (approximate)
Keywords:	San Diego County; Del Mar; San Dieguito Lagoon; archaeological survey; Township 14 South, Range 4 West, Section 11

NATIONAL ARCHAEOLOGICAL DATA BASE INFORMATION

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Contract No.:	Affinis No.1953
USGS quadrangles:	Del Mar(7.5' series)
Acreage:	2.5 acres (approximate)
Keywords:	San Diego County; Del Mar; San Dieguito Lagoon; archaeological survey; Township 14 South, Range 4 West, Section 11

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MANAGEMENT SUMMARY

An archaeological survey of the proposed site of the Riverpark Office project was conducted on September 17, 2004. Although an archaeological site, CA-SDi-192, had been recorded on the property, no evidence of any cultural resources were found on the survey. It is believed that the site was either graded away or was incorrectly mapped in the first place. Since no cultural resources were found on the subject property, no mitigating actions are recommended.

I. INTRODUCTION

This report covers an archaeological survey undertaken for Batter-Kay Associates on the proposed Riverpark Office project (Figures -). That survey was undertaken in response to a letter from the City of Del Mar dated September 2. 2004, stating that the Del Mar Community Plan shows the property as potentially containing an archaeological site. The letter further requests the client to provide a report on "archaeological resources on the bluff top on site.

UNDERTAKING INFORMATION

The proposed project consists of the construction of an office building complex on an approximately 2.5 acre lot at the corner of Jimmy Durante Boulevard and San Dieguito Drive. The parcel consists of cliff and bluff top, but the project is proposed for the flats at the base of the cliffs. This area has been used for overflow parking for the Del Mar Fairgrounds and Racetrack.

PROJECT LOCATION

The project is located on a vacant lot at the corner of Jimmy Durante Boulevard and San Dieguito Drive in the City of Del Mar, San Diego County, California. The lot is located in section 11, Township 14 south, Range 4 west. The lot is less than 1 km form the Pacific Ocean.

II. SETTING

The project area is in the coastal plains of San Diego County, where the climate is characterized as semi-arid, cool (Koppen classification BSk). Average annual temperatures range from a low of about 44° F to a high of 75° to 80° F, and annual rainfall averages between 9 and 16 inches (Griner and Pryde 1976). The Dyson property consists of a developed lot on a north-facing slope overlooking San Dieguito Lagoon. The San Dieguito River flows through the filled lagoon within one mile of the property. The elevation of the site is approximately 150 ft above mean sea level.

Geologically, the project area is underlain by the Quaternary Bay Point Formation. The Eocene Torrey Sandstone is found up slope from the subject property (Kennedy 1975). The property is located on a Corralitos loamy sand soil. This soil type is a deeply developed soil that forms on alluvium that has weathered from marine sandstone (Bowman 1973). The soil mapped for the property would not be expected to be in a depositional environment where substantial archaeological deposits could have been buried through natural processes.

Most of the project area is graded with no vegetation except a few weedy plants. The slopes of the property support a scrub vegetation and Torrey Pines were noted at the top of the bluff. A marshy area offurs at the northeast edge of the property.

To examine the cultural setting, records searches were requested from the South Coastal

Information Center at San Diego State University and form the San Diego Museum of Man. The results of the records search have not yet been received, but inspection of project maps on file at Affinis indicates the property is in the same location as the spot where CA-SDi-192 is located.

III. RESEARCH DESIGN

The City of Del Mar letter indicated there was potentially an archaeological site, perhaps on the bluff top, on or near the lot. Project maps at Affinis were consulted and it was determined that site CA-SDi-192 is mapped as being located on the property. The basic research question, then, is "Is there any evidence of CA-SDi-192 on the subject property.

IV. METHODS

The site was visited on September 17, 2004. The author, working alone, walked the flat areas of the property and followed foot paths up the bluff to examine the bluff top. The flats were walked in using a series of parallel transects spaced about 10 m apart. The bluffs could not be as systematically inspected, but most of the relatively flat areas were checked. Survey coverage is depicted in Figure ?.

V. REPORT OF FINDINGS

Although an archaeological site, CA-SDi-192, was recorded at the location of the subject property, no cultural resources were encountered during the survey on the lot in question. A single piece of shell was found in road fill to the east of the eastern property boundary and on the other side of San Dieguito Drive. This shell was in an area that had obviously been graded for the construction of the road.

VI. DISCUSSION

There are two possible explanations cultural resources not being identified on this survey. The first possibility is that all traces of the site (with the possible exception of the shell found off property) have been graded away. The second is that the site was misplotted on the maps and is actually located nearby but not on the Riverpark Office property. The first possibility seems most plausible.

CA-SDi-192 was one of the earliest sites recorded in San Diego County. The copy of the site form for this site on file at Affinis has four pages. One is an old style site form (the kind used in the 1960s and 1970s) with the site number, the map name (Del Mar), and the name "Treganza" filled in as the recorded. A number of the early forms are like this. It is clear that this is not the original form, but was one filled out sometime after the site was originally located by Adan E. Treganza. It may have been filled out from notes or form information on an old map. In any cas, the form postdates Treganza's discovery of the site and was almost certainly filled out by someone else. That also means that the site location information has been transferred from map

to map, and probably more than once. The second form is the 1976 version of the Department of Parks and Recreation Archaeological Site Survey Form containing information from an early 1970s recording of the site at San Diego State University. During the early 1970s, San Diego State University recorded sites on cards and used its own site numbering system. At the time the site was recorded as Cal:E:4:56, and it is not certain if the recorders knew that the site had also been recorded as CA-SDi-192. The early 1970s recorders of the site are listed as Gross and [Charles S.] Bull. Though my name is listed on the site form, I have no recollection of having visited the site, and it may be that Bull did the field work on this portion of whatever project we were working completing, while I worked on the site forms. The existing form with our names on it is not ouor original, and it must have been filled out at some time when the site records were being updated and, perhaps, consolidated.

The third page of the form is a location sketch map which is most likely a copy of that on the Gross and Bull card. It appears to show the site located just to the east of the intersection and, perhaps east of the property. The final page is copy of the Del Mar USGS 7.5' quadrangle with the site plotted. On this map it runs from the corner of Jimmy Durante Boulevard and San Dieguito Drive, and it runs up slope.

Whatever the explanation, no evidence of CA-SDi-192 was located on the property surveyed. Both the flats and the slopes were checked, and no indications of the site were found.

VII. MANAGEMENT CONSIDERATIONS

The cultural resources survey of the proposed Riverpark Office project was surveyed for cultural resources. Although archeological site CA-SDi-192 has been recorded as being located on the property, no cultural resources were found. The location of a piece of shell in graded road bed to the east and north of the project area may indicate some remnant os the site exists in that area or that site materials from the vicinity of the project lot were graded to this location. In either case, no artifacts or other evidence of prehistoric human occupation on the project lot was found.

Since no cultural resources were located on this survey, the proposed project should have no affect on cultural resources. Since there will be no affect, no mitigating measures for cultural resources are recommended.

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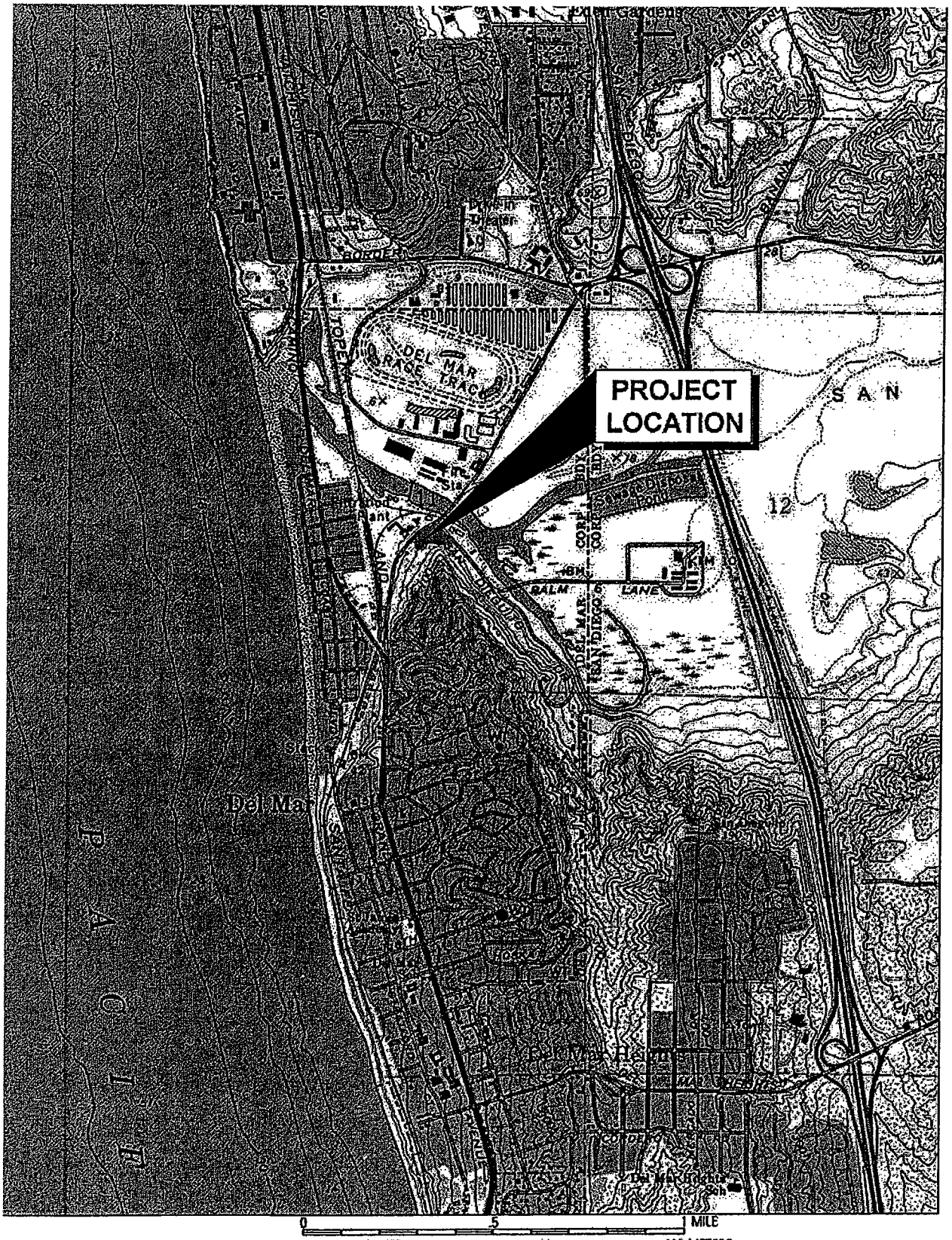
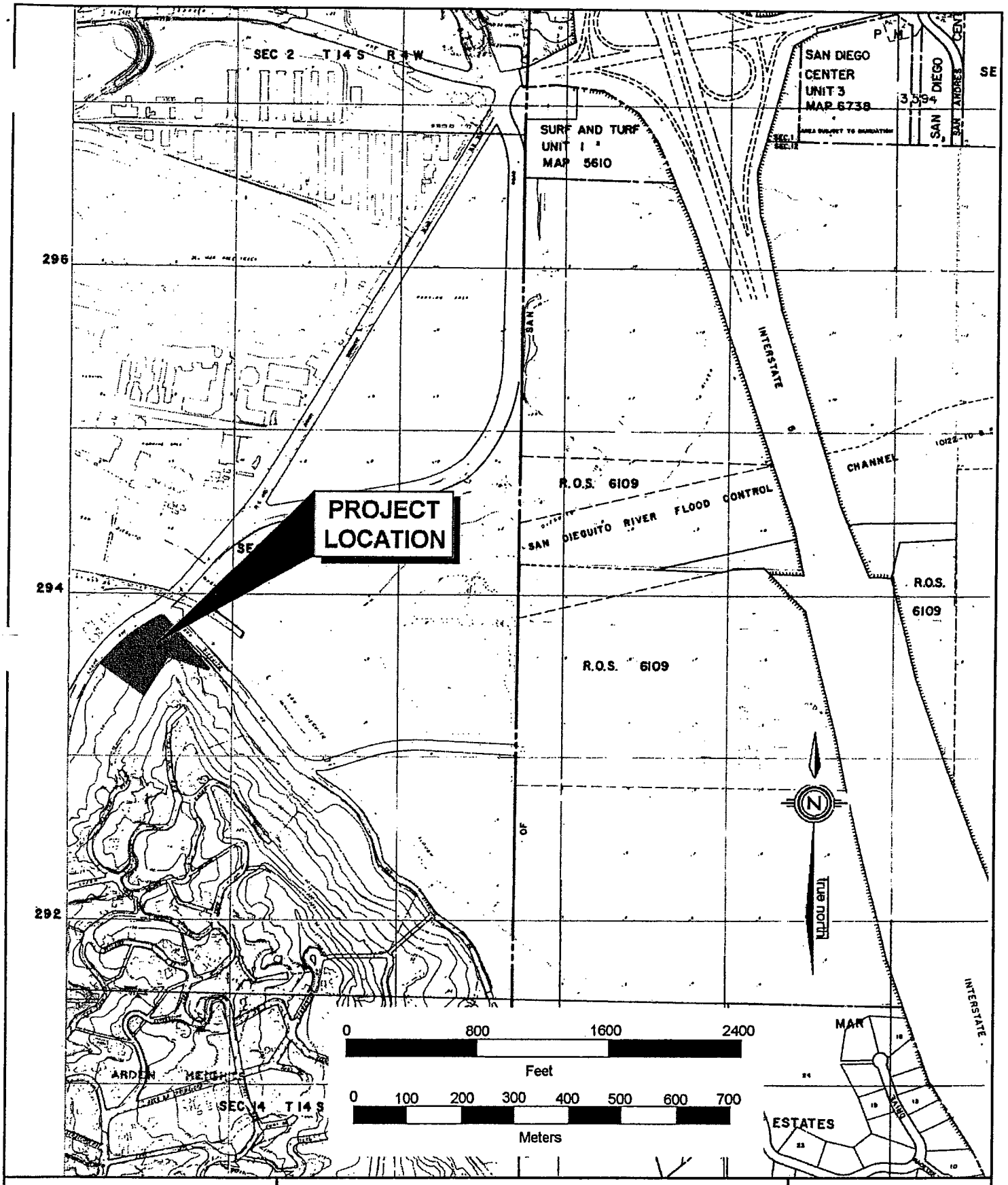
Affinis Shadow Valley Center 847 Jamacha Road El Cajon, CA 92019	Regional location in San Diego County	Figure 1



Affinis Shadow Valley Center 847 Jamacha Road El Cajon, CA 92019	Project location on the Del Mar 7.5 ' USGS quadrangle	Figure 2



Affinis

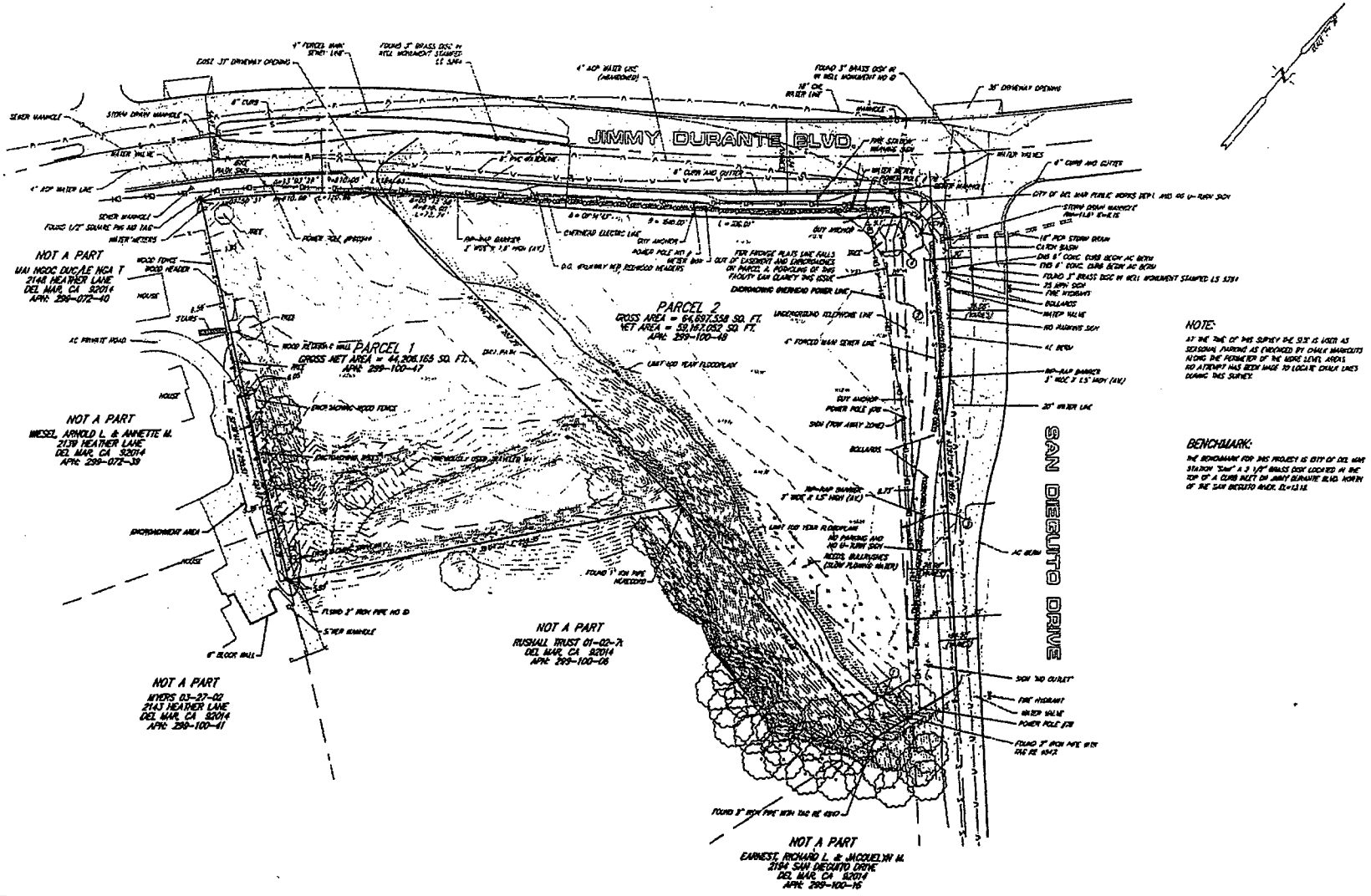
Shadow Valley Center
847 Jamacha Road
El Cajon, CA 92019

Project on 800 scale topographic map

Figure 3

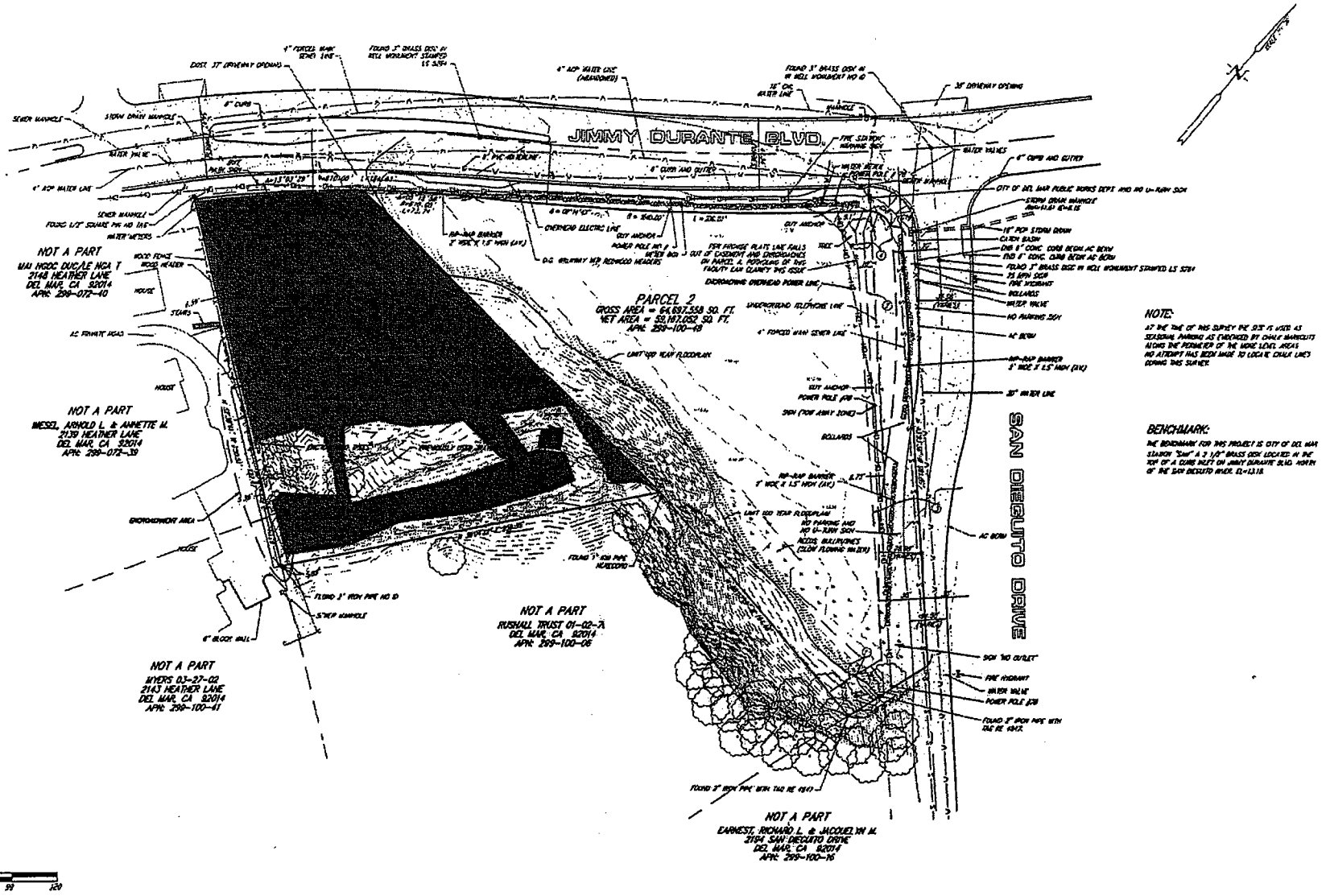
EXISTING SITE CONDITIONS

SHEET 3 OF 3 SHEETS



Affinis Shadow Valley Center 847 Jamacha Road El Cajon, CA 92019	Site plan	Figure 4

EXISTING SITE CONDITIONS



Affinis Shadow Valley Center 847 Jamacha Road El Cajon, CA 92019	Area surveyed	Figure 5

TECHNICAL REPORT PALEONTOLOGICAL RESOURCE ASSESSMENT RIVERVIEW OFFICES PROJECT, CITY OF DEL MAR, SAN DIEGO COUNTY, CALIFORNIA

(THOMAS A. DEMÉRÉ, PH.D., DEPARTMENT OF PALEONTOLOGY
SAN DIEGO NATURAL HISTORY MUSEUM, SEPTEMBER 2007)

TECHNICAL REPORT
PALEONTOLOGICAL RESOURCE ASSESSMENT
RIVERVIEW OFFICES PROJECT
CITY OF DEL MAR
SAN DIEGO COUNTY, CALIFORNIA

INTRODUCTION

The property owner proposes to construct two new office buildings south of the intersection of Jimmy Durante Boulevard and San Dieguito Drive in the City of Del Mar, San Diego County, California (Figure 1). The proposed site consists of approximately 2.4 acres and was previously graded to produce a flat pad at the grade of Jimmy Durante Boulevard along the northern project boundary and steeper cut slopes along the southern project boundary.

This technical report provides an assessment of issues related to paleontological resources within the project Area of Potential Effect (APE). The purpose of this report is to assist Dudek staff members in planning and design efforts for the purposed project as related to paleontological resource issues. Specifically, this report is intended to summarize existing paleontological resource data in the APE and vicinity; assess potential impacts to paleontological resources from construction of the project; and identify general mitigation measures to avoid or reduce project-related impacts wherever feasible. Additional discussion of report methodology is provided below. This report was prepared by Thomas A. Demeré of the Department of PaleoServices at the San Diego Natural History Museum (SDNHM), San Diego, California.

As defined here, paleontological resources (i.e., fossils) are the remains and/or traces of prehistoric (i.e., 10,000 years or older) plant and animal life exclusive of humans. Fossil remains such as bones, teeth, shells, leaves, and wood are found in the geologic deposits (rock formations) within which they were originally buried. For the purposes of this report, paleontological resources can be thought of as including not only the actual fossil remains but also the collecting localities and the geologic formations containing those localities.

METHODOLOGY

A review was conducted of relevant published geologic reports (Kennedy, 1975), unpublished paleontological reports (Demeré and Walsh, 1993), and museum paleontological locality data (Department of Paleontology, SDNHM). This approach was followed in recognition of the direct relationship between paleontological resources and the geologic formations within which they are entombed. Knowing the geology of a particular area and the fossil productivity of particular formations that occur in that area, it is possible to predict where fossils will, or will not, be encountered.

A walkover survey of the project APE was conducted on 8 September 2007 by SDNHM personnel to determine the paleontological sensitivity of the geologic units that will be affected by the proposed improvements and to field check the results of the literature and record reviews. Field work involved inspection of the site for bedrock outcrops, geologic contacts, and presence or absence of paleontological resources (i.e., fossils).

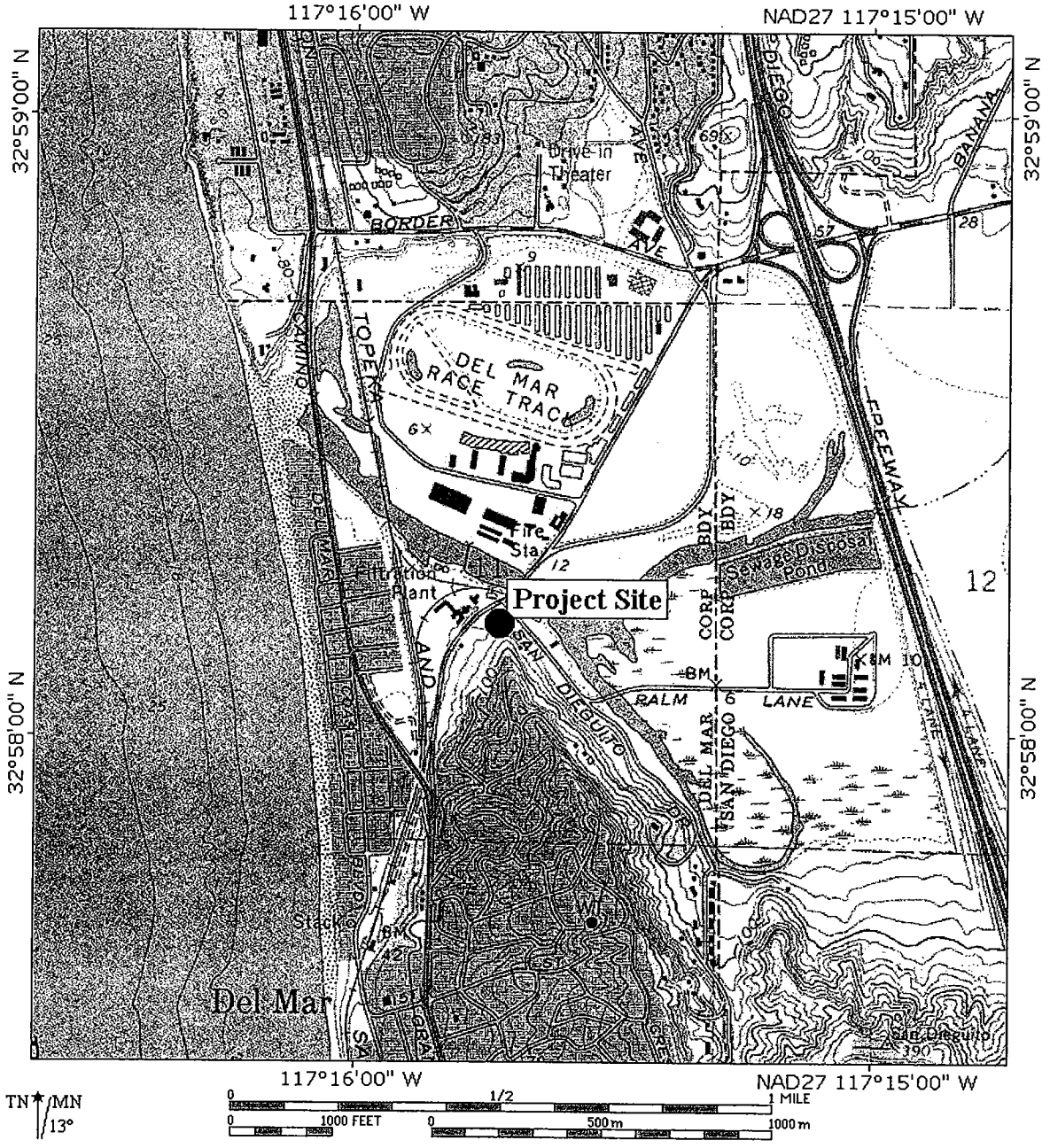


Figure 1. Index map showing location of the Riverview Offices Project, City of Del Mar, San Diego County, California. Base map: Del Mar, CA 7.5' USGS topographic quadrangle.

EXISTING CONDITIONS

PHYSICAL GEOLOGICAL SETTING

The project APE was graded sometime in the past and has artificially steepened slopes along its southern boundary. These slopes are underlain by geologic deposits of Eocene and Pleistocene age (Figures 2 and 3). The low lying areas along the northern boundary are underlain by geologic deposits of Pleistocene age, as well as some artificial fill materials. The older Eocene stratigraphic sequence consists of sedimentary rocks mapped as Delmar Formation and Torrey Sandstones (Kennedy, 1975). The younger Pleistocene stratigraphic sequence consists of strata mapped as Bay Point Formation (Kennedy, 1975).

PALEONTOLOGICAL RESOURCE ASSESSMENT

The following section provides a general overview of the geologic deposits located within or immediately adjacent to the project APE. Also included are discussions of the paleontology and resource sensitivity of these rock units. Recorded fossil collecting sites within one mile of the APE are summarized in Appendix 1 and are based on paleontological collections housed at SDNHM. Specific information about these paleontological resources can be found at:
www.sdnhm.org/research/paleontology/searchdata.html

Bay Point Formation

Introduction: The coastal plain of San Diego County is characterized by a "stair-step" sequence of elevated marine terraces (uplifted sea floors) and their associated marine and non-marine sedimentary covers (Kern, 1977; Kern and Rockwell, 1992). Generally speaking, these marine terraces and their sedimentary deposits show a direct correlation between elevation and geologic age (i.e., the lowest terraces are the youngest, while the highest terraces are the oldest (Kern and Rockwell, 1992). Various formational names have been used to refer to these marine terrace deposits including Sweitzer Formation (Hertlein and Grant, 1944), Lindavista Formation (Hanna, 1926; Kennedy, 1975), and Bay Point Formation (Kennedy, 1975; Kennedy and Tan, 1977). The Lindavista Formation is considered by most workers to be synonymous with the Sweitzer Formation and to only represent deposits on the higher terraces (i.e., above elevations of 300 feet). In contrast, the Bay Point Formation is generally considered to include marine and non-marine sedimentary deposits (primarily light-brown, fine-grained, sandstones) on the lower terraces (i.e., from near sea level to elevations of ~200 feet). As mapped by Kennedy (1975) the Bay Point Formation also includes Pleistocene non-marine valley-fill deposits exposed along the margins of coastal valleys (e.g., San Luis Rey Valley and San Dieguito Valley).

The Bay Point Formation as exposed in the graded slopes along the southwestern portion of the APE consists of light gray to light brown, poorly sorted, fine- to coarse-grained, compact sandstones. Exposures of this rock unit in the steep, near vertical slopes along

Figure 2. Steep slopes in eastern portion of the APE exposing sandstones of the Eocene-age Torrey Sandstone overlain by sandstones and conglomerates of the Pleistocene-age Bay Point Formation.

the eastern portion of the APE consist of medium brown, to light greenish gray, coarse-grained, massive sandstone with a cobble to small boulder basal conglomerate (Figure 2). It is likely that the sandstones in both areas are part of a single stratigraphic unit that was deposited along an irregular buttress unconformity eroded into the underlying Eocene rock units.

Paleontology: The Bay Point Formation has produced large and diverse assemblages of well-preserved marine invertebrate fossils, primarily mollusks (Stephens, 1929; Hertlein and Grant, 1939; Valentine, 1959; Deméré, 1980). Remains of fossil marine vertebrates (i.e., sharks, rays, and bony fishes) have also been recovered from this rock unit. Recorded collecting sites in the Bay Point Formation include both natural exposures (e.g., sea cliffs) as well as construction-related excavations. The Bay Point Formation has also produced significant assemblages of Pleistocene land mammals from valley-fill deposits. Recovered vertebrate fossils include ground sloth, dire wolf, horse, tapir, camel, deer, mastodon and mammoth (Deméré and Walsh, 1993).

Site Specific Assessment: Although no recorded paleontological sites are known from the APE, there are several sites recognized within a one-mile radius. These include a site

in marine terrace deposits exposed in the sea cliffs of southern Solana Beach and several sites in estuarine valley-fill deposits in cut slopes adjacent to the Flower Hill shopping center. The former locality has produced well-preserved fossils of intertidal to subtidal, exposed sandy shore mollusks. The latter localities produced well-preserved fossils of intertidal to subtidal, estuarine, warm water mollusks.

Because of these previous records, and following the paleontological guidelines developed by the County of San Diego, the Bay Point Formation is assigned a moderate to high paleontological resource sensitivity rating.

Torrey Sandstone

Introduction: The Torrey Sandstone consists primarily of yellowish-white, coarse-grained, locally cross-bedded, arkosic sandstones (Hanna, 1926). The type area for this rock unit is the seacliffs at Torrey Pines State Reserve. Portions of the Torrey Sandstone were deposited in an ancient nearshore marine environment, while other parts of the deposit formed within a barrier island/protected lagoon setting (Kennedy, 1975). The Torrey Sandstone gradationally overlies the Delmar Formation and is in turn unconformably overlain by the Ardath Shale and Scripps Formation. Based upon its stratigraphic position the formation is considered to be early middle Eocene in age, approximately 48-49 Ma (mega annum; million years ago).

The Torrey Sandstone as exposed in the steep, near vertical slopes along the eastern portion of the APE consists of interbedded strata of light yellow, coarse-grained, massive, bioturbated and cross-bedded sandstones and light olive green, bioturbated sandy mudstone (Figure 3). This interbedded sequence strongly resembles the stratigraphic interval characteristic of the transitional zone between the Torrey Sandstone and Delmar Formation as well exposed in the sea cliffs of Del Mar and Solana Beach.

Paleontology: The Torrey Sandstone has produced important remains of fossil plants and marine invertebrates (Givens and Kennedy, 1979; Squires, 1989; Myers, 1991). The plant remains (mostly leaves) are especially significant. Many are from taxa related to species that today live in brackish-water marsh and/or riparian woodland environments in subtropical and tropical regions of Southeast Asia and the southeastern United States (Myers, 1991). Their occurrence in the Torrey Sandstone suggests that the Eocene climate in this area was warmer (20° C mean annual temperature) and wetter (120-150 cm annual rainfall) than the modern climate.

Invertebrate fossils known from the Torrey Sandstone primarily consist of nearshore marine taxa (e.g., clams, oysters, snails, and barnacles). Vertebrate fossil remains are rare and include teeth of crocodiles, sharks, and rays.

Site Specific Assessment: No recorded paleontological sites are known from the Torrey Sandstone as exposed in the APE. The closest recorded site in this rock unit occurs approximately three miles to the southeast and has produced significant impressions (leaves, stems, and seeds) of fossil plants. During the field survey well-preserved trace

Figure 3. Outcrop of the Eocene-age Torrey Sandstone in the central portion of the APE showing bioturbated contact between a coarse-grained arkosic sandstone stratum and an underlying light olive green, sandy mudstone stratum.

fossils (i.e., burrows) of infaunal marine invertebrates (e.g., burrowing crustaceans and/or annelid worms) were observed in outcrops of the Torrey Sandstone (Figure 3).

Because of these previous records, and following the paleontological guidelines developed by the County of San Diego, the Torrey Sandstone is assigned a moderate paleontological resource sensitivity rating.

Delmar Formation

Introduction: The Delmar Formation (Hanna, 1926) consists of greenish silty mudstones, brown siltstones, and greenish sandstones, with interbeds of well-cemented oyster-rich shell beds. The Delmar Formation is overlain by the Torrey Sandstone, and is presumably underlain by Cretaceous sedimentary rocks and pre-Cenozoic crystalline basement rocks (Kennedy, 1975). The Delmar Formation was deposited in a

lagoonal/estuarine setting and preserves marsh flat and tidal channel paleoenvironments (Link and Abbott, 1991). The Delmar Formation is late early to early middle Eocene in age, approximately 49-50 Ma.

The Delmar Formation is not clearly exposed on the APE. However, the increase in greenish mudstones towards the base of the steep, near vertical slopes along the eastern portion of the APE suggests that the Delmar Formation likely does occur at or near the level of the graded pad that forms the northern portion of the APE.

Paleontology: Fossils from the Delmar Formation (Hanna, 1927; Givens and Kennedy, 1979) consist of well-preserved to poorly preserved remains of estuarine invertebrates (e.g., clams, oysters, and snails) and estuarine vertebrates (e.g., sharks and rays). An extremely important locality at Swami's Point in Encinitas has yielded well-preserved skull remains of aquatic reptiles (e.g., crocodile) and terrestrial mammals (e.g., tillodont and early rhinoceros).

Site Specific Assessment: No recorded paleontological sites are known from the Delmar Formation as potentially exposed in the APE. The closest observed paleontological sites in this rock unit occur less than 0.5 miles southwest of the APE along Jimmy Durante Boulevard. These sites contain well-preserved fossils of estuarine marine mollusks.

Because of these previous records, and following the paleontological guidelines developed by the County of San Diego, the Delmar Formation is assigned a high paleontological resource sensitivity rating.

IMPACT ANALYSIS

INTRODUCTION

Direct impacts to paleontological resources occur when earthwork activities, such as mass grading operations, cut into the geological deposits (formations) within which fossils are buried. These direct impacts are in the form of physical destruction of fossil remains. Since fossils are the remains of prehistoric animal and plant life they are considered to be nonrenewable. Such impacts can be significant and, under CEQA guidelines, require mitigation.

Impacts to paleontological resources are typically rated from high to zero depending upon the resource sensitivity of impacted formations.

High significance
Impacts to high sensitivity formations (Bay Point Formation and Delmar Formation).

Moderate significance
Impacts to moderate sensitivity formations (Torrey Sandstone).

Low significance
Impacts to low sensitivity formations.

Zero significance
Impacts to formations with no fossil potential.

SITE SPECIFIC IMPACTS

No construction plans are available at this time to provide a basis for assessing the specific nature and extent of direct impacts to sensitive paleontological resources within in the APE. Typically, such impacts take the form of excavation related destruction of buried fossil-bearing strata. Examples of probable excavation activities include regarding of the level pad along the northern portion of the APE and regarding of the steeper cut slopes along the southern and eastern portions of the APE.

MITIGATION MEASURES

Typical measures for mitigating direct impacts to significant paleontological resources include the following:

1. A qualified paleontologist should attend the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. (A qualified paleontologist is defined as an individual with a MS or Ph.D. in paleontology or geology that is familiar with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of San Diego County, and who has worked as a paleontological mitigation project supervisor in the county for at least one year.)

2. A paleontological monitor should be on-site on a full-time basis during the original cutting of previously undisturbed deposits of high paleontological resource potential (Bay Point Formation and Delmar Formation) to inspect exposures for contained fossils. Grading activities in previously undisturbed deposits of moderate paleontological resource potential (Torrey Sandstone) should be monitored on a part-time basis. (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor should work under the direction of a qualified paleontologist.)

3. When fossils are discovered, the paleontologist (or paleontological monitor) should recover them. In most cases this fossil salvage can be completed in a short period of time. However, some fossil specimens (such as a complete large mammal skeleton) may require an extended salvage period. In these instances the paleontologist (or paleontological monitor) should be allowed to temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for the recovering of small fossil remains, such as isolated mammal teeth, it may be necessary to set up a screen-washing operation on the site.

4. During the monitoring and recovery phases of the mitigation program, the qualified paleontologist and/or the paleontological monitor should routinely collect stratigraphic data (e.g., lithology, vertical thickness, lateral extent of strata, nature of upper and lower contacts, and taphonomic character of exposed strata). Collection of such data is critical for providing a stratigraphic context for any recovered fossils.

5. Fossil remains collected during monitoring and salvage should be cleaned (removal of extraneous enclosing sedimentary rock material), repaired (consolidation of fragile fossils and gluing together broken pieces), sorted (separating fossils of the different species), and cataloged (scientific identification of species, assignment of inventory tracking numbers, and recording of these numbers in a computerized collection database) as part of the mitigation program.

6. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, should be deposited (as a donation) in a scientific institution with permanent paleontological collections such as the San Diego Natural History Museum. Donation of the fossils should be accompanied by financial support for preparation, curation and initial specimen storage, if this work has not already been completed.

7. A final summary report should be completed that outlines the results of the mitigation program. This report should include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.

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APPENDIX 1

Record Search for Riverview Offices Project

APPENDIX F1 AND F2

Greenhouse Gas Technical Report
and Option B Technical Memorandum

Greenhouse Gas Emissions Technical Report
for the
Watermark Del Mar Specific Plan EIR
City of Del Mar, California

Prepared for:

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CO_2	carbon dioxide
CO_2E	carbon dioxide equivalent
CPUC	California Public Utilities Commission
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
mpg	miles per gallon
N_2O	nitrous oxide
NHTSA	National Highway Traffic Safety Administration
O_3	ozone
OPR	Governor's Office of Planning and Research
PFC	perfluorocarbon
RPS	Renewable Portfolio Standard
SANDAG	San Diego Association of Governments
SB	Senate Bill
SF_6	sulfur hexafluoride

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SUMMARY

The proposed project location lies within the jurisdictional boundaries of the City of Del Mar in western San Diego County. The residential project includes development of 48 multi-family units, a parking structure, and other recreational amenities. Estimated project-generated operational GHG emissions from area sources, energy usage, motor vehicles, water consumption, wastewater treatment, solid waste generation, and amortized construction emissions, would be approximately 544 MT CO_2E per year, which is below the California Air Pollution Control Officers Association's screening threshold of 900 MT CO2E per year.

The proposed project would not actively interfere with any future City-mandated, state-mandated, or federally-mandated retrofit obligations enacted or promulgated to legally require residential development City-wide, state-wide, or nation-wide to assist in meeting state-adopted greenhouse gas emissions reduction targets, including that established under Executive Order S-3-05 or Executive Order B-30-15. Therefore, the proposed project would not interfere with the state's implementation of Executive Order B-30-15's target of reducing statewide GHG emissions to 40% below 1990 levels by 2030 or Executive Order S-3-05's target of reducing statewide GHG emissions to 80% below 1990 levels by 2050 because it does not interfere with the state's implementation of GHG reduction plans described in the CARB's Updated Scoping Plan. As a result, the proposed project would result in a less than significant impact with respect to GHG emissions.

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1 INTRODUCTION

1.1 Purpose

The purpose of this report is to evaluate the potential greenhouse gas (GHG) impacts associated with implementation of the Watermark Del Mar Specific Plan (proposed project).

1.2 Project Location

The Watermark Del Mar Specific Plan site is approximately 0.76 mile west of Interstate 5 and 0.32 mile east of Camino Del Mar in the city of Del Mar, California (Figure 1). The site is located on the southern corner of the intersection of Jimmy Durante Boulevard and San Dieguito Drive (Figure 2). The site consists of two parcels: Assessor's Parcel Numbers 299-100-47 and 299-100-48. The site is vacant and totals approximately 103,282 square feet (2.37 acres). The site is generally bounded to the north by the intersection of Jimmy Durante Boulevard and San Dieguito Drive (Figure 3). San Dieguito Drive adjoins the site to the east-northeast, beyond which is a vacant lot and various facilities, including Co's Traffic Control, Del Mar Blue Print, Rose Towing, Del Mar Automotive, and other businesses. To the south and southwest are residences. To the west and northwest, Jimmy Durante Boulevard adjoins the site with a vacant lot and various businesses beyond.

1.3 Project Description

1.3.1 Residential

Option A

Option A would include 48 residential units on 103,282 square feet (approximately 2.37 acres) of gross land area for a maximum density of 20.5 dwelling units per acre. The proposed 20.5 dwelling-units-per-acre density is at the very low end of the City of Del Mar Community Plan Housing Element's prescribed density range.

Option A would provide for a residential building area of 62,941 square feet and a total lot coverage of approximately 45%. The lot coverage calculation for Option A does not include the parking structure floor area (non-habitable building area). Option A proposes a floor area ratio of 0.65 based on 63,541 square feet of floor area (habitable building area) on net land area of 103,237 square feet.

The proposed structures would be situated on the site to provide a minimum 10-foot setback from the adjacent residentially zoned properties. The design considers no additional setback

required where the structures would be adjacent to the public right-of-way along Jimmy Durante Boulevard and San Dieguito Drive. The residential units provided would be a mix of studio, one-bedroom, two-bedroom, and three-bedroom units.

Option B

Under Option B, the project design has been modified to address input received during various community workshops on the project. The Specific Plan for Option B has been modified along with revised design plans to incorporate changes in response to concerns raised.

This option includes modifications to the building placement on the site, which was of particular concern as viewed from Jimmy Durante Boulevard. The changes to the buildings that front on this street include modifications to the setbacks on the first and second floors, adding building separation between the units as well as reconfiguring the pool area to eliminate the masonry columns and trellis at the corner of San Dieguito Drive and Jimmy Durante Blvd, replacing them with additional trees and landscaping. The open areas internal to the site have been enlarged. The parking provided on site has also been increased to be above standard requirements, based on concerns that there was no on-street parking in the immediate area. The result of all these changes is that the total unit count would be reduced by 10 to 38 housing units.

Option B would include 38 residential units on 103,282 square feet (approximately 2.37 acres) of gross land area for a maximum density of 16.1 dwelling units per acre. The proposed 16.1 dwelling-units-per-acre density is below the City of Del Mar Community Plan Housing Element's prescribed density range.

Option B would provide for a building area of 60,660 square feet and a total lot coverage of approximately 45%. Similar to Option A, the lot coverage calculation for Option B does not include the parking structure floor area (non-habitable building area). Option B proposes a floor area ratio of 0.62 based on 61,860 square feet of floor area (habitable building area) on net land area of 103,237 square feet.

The proposed structures would be situated on the site to provide a minimum 15-foot setback from the adjacent residentially zoned properties. The design considers no additional setback required where the structures would be adjacent to the public right-of-way along Jimmy Durante Boulevard. However, unlike Option A, Option B would provide an additional 10-foot setback adjacent to the public right-of-way along San Dieguito Drive. The residential units provided would be a mix of studio, one-bedroom, two-bedroom, and three-bedroom units.

1.3.2 Affordable Housing

The RHNA allocated 61 housing units to the City for the 2010–2020 Housing Element Cycle, including 22 housing units for extremely low, very low, and low-income households (City of Del Mar 2013, Table 36).

Option A

As a public benefit, Option A proposes seven affordable dwelling units. The seven affordable units represent a portion (15%) of the proposed 48 new units. Therefore, Option A would account for 79% of the units allocated by the RHNA and it would satisfy 32% of the City's affordable housing needs. The seven affordable dwelling units proposed by Option A would consist of two studio units, one one-bedroom unit, and four two-bedroom units. No three-bedroom units are proposed as affordable housing units.

Option B

As a public benefit, Option B proposes six affordable dwelling units. The six affordable units represent a portion (16%) of the proposed 38 new units. Therefore, Option B would account for 62% of the units allocated by the RHNA and it would satisfy 27% of the City's affordable housing needs. The six affordable dwelling units proposed by Option B would consist of two studio units, one one-bedroom unit, and three two-bedroom units. No three-bedroom units are proposed as affordable housing units.

Affordability The rental rates or purchase price for all affordable dwelling units required would be calculated in accordance with affordability levels for moderate income households (120% of the Area Median Income [AMI]) as defined by the State of California Department of Housing and Community Development (HCD), and the San Diego County Office of Housing and Community Development for San Diego County, and as adjusted and published annually. All seven of the affordable dwelling units would be subject to the recordation of a deed restriction committing the property owner and any successors-in-interest to limiting rental rates or purchase prices to the affordability rates to families with income levels at 120% of AMI or less for a period of 30 years from the date of issuance of the Certificate of Occupancy for such residential unit(s).

In lieu of a deed restriction required to ensure affordability as provided within the Specific Plans, all or part of the affordable dwelling units may be sold, deeded, or otherwise transferred to the City of Del Mar or to any other managing agency acceptable to the City of Del Mar and remain in full compliance with all codes and provisions for providing the required percentage of affordable dwelling units. Four of the affordable units under Option A and three affordable units

under Option B would be gifted to the City or a City-designated entity, which would likely result in lower-tier affordability qualification.

Per Assembly Bill No. 2222 the Planning and Zoning Law requires, when a developer of housing proposes a housing development within the jurisdiction of the local government, that the city and county provide the developer with a density bonus and other incentives or concessions for the production of lower income housing units or the donation of land within the development if the developer, among other things, agrees to construct a specified percentage of units for very low, low-, or moderate-income households or qualifying residents. With respect to State Density Bonus Incentives, Watermark Del Mar proposes that, with approval of Option A or Option B, any possible density increase and development incentives specified in the Del Mar Municipal Code would not be applicable to the site.

1.3.3 Architectural Design

Watermark Del Mar is designed to be a gateway to Del Mar from the north and east, and to create a welcoming beach-colony-inspired architectural statement that joins and enhances the architectural tradition established in Del Mar. Watermark Del Mar would provide a variation to the number and mix of unit sizes, building facades, and rooflines to provide a variety of architectural elements along Jimmy Durante Boulevard and maintain important vistas along San Dieguito Drive. Brick, cultured stone, architectural siding, a seaside-inspired color palette, and beach colony architectural elements found throughout Del Mar would be incorporated into the design to provide architectural compatibility with the broader Del Mar architectural statement.

Maximum building height for Watermark Del Mar would be 26 feet above either existing or finished grade when habitable space is constructed on grade. To comply with flood hazard provisions of the Del Mar Municipal Code Chapter 30.56 (Flood Overlay Zone), all finish grades would be at or above the 100-year base flood elevation of the San Dieguito River (+18 feet as indicated on maps issued by the Federal Emergency Management Agency). Where habitable structure is built over structured parking, the 26-foot height would be measured from the garage roof/podium deck elevation set at 2 feet above the base flood elevation or elevation +20 feet (City of Del Mar 2000).

Watermark Del Mar would ensure that roof decks, decks, and associated rooftop penetrations (e.g., access stairs, handrails) are architecturally integrated into the design of the residential structures. All Watermark Del Mar roof appurtenances, including air conditioning units and mechanical equipment, would be designed to be shielded and architecturally screened from view from public rights-of-way.

Watermark Del Mar's design would ensure that trash receptacles, adequate areas for collecting and loading recyclable materials, and/or outdoor storage areas are internalized or are adequately screened from view from surrounding properties or public rights-of way.

1.3.4 Circulation

Vehicular access to the proposed project site would be provided from a single driveway on San Dieguito Drive. The location of the driveway would be in approximately the same location as the existing driveway currently in use for fairground, racetrack, and event parking. The proposed driveway curb cut would access onto a private drive ramp to enter the secured parking facility for residents and guests. The drive ramp was designed to provide additional length to ensure ample space for queuing for residents and guests entering and exiting the facility.

The Watermark Del Mar Specific Plan community was designed to be pedestrian and cyclist friendly, with multiple access points for residents who do not use automobiles. Pedestrians and cyclists would have a variety of access points. In addition to the parking structure ramp, an additional pedestrian/cyclist entry point would occur on San Dieguito Drive. Also, a stepped central pedestrian/cyclist access point would occur at the center of Watermark Del Mar on Jimmy Durante Boulevard. This entry would serve as the main pedestrian entry point to the neighborhood with its centralized positioning and entry surrounded by trellis works and landscaping. Two additional pedestrian/cyclist entry points would be provided at each end of the site along Jimmy Durante Boulevard. The western-most entry point would provide access to the walking route to the Del Mar Plaza and the downtown area. The eastern-most pedestrian/cyclist entry would provide access to San Dieguito Lagoon and riverside strolling opportunities.

1.3.5 Parking

The proposed project's parking structure was designed to screen parking areas from view of adjacent properties and public rights-of-way by placing the parking structure partially below ground and, through the use of low, decorative walls, earth mounding and landscaping in the public right-of-way, to complement and enhance the pedestrian connection from the Jimmy Durante Boulevard and San Dieguito Drive intersection to the Del Mar Plaza.

The proposed project's partially underground parking structure would be accessed via a new curbed driveway at San Dieguito Drive that would lead to a private drive ramp. The location of the curbed driveway would be in approximately the same location as the existing driveway currently in use for fairground, race track, and event parking. The existing curb cut driveway at Jimmy Durante Boulevard at the west end of the site would be eliminated. Access to the parking structure was designed to be controlled by a card key access system located on the private drive ramp to enhance security of the parking structure and control vehicular access to the structure.

The Watermark Del Mar Specific Plan provides one stall for each studio and one-bedroom unit, and two stalls for each two-bedroom and three-bedroom unit. Additionally, the proposed project would provide guest parking stalls at a ratio of one stall per four units. The Watermark Del Mar Specific Plan allows use of tandem parking (one car parked behind another in the same stall). Compact stalls (7 feet 6 inches wide and 16 feet in depth) are permitted at a 10% ratio. Watermark Del Mar would provide standard parking stalls that are a minimum of 9 feet wide and 18 feet in depth, and drive aisles that are a minimum of 22 feet in width.

The Watermark Del Mar Specific Plan provides that parking provided for off-street parking and non-habitable floor area be exempt from calculation toward a building's maximum allowable floor area ratio and would not be considered a "story."

1.3.6 Recreational Amenities

The proposed project would provide a pool, spa, lounge, and recreation area for residents. The recreation area is specifically sited to provide for an aesthetically pleasing vista to the site from the intersection of Jimmy Durante Boulevard and San Dieguito Drive. The pool, spa, and lounge area would provide approximately 2,800 square feet of recreational area, in addition to the adjacent 640-square-foot recreation room. The single-story building that would house the recreation room was sized to enhance and support the view to the sand stone bluff farther along San Dieguito Drive, and would serve as a gathering point for the neighborhood with a view over the pool, spa, and lounge area.

1.3.7 Landscaping

Landscape materials and plant palettes were selected to accentuate the coastal craftsman style of the architecture while introducing the natural character of the adjacent wetlands and native landscape. Mediterranean and coastal California plant palette proposed throughout the site would combine drought tolerance with aesthetic impact. The overall landscape palette would feature native plant species to unify the site with the surrounding landscape. The project would offer four landscape typologies: street frontage, podium-level courtyards, wetlands, and slope interface. Each landscape type would be designed to unify the site's coastal character while addressing climatic requirements.

1.3.8 Lighting

Illumination of the proposed project would be limited to specific areas and hours of activity, with the exception of necessary security lighting. Lighting would be provided throughout the project site on the exterior of structures. Specifically, lighting would be provided around residential buildings, podium-level courtyards and walkways, and other recreational areas. To minimize the

potential effects of project lighting and ensure consistency with the lighting policies of the City of Del Mar, lighting fixtures within the project area would be designed and implemented to provide illumination that is appropriate for the level of activity at the site. Lighting inside and outside the buildings would adhere to minimum lighting standards. Exterior lighting would be of minimum height and intensity, and face downward to minimize spread of the beam. Parking area lighting would be confined and contained within the enclosed parking structure.

1.3.9 Utilities

Sanitary sewer service would be provided by connecting to an existing sanitary sewer main adjacent to the property at the westernmost portion of the site's Jimmy Durante Boulevard frontage.

A private water system would be provided through a point of connection in Jimmy Durante Boulevard, extended to the property to a new on-site water meter assembly, and distributed within the project for domestic, fire, and landscape irrigation purposes. A new fire hydrant would be provided on Jimmy Durante Boulevard and on San Dieguito Drive.

A private storm drain system would be incorporated into the project design that provides stormwater treatment with a proposed bioretention basin prior to connecting to the existing storm drain outlet on San Dieguito Drive.

Electrical lines currently exist along Jimmy Durante Boulevard and San Dieguito Drive, and natural gas lines currently exist to the west and south of the site. Electrical and natural gas service is available to serve the needs of the project. Electricity and natural gas would be provided for energy needs associated with the residential buildings and supporting amenities.

1.3.10 Off-Site Improvements

The project proposes a loading area at San Dieguito Drive for use by residents for delivery and unloading of furniture and appliances typically associated with the move-in and move-out of residents. The proposed loading area would be located just south of the proposed parking structure access and would include provisions for a pedestrian ramp and associated pedestrian sidewalk. The project proposes a new sidewalk from the intersection of San Dieguito Drive and Jimmy Durante Boulevard south to the southeastern property corner.

Jimmy Durante Boulevard off-site improvements would include new or replaced sidewalk along Jimmy Durante Boulevard from the intersection of Jimmy Durante Boulevard and San Dieguito Drive to the western property corner. Additionally, the street frontage improvements described in Section 1.3.7, Landscaping, would be included as part of the project.

1.3.11 Construction Assumptions and Methodology

Emissions from the construction phase of the project were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.1, available online (www.caleemod.com). The analysis contained herein is based on the following assumptions (duration of phases is approximate):

- Site preparation – 2 weeks (June 2019)
- Grading – 5 weeks (June 2019 – July 2019)
- Trenching – 4 weeks (October 2019 – November 2019)
- Building construction – 74 weeks (November 2019 – April 2021)
- Paving – 3 weeks (November 2019 – December 2019)
- Application of architectural coatings – 5 weeks (April 2021 – May 2021)

Construction is anticipated to commence following completion of entitlement efforts and completion of building design and associated permits. Construction would last for approximately 2 years, at which point building occupancy would occur. Construction equipment would include rollers, rubber-tired dozers, scrapers, water trucks, pavers, paving equipment, forklifts, and tractors/loaders/backhoes. Concrete and delivery trucks would also be used. Construction equipment would be used intermittently depending on construction phase.

Construction phasing would consist of parking structure construction, disturbed slope grading, residential structures over parking structure podium construction, and construction of the balance of the residential structures. Construction activities would take place within the limits of the construction hours identified in the City of Del Mar's Noise Regulations (City of Del Mar 1997).

Construction phasing specifications were provided by the project applicant, while the default values generated by CalEEMod were used for the construction equipment mix. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week (22 days per month) during project construction. Default construction worker, vendor trips, and trip lengths as provided in CalEEMod were utilized, with the exception of haul trips which were adjusted accordingly based on information provided by the applicant. CalEEMod default values were generated for worker and vendor trips. These assumptions are summarized Table 1.

Table 1
Construction Scenario Assumptions

Construction Phase	Average Daily Worker One-Way Trips	Average Daily Vendor One-Way Trips	Total Haul Truck One-Way Trips	Equipment	Quantity	Usage Hours
Site Preparation	13	0	0	Crawler Tractors	1	8
				Tractors/Loaders/Backhoes	2	7
Grading	15	2	240	Excavators	1	8
				Graders	1	8
				Sweepers/Scrubbers	1	8
				Tractors/Loaders/Backhoes	2	8
Trenching	8	0	0	Tractors/Loaders/Backhoes	3	8
Building Construction	56	13	0	Forklifts	3	7
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	1	8
Paving	15	2	0	Pavers	1	8
				Paving Equipment	1	8
				Rollers	1	8
Architectural Coating	11	0	0	Air Compressors	3	6

Notes: See Appendix A for details.
N/A = not applicable/not proposed

A detailed depiction of the construction schedule—including information regarding subphases and equipment used during each subphase—is included in Appendix A of this report.

Prior to construction, a Storm Water Pollution Prevention Plan would be prepared to identify best management practices to minimize off-site sediment transport for the duration of the project. In addition, grading plans would be subject to City of Del Mar approval, and would require measures to comply with the City of Del Mar's municipal storm water permit. The City of Del Mar's Municipal Code requires project compliance with the National Pollutant Discharge Elimination System permit for stormwater discharges and general construction activities, regular cleaning or sweeping of parking lots and impervious areas, and implementation of stormwater best management practices. The project would implement erosion and sediment control measures required by the City of Del Mar's Municipal Code, and other pertinent regulations and conditions. A traffic control plan would be prepared and made a standard condition of approval. The plan would include provisions for construction times and control plans for allowance of bicyclists and pedestrians along Jimmy Durante Boulevard and San Dieguito Drive throughout construction. The traffic control plan would also include provisions for allowance of emergency vehicle passage at all times.

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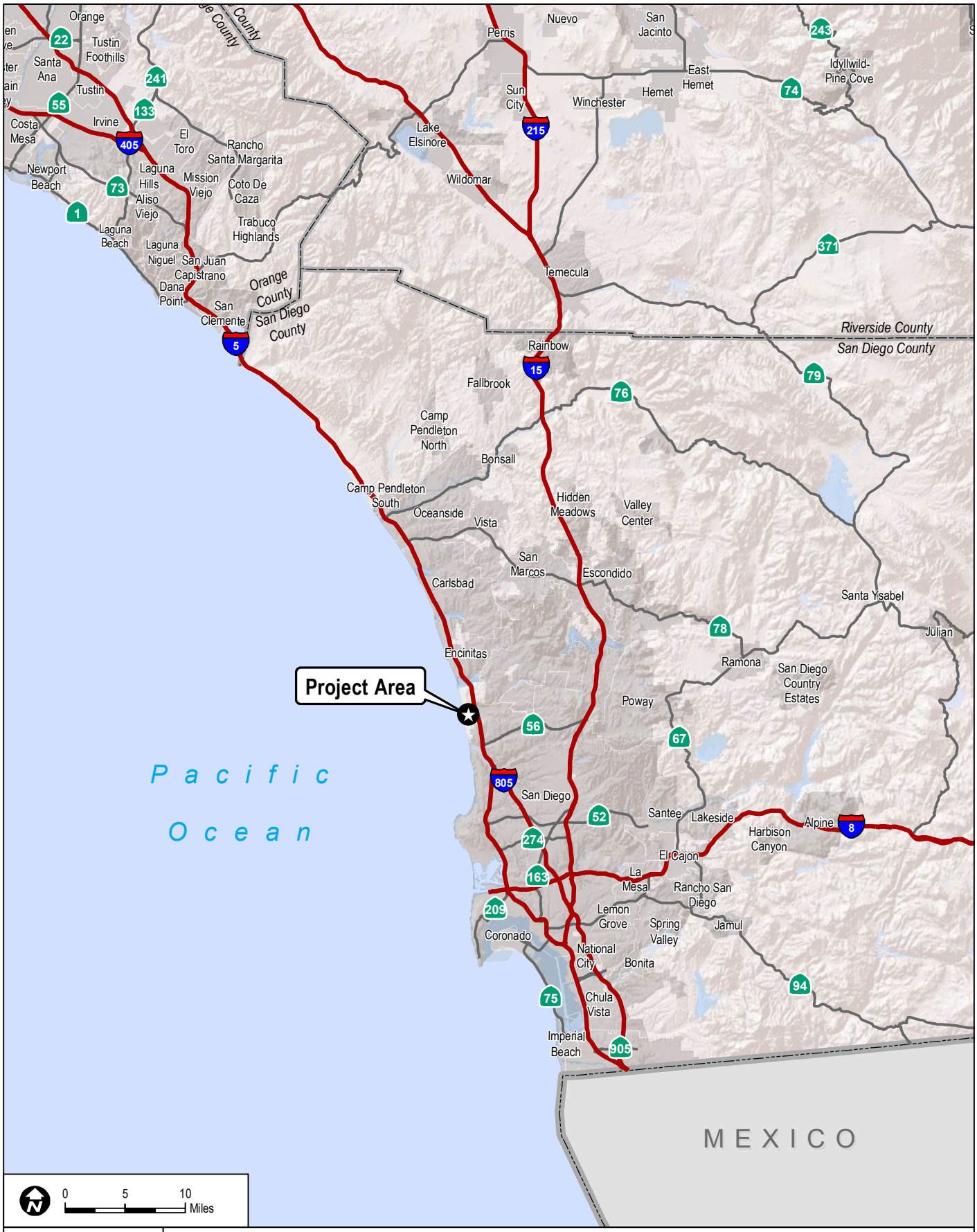

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FIGURE 1

Regional Map

Watermark Del Mar Greenhouse Gas Report

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SOURCE: Bing Maps 2015

FIGURE 2
Vicinity Map

Watermark Del Mar Greenhouse Gas Report

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SOURCE: Google Maps 2015

FIGURE 3

Existing Site Layout

Watermark Del Mar Greenhouse Gas Report

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SOURCE: Benson & Bohl Architects 2017

FIGURE 4
Conceptual Site Plan - Option A (48 Units)

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2 ENVIRONMENTAL SETTING

2.1 Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that in general, climate changes prior to the Industrial Revolution in the 1700's can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-20th century and is the most significant driver of observed climate change (IPCC 2013, EPA 2017a). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further in Section 2.5, Potential Effects of Climate Change.

2.2 Greenhouse Gases

GHGs include, but are not limited to, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), water vapor, hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).[1] Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, HCFCs, PFCs, and SF_6, and are associated with certain industrial products and processes. A summary of the most common GHGs and their sources is included in the following text.[2]

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities, and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are the combustion of coal, oil, natural gas, and wood.

Methane. CH_4 is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and the use of N_2O as a propellant (such as in rockets, racecars, aerosol sprays).

Fluorinated Gases. Fluorinated gases are synthetic, powerful GHGs that are emitted from a variety of industrial processes. Several prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals that are used as alternatives to ozone-

[1] California Health and Safety Code Section 38505 identifies seven GHGs that CARB monitors and regulates to reduce emissions: CO_2, CH_4, N_2O, SF_6, HFCs, PFCs, and NF_3.
For purposes of CEQA analysis for land use development projects, CalEEMod estimates emissions of CO_2, CH_4, and N_2O.

[2] The descriptions of these GHGs are summarized from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (1995), IPCC Fourth Assessment Report (2007), CARB's Glossary of Terms Used in GHG Inventories (2017), and EPA's Glossary of Climate Change Terms (2016).

depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.

- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, along with HFCs, to the ozone depleting substances. The two main sources of PFCs are primarily aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF_6 is a colorless gas that is soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen trifluoride:** NF_3 is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential. Diesel particulate matter emissions are a major source of black carbon and are also toxic area contaminants (TACs) that have been regulated and controlled in California for several decades to protect public health. In relation to declining diesel particulate matter from the California Air Resources Board's (CARB) regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric O_3, which is created by photochemical reactions involving gases both from natural sources and from human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O_2), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, due to

chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere) and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons. HCFCs are a large group of compounds, whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

2.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2016).

The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent (MT CO_2E).

The current version of the California Emissions Estimator Model (CalEEMod) (version 2016.3.1) used in this analysis assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the project.

2.4 Sources of Greenhouse Gas Emissions

Per the U.S. Environmental Protection Agency's (EPA) *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2015* (EPA 2017), total United States GHG emissions were approximately 6,586.7 million metric tons (MMT) CO_2E in 2015. The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 82.1% of total GHG emissions (5,411.4 MMT CO_2E). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 93.3% of CO_2 emissions in 2015 (5,049.8 MMT CO_2E). Total United States GHG emissions have increased by 3.5% from 1990 to 2015, and emissions increased from 2014 to 2015 by 2.3% (153.0 MMT CO_2E). Since 1990, United States GHG emissions have increased at an average annual rate of 0.2%; however, overall, net emissions in 2015 were 11.5% below 2005 levels (EPA 2017b).

According to California's 2000–2015 GHG emissions inventory (2017 edition), California emitted 440.36 MMT CO_2E in 2015, including emissions resulting from out-of-state electrical generation (CARB 2017b). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high global-warming potential substances, and recycling and waste. The California GHG emission source categories and their relative contributions in 2015 are presented in Table 2.

Table 2
GHG Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2E)	Percent of Total
Transportation	164.63	37%
Industrial uses	91.71	21%
Electricity generation[a]	83.67	19%
Residential and commercial uses	37.92	9%
Agriculture	34.65	8%
High global-warming potential substances	19.05	4%
Recycling and waste	8.73	2%
Totals	**440.36**	**100%**

Source: CARB 2017b.
Notes: Emissions reflect the 2015 California GHG inventory.
MMT CO_2E = million metric tons of carbon dioxide equivalent per year
[a] Includes emissions associated with imported electricity, which account for 33.74 MMT CO_2E annually.

During the 2000 to 2015 period, per capita GHG emissions in California have dropped from a peak in 2001 of 14.0 metric tons (MT) per person to 11.3 MT per person in 2015, representing a 19% decrease. In addition, total GHG emissions in 2015 were 1.5 MMT CO_2E less than 2014 emissions (CARB 2017b).

2.5 Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 *Intergovernmental Panel on Climate Change Synthesis Report* indicated that warming of the climate system is unequivocal and, since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (CCCC 2006). The primary effect of global climate change has been a 0.2°C rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1 to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights (CCCC 2012). A decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California and much of the State's water supply, by 30% to as much as 90% is predicted over the next 100 years (CAT 2006).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late 21st century in Central and, most notably, Southern California. By late-century, all projections show drying, and half of them suggest 30-year average precipitation will decline by more than 10% below the historical average (CCCC 2012).

Wildfire risk in California will increase as a result of climate change. Earlier snowmelt, higher temperatures and longer dry periods over a longer fire season will directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning. However, human activities will continue to be the biggest factor in ignition risk. It is estimated that the long-term increase in fire occurrence associated with a higher emissions scenario is substantial, with increases in the number of large fires statewide ranging from 58% to 128% above historical levels by 2085. Under the same emissions scenario, estimated burned area will increase by 57% to 169%, depending on location (CCCC 2012).

Reduction in the suitability of agricultural lands in the State for traditional crop types may occur. While effects may occur, adaptation could allow farmers and ranchers to minimize potential negative effects on agricultural outcomes through adjusting timing of plantings or harvesting and changing crop types.

Public health-related effects of increased temperatures and prolonged temperature extremes, including heat stroke, heat exhaustion, and exacerbation of existing medical conditions, could be particular problems for the elderly, infants, and those who lack access to air conditioning or cooled spaces (CNRA 2009).

A summary of current and future climate change impacts to resource areas in California, as discussed in the *Safeguarding California: Reducing Climate Risk* (CNRA 2014) is provided below.

Agriculture. The impacts of climate change on the agricultural sector are far more severe than the typical variability in weather and precipitation patterns that occur year to year. Some of the specific challenges faced by the agricultural sector and farmers include more drastic and unpredictable precipitation and weather patterns; extreme weather events that range from severe flooding to extreme drought, to destructive storm events; significant shifts in water availably and water quality; changes in pollinator lifecycles; temperature fluctuations, including extreme heat stress and decreased chill hours; increased risks from invasive species and weeds, agricultural pests and plant diseases; and disruptions to the transportation and energy infrastructure supporting agricultural production. These challenges and associated short-term and long-term impacts can have both positive and negative effects on agricultural production. For example, changes in weather patterns can foster longer growing periods for certain crops, but simultaneously increase the likelihood of pests. It is predicted that current crop and livestock

production will suffer long-term negative effects resulting in a substantial decrease in the agricultural sector if not managed or mitigated (CNRA 2014).

Biodiversity and Habitat. The state's extensive biodiversity stems from its varied climate and assorted landscapes, which have resulted in numerous habitats where species have evolved and adapted over time. The preservation of California's unique biological heritage is of ever-increasing importance given the forecasted impacts associated with climate change.

Similar to the agricultural sector, there are a number of climate change challenges the biodiversity sector must contend with, on top of the ever-increasing pressures of habitat loss and fragmentation, population growth, pollution, plant and animal diseases, and other human-induced impacts. Specific climate change challenges to biodiversity and habitat include species migration in response to climatic changes, range shift and novel combinations of species; pathogens, parasites and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; threshold effects (i.e., a change in the ecosystem that results in a "tipping point" beyond which irreversible damage or loss has occurs).

Habitat restoration, conservation, and resource management across California and through collaborative efforts amongst public, private and nonprofit agencies has assisted in the effort to fight climate change impacts on biodiversity and habitat. One of the key measures in these efforts is ensuring species' ability to relocate as temperature and water availability fluctuate as a result of climate change, based on geographic region. As such, it is critical to ensure habitat corridors, linkages and connectivity are established to allow species the mobility to move from place to place as resources change over time. Continued collaborative efforts are required across agencies to ensure the health of existing habitat, wildlife, and the geographic extent of their existence required to support biodiversity (CNRA 2014).

Emergency Management. "Emergency management includes actions to prepare for, mitigate against, respond to and recover from emergencies and disasters that impact our communities, critical infrastructure and resources by lessoning the likelihood, severity and duration of the consequences of the incident" (CNRA 2014). "Hazard mitigation is any action taken to reduce or eliminate the long-term risk to human life and property from natural or man-made hazards" (CNRA 2014). In California, preparing, mitigating, and responding to and/or recovering from a natural disaster usually is done in the context of an earthquake, wildfire or severe flood event.

Energy. The energy sector provides California residents with a supply of reliable and affordable energy through a complex integrated system. Specific climate change challenges for the energy sector include temperature, fluctuating precipitation patterns, increasing extreme weather events and sea level rise. Increasing temperatures and reduced snowpack negatively impact the availability of a steady flow of snowmelt to hydroelectric reservoirs. Higher temperatures also

reduce the capacity of thermal power plants since power plant cooling is less efficient at higher ambient temperatures. Natural gas infrastructure in coastal California is threatened by sea level rise and extreme storm events (CNRA 2014).

Forestry. Forests occupy approximately 33% of California's 100 million acres and provide key benefits such as wildlife habitat, absorption of carbon dioxide, renewable energy and building materials. The most significant climate change related risk to forests is accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large scale mortalities and combined with increasing temperatures have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts and vegetation conversions. These factors contribute to decreased forest growth, geographic shifts in tree distribution, loss of fish and wildlife habitat and decreased carbon absorption. These losses can also negatively impact the timber industry as well as recreation opportunities. Climate change may result in increased establishment of non-native species, particularly in rangelands where invasive species are already a problem. Invasive species may be able to exploit temperature or precipitation changes, or quickly occupy areas denuded by fire, insect mortality or other climate change effects on vegetation (CNRA 2014).

Ocean and Coastal Ecosystems and Resources. Sea level rise, changing ocean conditions and other climate change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems in addition to threatening people and infrastructure located along the California coastline and in coastal communities. Sea level rise in addition to more frequent and severe coastal storms and erosion are threatening vital infrastructure such as roads, bridges, power plants, ports and airports, gasoline pipes, and emergency facilities as well as negatively impacting the coastal recreational assets such as beaches and tidal wetlands. Water quality and ocean acidification threaten the abundance of seafood and other plant and wildlife habitats throughout California and globally (CNRA 2014).

Public Health. Climate change can impact public health through various environmental changes and is the largest threat to human health in the twenty-first Century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies, and extreme events such as heat, floods, droughts, and wildfires. Increased frequency, intensity and duration of extreme heat and heat waves is likely to increase the risk of mortality due to heat related illness as well as exacerbate existing chronic health conditions. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness such as asthma and allergies. Additional health impacts that may be impacted by climate change include cardiovascular disease, vector-borne diseases, mental health impacts, and malnutrition injuries. Increased frequency of these ailments is likely to subsequently increase the direct risk of injury and/or mortality (CNRA 2014).

Transportation. Residents of California rely on airports, seaports, public transportation and an extensive roadway network to gain access to destinations, goods and services. While the transportation industry is a source of GHG emissions it is also vulnerable to climate change risks. Particularly, sea level rise and erosion threaten many coastal California roadways, airports, seaports, transit systems, bridge supports and energy and fueling infrastructure. Increasing temperatures and extended periods of extreme heat threaten the integrity of the roadways and rail lines. High temperatures cause the road surfaces to expand which leads to increased pressure and pavement buckling. High temperatures can also cause rail breakages which could lead to train derailment. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure which can impair movement of peoples and goods, or potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion risks, landslides, mudslides and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety (CNRA 2014).

Water. Water resources in California support residences, plants, wildlife, farmland, landscapes and ecosystems and bring trillions of dollars in economic activity. Climate change could seriously impact the timing, form, amount of precipitation, runoff patterns, and frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to earlier snowmelt, which can impact water supply availability, natural ecosystems and winter recreation. Water supply availability during the intense dry summer months is heavily dependent on the snowpack accumulated during the winter time. Increased risk of flooding has a variety of public health concerns including water quality, public safety, property damage, displacement and post-disaster mental health problems. Prolonged and intensified droughts can also negatively affect groundwater reserves and result in increased overdraft and subsidence. Droughts can also negatively impact agriculture and farmland throughout the state. The higher risk of wildfires can lead to increased erosion, which can negatively impact watersheds and result in poor water quality. Water temperatures are also prone to increase, which can negatively impact wildlife that rely on a specific range of temperatures for suitable habitat (CNRA 2014).

Additionally, in March 2016, CNRA released *Safeguarding California: Implementation Action Plans*, a document that shows how California is acting to convert the recommendations contained in the 2014 *Safeguarding California* plan into action. The 2016 *Implementation Plans* report is divided by ten sectors (i.e., agriculture, biodiversity and habitat, emergency management, energy, forestry, land use and community development, oceans and coastal resources and ecosystems, public health, transportation, and water), and shows the path forward by presenting the risks posed by climate change, the adaptation efforts underway, and the actions that will be taken to safeguard residents, property, communities, and natural systems (CRNA 2016).

The existing project Site is generally comprised of currently undeveloped, vacant land with dirt access roads, but no active land uses. Thus, for purposes of this EIR's GHG analysis, the on-site existing conditions GHG emissions inventory is estimated at zero.

3 REGULATORY SETTING

3.1 Federal Activities

Massachusetts v. EPA. On April 2, 2007, in *Massachusetts v. EPA*, the Supreme Court directed the EPA Administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA Administrator is required to follow the language of Section 202(a) of the federal Clean Air Act. On December 7, 2009, the Administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The Administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The Administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act. On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the Act requires the following, which aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
2. Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards. In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation (DOT), and the Department of Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Obama issued a memorandum directing the DOT, DOE, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6%–23% over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans and all types of sizes of buses and work trucks. The final standards are expected to lower carbon dioxide emissions by approximately 1.1 billion MT and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

U.N. Framework Convention on Climate Change Pledge. On March 31, 2015, the State Department submitted the U.S. target to cut net GHG emissions to the United Nations Framework Convention on Climate Change (UNFCCC). The submission, referred to as an Intended Nationally Determined Contribution (INDC), is a formal statement of the U.S. target,

announced in China last year, to reduce our emissions by 26%–28% below 2005 levels by 2025, and to make best efforts to reduce by 28% (U.S. State Department 2015).

The target reflects a planning process that examined opportunities under existing regulatory authorities to reduce emissions in 2025 of all GHGs from all sources in every economic sector. Several U.S. laws, as well as existing and proposed regulations thereunder, are relevant to the implementation of the U.S. target, including the Clean Air Act (42 U.S.C. 7401 et seq.), the Energy Policy Act (42 U.S.C. 13201 et seq.), and the Energy Independence and Security Act (42 U.S.C. 17001 et seq.).

Clean Power Plan and New Source Performance Standards for Electric Generating Units. On October 23, 2015, EPA published a final rule (effective December 22, 2015) establishing the Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO_2 emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units, and (2) stationary combustion turbines. Concurrently, EPA published a final rule (effective October 23, 2015) establishing Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (80 FR 64661–65120). The rule prescribes CO_2 emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. Implementation of the Clean Power Plan has been stayed by the U.S. Supreme Court pending resolution of several lawsuits. . Additionally, in March 2017, President Trump directed the EPA Administrator to review the Clean Power Plan in order to determine whether it is consistent with current executive policies concerning GHG emissions, climate change and energy.

3.2 State of California

State Climate Change Targets

Executive Order (EO) S-3-05. EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

Assembly Bill (AB) 32 and CARB's Climate Change Scoping Plan. In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the satewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 MMT CO_2E). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (*Scoping Plan*) in accordance with Health and Safety Code Section 38561. The *Scoping Plan* establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
2. Achieving a statewide renewable energy mix of 33%
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard

6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

In the *Scoping Plan*, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level; i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as "Business-As-Usual" [BAU]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the *Scoping Plan's* Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the BAU conditions. When the 2020 emissions level projection also was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewable Portfolio Standard (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the BAU conditions.

More recently, in 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (*First Update*). The stated purpose of the *First Update* is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050." The *First Update* found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the *First Update*, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050." Those six areas are: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and, (6) natural and working lands. The *First Update* identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal.

Based on CARB's research efforts presented in the *First Update*, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050." Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and, the rapid market penetration of efficient and clean energy technologies.

As part of the *First Update*, CARB recalculated the state's 1990 emissions level using more recent global warming potentials identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO_2E) and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 28.5% or 16%) from the BAU conditions.

On January 20, 2017, CARB released The *2017 Climate Change Scoping Plan Update (Second Update)* for public review and comment (CARB 2017a). This update proposes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below), including continuing the Cap-and-Trade Program through 2030, and includes a new approach to reduce GHGs from refineries by 20%. The *Second Update* incorporates approaches to cutting short-lived climate pollutants (SLCPs) under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by CARB in March 2017), and acknowledges the need for reducing emissions in agriculture and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon. During development of the *Second Update*, CARB held a number of public workshops in the Natural and Working Lands, Agriculture, Energy and Transportation sectors to inform development of the 2030 Scoping Plan Update (CARB 2016a). When discussing project-level GHG emissions reduction actions and thresholds, the *Second Update* states "achieving no net increase in GHG emissions is the correct overall objective, but it may not be appropriate or feasible for every development project. An inability to mitigate a project's GHG emissions to zero does not necessarily imply a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA." It is expected that the *Second Update* will be considered by CARB's Governing Board in late June 2017.

EO B-30-15. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050 as set forth in S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_2E. The EO also calls for state agencies to continue to develop

and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

SB 32 and AB 197. SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction targets; make changes to CARB's membership, and increase legislative oversight of CARB's climate change-based activities; and expand dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and, requires CARB to identify specific information for GHG emissions reduction measures when updating the scoping plan.

SB 605 and SB 1383. SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state; and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of SLCPs (40 percent below 2013 levels by 2030 for methane and HFCs, and 50 percent below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its *Short-Lived Climate Pollutant Reduction Strategy* (*SLCP Reduction Strategy*) in March 2017. The *SLCP Reduction Strategy* establishes a framework for the statewide reduction of emissions of black carbon, methane and fluorinated gases.

Building Energy

Title 24, Part 6. Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is required by law to adopt standards every 3 years that are cost effective for

homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2013 Title 24 standards became effective on July 1, 2014. Buildings constructed in accordance with the 2013 standards were estimated to use 25% less energy for lighting, heating, cooling, ventilation, and water heating than the 2008 standards (CEC 2012).

The 2016 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2017. The 2015 Title 24 standards will further reduce energy used and associated GHG emissions. In general, single-family homes built to the 2016 standards are anticipated to use about 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and nonresidential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015).

The project would be required to comply with 2016 Title 24 standards because its building construction phase would commence after January 1, 2017. This analysis does not quantify the increased energy efficiency and corresponding GHG emissions savings associated with the more stringent 2016 Title 24 standards, which results in a conservative assessment of GHG emission savings because the 2016 Title 24 standards have been documented to reduce energy usage (e.g., for lighting, heating, cooling, ventilation, and water heating) and associated GHG emissions. Instead, the project's GHG emissions estimates conservatively are in accordance with CalEEMod's default assumption that the 2013 Title 24 standards are the operative standards. This "pool" of required 2016 Title 24 GHG savings, while not quantified for the project, nonetheless will occur and represent GHG additional reductions beyond those required by the recommended mitigation measures.

Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016

standards became effective on January 1, 2017. The mandatory standards require the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance
- 65 percent of construction and demolition waste must be diverted from landfills
- Mandatory inspections of energy systems to ensure optimal working efficiency
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements; stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

The California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving zero net energy (ZNE) for new construction in California. The key policy timelines include: (1) all new residential construction in California will be ZNE by 2020, and (2) all new commercial construction in California will be ZNE by 2030.[3] As most recently defined by the CEC in its 2015 *Integrated Energy Policy Report*, a zero net energy code building is "one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building" using the CEC's Time Dependent Valuation metric.

[3] See, e.g., CPUC, California's Zero Net Energy Policies and Initiatives, Sept. 18, 2013, accessed at http://www.cpuc.ca.gov/NR/rdonlyres/C27FC108-A1FD-4D67-AA59- 7EA82011B257/0/3.pdf. It is expected that achievement of the zero net energy goal will occur via revisions to the Title 24 standards.

Title 20. Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include: refrigerators, refrigerator-freezers and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

SB 1. SB 1 (2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the Public Resources Code, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry in which solar energy systems are a viable mainstream option for both homes and businesses within 10 years of adoption, and to place solar energy systems on 50% of new homes within 13 years of adoption. SB 1, also termed "GoSolarCalifornia," was previously titled "Million Solar Roofs."

AB 1470. This bill established the Solar Water Heating and Efficiency Act of 2007. The bill makes findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. The bill defines several terms for purposes of the act. The bill requires the commission to evaluate the data available from a specified pilot program, and, if it makes a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

AB 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting, to reduce electricity consumption 50 percent for indoor residential lighting and 25 percent for indoor commercial lighting.

Mobile Sources

AB 1493. In a response to the transportation sector accounting for more than half of California's CO_2 emissions, AB 1493 was enacted in July 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%.

EO S-1-07. Issued on January 18, 2007, EO S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2E grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste.

SB 375. SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations (MPOs) are then responsible for preparing a Sustainable Communities Strategy within their Regional Transportation Plan. The goal of the Sustainable Communities Strategy is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If a Sustainable Communities Strategy is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional MPOs. The targets for SANDAG are a 7% reduction in emissions per capita by 2020 and a 13% reduction by 2035.

SANDAG completed and adopted its *2050 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) in October 2011. In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

After SANDAG's 2050 RTP/SCS was adopted, a lawsuit was filed by the Cleveland National Forest Foundation and others. The matter currently is pending before the California Supreme Court (Case No. S223603) for determination of whether an EIR for a regional transportation plan must include an analysis of the plan's consistency with the GHG reduction goals reflected in Executive Order No. S-3-05 to comply with CEQA.

SANDAG recently adopted the next iteration of its RTP/SCS in accordance with statutorily mandated timelines. More specifically, in October 2015, SANDAG adopted *San Diego Forward: The Regional Plan*. Like the 2050 RTP/SCS, this planning document meets CARB's 2020 and 2035 reduction targets for the region (SANDAG 2015). In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

Advanced Clean Cars Program. In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2011). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The Zero Emissions Vehicle (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years. The Clean Fuels Outlet regulation will ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of the new advanced technology vehicles as they come to the market.

EO B-16-12. EO B-16-12 (2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution ZEVs. This EO also sets a long-term target of reaching 1.5 million zero-emission vehicles on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80% less than 1990 levels by 2050. In furtherance of this EO, the Governor convened an Interagency Working Group on Zero-Emission Vehicles that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet.

AB 1236. AB 1236 (2015) as enacted in California's Planning and Zoning Law, requires local land use jurisdictions to approve applications for the installation of electric vehicle charging stations, as defined, through the issuance of specified permits unless there is substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provides for appeal of that decision to the planning commission, as specified. The bill requires local land use jurisdictions with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that creates an expedited and streamlined permitting process for electric vehicle charging stations, as specified. Prior to this statutory deadline, in August 2016, the County Board of Supervisors adopted Ordinance No. 10437 (N.S.) adding a section to its County Code related to the expedited processing of electric vehicle charging stations permits consistent with AB 1236.

SB 350. In 2015, SB 350 – the Clean Energy and Pollution Reduction Act – was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see Public Utilities Code section 740.12).

Renewable Energy and Energy Procurement

SB 1078. SB 1078 (2002) established the Renewable Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010.

SB 1368. SB 1368 (2006) requires the CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC). This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural

gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

SB X1 2. SB X1 2 (2011) expanded the RPS by establishing that 20 percent of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

SB 350. SB 350 (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030 be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

Water

EO B-29-15. In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Solid Waste

AB 939 and AB 341. In 1989, AB 939, known as the Integrated Waste Management Act (Public Resources Code Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid

waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes would assist the state in reaching the 75 percent goal by 2020.

Increasing the amount of commercial solid waste that is recycled, reused, or composted will reduce GHG emissions primarily by 1) reducing the energy requirements associated with the extraction, harvest, and processing of raw materials and 2) using recyclable materials that require less energy than raw materials to manufacture finished products (CalRecycle 2015). Increased diversion of organic materials (green and food waste) will also reduce GHG emissions (CO_2 and CH_4) resulting from decomposition in landfills by redirecting this material to processes that use the solid waste material to produce vehicle fuels, heat, electricity, or compost.

Other State Regulations and Goals

EO S-13-08. EO Order S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final *2009 California Climate Adaptation Strategy* report was issued in December 2009 (CNRA 2009), and an update, *Safeguarding California: Reducing Climate Risk*, followed in July 2014 (CNRA 2014). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: Agriculture, Biodiversity and Habitat, Emergency Management, Energy, Forestry, Ocean and Coastal Ecosystems and Resources, Public Health, Transportation, and Water.

2015 State of the State Address. In January 2015, Governor Brown in his inaugural address and annual report to the Legislature established supplementary goals which would further reduce GHG emissions over the next 15 years. These goals include an increase in California's renewable energy portfolio from 33% to 50%, a reduction in vehicle petroleum use for cars and trucks by up to 50%, measures to double the efficiency of existing buildings, and decreasing emissions associated with heating fuels.

2016 State of the State Address. In his January 2016 address, Governor Brown established a statewide goal to bring per capita GHG emission down to two tons per person, which reflects

the goal of the Global Climate Leadership Memorandum of Understanding (Under 2 MOU) to limit global warming to less than two degrees Celsius by 2050. The Under 2 MOU agreement pursues emission reductions of 80% to 95% below 1990 levels by 2050 and/or reach a per capita annual emissions goal of less than two metric tons by 2050. A total of 135 jurisdictions representing 32 countries and six continents, including California, have signed or endorsed the Under 2 MOU (Under 2 2016).

3.3 Local Regulations

2050 Regional Transportation Plan

As described above, On October 28, 2011, the SANDAG Board of Directors adopted the 2050 RTP/SCS, which articulates future plans for San Diego's regional transportation system over the next 40 years. The SCS, which is included as part of the RTP, details the regional strategy for reducing GHG emissions to state-mandated levels over time as required by SB 375, including measures encouraging infill development. The San Diego region is the first in California to produce an RTP with a SCS.

Most recently, SANDAG prepared *San Diego Forward: The Regional Plan*, which has united two of SANDAG's major planning efforts into one with the next update of the RTP/SCS and an update of the Regional Comprehensive Plan (RCP) that was adopted in 2004. The updated RTP/SCS was adopted by the SANDAG Board of Directors on October 9, 2015.

City of Del Mar Climate Action Plan

On June 6, 2016, the City of Del Mar has adopted its Climate Action Plan (CAP) to reduce GHG emissions within the City in order to meet the State of California's goal as recommended in the AB 32 Scoping Plan of reducing GHG emissions to 1990 levels by 2020 (City of Del Mar 2016). It should be noted however that the City's CAP is not a certified GHG reduction plan and has not undergone CEQA review. The CAP states that it is an "aspirational document" and is not considered part of the City's General Plan or part of a regulatory program, therefore, information provided herein is provided for informational purposes. Reduction measures included in the CAP will undergo environmental review prior to implementation as necessary.

The CAP provides an update to the City's 2005 GHG inventory and provides GHG inventory projections for business-as-usual (BAU) and "adjusted" 2020 and 2030, which includes reductions from federal and state regulatory measures. In 2012, the City's communitywide GHG emissions totaled 55,855 MT CO_2E. In order to meet the state's long-term goal, the City would have to reduce its GHG emissions by 15% in 2020 to 47,477 MT CO_2E and 50% by 2035 to 27,928 MT CO_2E. As indicated in the CAP, the City's BAU GHG emissions

would be 54,822 MT CO_2E in 2020 and 55,314 MT CO_2E in 2035. With reductions, the City is projected to emit 46,028 MT CO_2E in 2020 and 43,048 MT CO_2E in 2035. Thus, the City would need to reduce 15,120 MT CO_2E emissions below the adjusted BAU scenario in 2035 to meet the state-aligned target.

Reduction measures included in the CAP detail how the City can meet the GHG emissions target through implementation of goals, measures, and strategies. Each goal contains one or more proposed policies, programs, or projects indicating the City's commitment toward meeting the goal. The GHG reduction potential by 2020 and 2035 are identified for each goal. Goals are further divided into one or more discrete strategies that the City may take in achieving the goal. Strategies may be added or removed over time, depending on their relevancy, funding availability, and whether the strategies are successful in supporting measures as they are monitored over time. Each measure includes co-benefits which cover areas such as energy efficiency, water conservation, improved air quality, renewable energy and transportation.

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4 THRESHOLDS OF SIGNIFICANCE

The California Natural Resources Agency (CNRA) adopted amendments to the CEQA Guidelines on December 30, 2009, which became effective on March 18, 2010. With respect to GHG emissions, the amended CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4(a)). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

- The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." Similarly, the revisions to Appendix G, Environmental Checklist Form, which is often used as a basis for lead agencies' selection of significance thresholds, do not prescribe specific thresholds.

Rather, the CEQA Guidelines establish two CEQA thresholds related to GHGs, and these will be used to discuss the significance of project impacts (14 CCR 15000 et seq.):

1. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
2. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Accordingly, the CEQA Guidelines do not prescribe specific methodologies for performing an assessment, establish specific thresholds of significance, or mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the

appropriate methodologies and thresholds of significance that are consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009).

The City of Del Mar has not established a GHG significance threshold to date. Several lead agencies in California have adopted a screening threshold as recommended by the California Air Pollution Control Officers Association (CAPCOA), which proposes a screening-level threshold of 900 MT CO_2E. The annual 900 MT CO_2E screening level referenced in the CAPCOA white paper is an acceptable conservative criterion which can be used to determine if GHG emissions for a given project would require further analysis or mitigation in order to reduce its climate change impact (CAPCOA 2008). Therefore, this analysis uses the 900 MT CO_2E in order to assess the significance of the proposed project's GHG emissions.

5 IMPACT ANALYSIS

5.1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Impacts

Construction of the proposed project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. GHG emissions associated with temporary construction activity were quantified using CalEEMod. A detailed depiction of the construction schedule—including information regarding phasing, equipment utilized during each phase, haul trucks, vendor trucks, and worker vehicles—is included in Section 1.3, Construction Assumptions and Methodology, of this report.

Table 3 shows the estimated annual GHG construction emissions associated with the proposed project.

Table 3
Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2E
	metric tons per year			
2019	87.82	0.02	0.00	88.30
2020	318.17	0.04	0.00	319.16
2021	102.08	0.01	0.00	102.38
Total Emissions	**508.07**	**0.07**	**0.00**	**509.84**

Notes: See Appendix A for detailed results.
CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2E = carbon dioxide equivalent

Estimated annualized project-generated construction emissions would be approximately 17 MT CO_2E over a 30-year project life. However, since there is no established GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis below. Per guidance from the South Coast Air Quality Management District (SCAQMD 2008), construction emissions are amortized over a 30-year period to account for the contribution of construction emissions over the lifetime of a project.

Operational Impacts

Operation of the proposed project would result in GHG emissions from vehicular traffic, area sources (e.g., natural gas combustion and landscaping), electrical generation, water supply, and solid waste as described below.

Area Sources

In addition to estimating mobile source emissions, CalEEMod was also used to estimate emissions from project area sources, including natural gas combustion for hearths and appliances, and landscape maintenance. Natural gas usage for the proposed project was based upon the CalEEMod default usage rates. Because the proposed project design does not include wood burning fireplaces, the default CalEEMod hearth data was updated to reflect no wood burning fireplaces. The CalEEMod default value for wood burning fireplaces and no fireplaces were allocated into the natural gas fireplaces input.

Electricity

Emissions from energy sources, which include natural gas appliances and space and water heating, were also estimated using CalEEMod. Default values for indoor and outdoor water use, solid waste generation, and natural gas consumption (through Title 24 and non-Title 24 natural gas energy intensities) were used for the proposed project. The proposed project is expected to

meet the 2016 Title 24 standards, which requires that new residential development are required to achieve a 28% energy savings compared with 2013 Title 24 standards (CEC 2015).

As previously discussed, RPS requires energy providers to derive 33% of their electricity from qualified renewable sources by 2020. Therefore, the emissions factors for SDG&E was adjusted to take into account the procurement of renewable energy by SDG&E to meet the required 33% RPS procurement by 2020. Notably, utilization of the 2020 RPS value of 33% in CalEEMod is conservative for purposes of estimating the proposed project's GHG emissions because SDG&E already achieved 35.2% in 2015 and the proposed project's buildout year of 2022, a more restrictive RPS value would apply as SDG&E attempts to achieve the SB 350 requirement to achieve 50% RPS by 2030.

Vehicular Traffic

The proposed project would impact air quality through an increase in vehicular traffic generated by project residents and visitors. CalEEMod was utilized to estimate daily emissions from proposed vehicular sources (refer to Appendix A). CalEEMod default data, including temperature, trip characteristics, variable start information, vehicle mix, and emissions factors, were conservatively used for the model inputs. Emission factors representing the vehicle mix and emissions for 2022 (first year full buildout) were used to estimate emissions.

Solid Waste

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, transportation of waste, and disposal. Solid waste generation rates were estimated from CalEEMod Model, and GHG emissions from solid waste management were estimated using the model, assuming landfilling of solid waste with flaring. CalEEMod includes landfills with landfill gas flaring based on California default conditions. Municipal landfills within the San Diego region are required to utilize landfill gas collection systems as specified under SDAPCD Rule 59.1 and/or federal Clean Air Act regulation 40 CFR Part 60, Subpart WWW. Landfill gas is either flared or used in combustion turbines for electricity generation.

Consistent with the state's diversion rate goals set forth in AB 341, which requires that jurisdictions to achieve a 75% diversion rate by 2020, the City is aiming to exceed state requirements with CAP goals for waste diversion of 80% by 2020.

Water Supply and Wastewater

Water supplied to the proposed project requires the use of electricity. Accordingly, the supply, conveyance, treatment, and distribution of water would indirectly result in GHG emissions

through use of electricity. The proposed project would meet a 20% reduction in indoor water use is required per CALGreen and 25% reduction in outdoor water use is required per EO B-29-15.

Table 4 shows the operational GHG emissions associated with the proposed project.

Table 4
Estimated Annual Operational GHG Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2E
	metric tons per year			
Area	38.39	0.00	0.00	38.63
Energy	162.14	0.01	0.00	162.94
Mobile	303.96	0.02	0.00	304.35
Waste	1.65	0.10	0.00	4.08
Water	13.77	0.09	0.00	16.60
Amortized Construction Emissions	—	—	—	16.99
Total Emissions	**519.91**	**0.22**	**0.00**	**543.59**

Source: See Appendix A for detailed results
Notes: These estimates reflect compliance with 2016 Title 24 standards requiring residential to be 28% more efficient than 2013 standards, compliance with CALGreen and EO B-29-15 (20% indoor and 25% outdoor reduction in water consumption), and compliance with City's goal of 80% waste diverted.
CH_4 = methane; CO_2 = carbon dioxide; CO_2E = carbon dioxide equivalent; N_2O = nitrous oxide

As shown in Table 4, estimated annual project-generated GHG emissions in addition to amortized construction emissions would be approximately 544 MT CO_2E per year. Emissions from the proposed project would be below the CAPCOA's 900 MT CO_2E screening threshold. As such, impacts would be **less than significant**.

5.2 Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As previously discussed, the City's CAP is not a qualified CAP, therefore the proposed project's consistency is provided for informational purposes only. The City's CAP is a long-range plan to reduce GHG emissions from communitywide activities within the City and would also prepare the City from the impending effects of climate change. The City is committed to reducing its GHG emissions by 15% below 2012 levels by 2020 and 50% below 2012 levels by 2035, consistent with AB 32 and the State's GHG emission reduction goals. In order to reduce citywide GHG emissions, the CAP identifies a series of reduction measures or strategies, which will guide the City in several key focus areas (energy and buildings, water and waste, transportation, and urban tree planting). A project that would implement any of the CAP

reduction measures applicable to residential development would assist in achieving attainment of the CAP's goals for the City as a whole and therefore would not conflict with the CAP.

Accordingly, the proposed project's GHG emissions of 543 MT CO_2E which is less than the 900 MT CO_2E screening threshold demonstrates compliance with the CAP. Measures applicable to the proposed project include compliance with green building standards identified in Title 24, reduced indoor and outdoor water consumption, and diversion of construction debris. The proposed project would comply with these GHG reduction measures. Other measures outlined within the CAP would not be directly applicable to the proposed project and are intended for the City to implement. Therefore, the proposed project would not conflict with the City's CAP.

In 2014, CARB adopted the First Update to the Climate Change Scoping Plan: Building on the Framework (First Update). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050." The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals. In 2017, CARB released the 2017 Climate Change Scoping Plan Update (Scoping Plan Second Update) for public review and comment (CARB 2017c). This update to the scoping plan proposes the CARB's strategy for achieving the state's 2030 GHG target, including continuing the cap-and-trade program through 2030, and includes a new approach to reduce GHGs from refineries by 20 percent.

The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others. While state regulatory measures would ultimately reduce GHG emissions associated with the proposed project through their effect on these sources, no statewide plan, policy, or regulation would be specifically applicable to reductions in GHG emissions from the proposed project.

Regarding consistency with SB 32 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and EO S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future year analysis. However, CARB forecasts that compliance with the current Scoping Plan puts the State on a trajectory of meeting these long-term GHG goals (CARB 2017c). As discussed previously, the proposed project GHG emissions would not exceed the 900 MT CO_2E screening level referenced in the CAPCOA white paper, therefore, the proposed project would not conflict with the state's trajectory toward future GHG reductions. Additionally, because the specific path to compliance for the state with regards to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional reductions in GHG emissions for the proposed project would be speculative and cannot be identified at this time. With respect to future GHG targets under SB 32 and Executive Order S-3-05, CARB has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet the reduction targets in 2030 and in 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the state on its trajectory toward meeting these future GHG targets.

At the regional level, SANDAG's RTP/SCS has been adopted for the purpose of reducing GHG emissions attributable to passenger vehicles in the San Diego region. CARB has recognized that the approved RTP/SCS is consistent with SB 375 (CARB 2015). SANDAG recently adopted the next iteration of its RTP/SCS in accordance with statutorily-mandated timelines. More specifically, in October 2015, SANDAG adopted *San Diego Forward: The Regional Plan*. Like the 2050 RTP/SCS, this planning document meets CARB's 2020 and 2035 reduction targets for the region. While the RTP/SCS does not regulate land use or supersede the exercise of land use authority by SANDAG's member jurisdictions (i.e., the City), the RTP/SCS is a relevant regional reference document for purposes of evaluating the intersection of land use and transportation patterns and the corresponding GHG emissions. The RTP/SCS is not directly applicable to the proposed project because the underlying purpose of the RTP/SCS is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout San Diego County, as stipulated under SB 375. Nevertheless, because the proposed project is an infill development project, it supports the overarching intent of the RTP/SCS by avoiding sprawling development patterns.

Based on the preceding considerations, the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and impacts would be **less than significant**.

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APPENDIX A

CalEEMod Construction and Operational Emissions Output

Watermark (Option 1)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	108.00	Space	1.07	46,808.00	0
Racquet Club	0.64	1000sqft	0.01	600.00	0
Recreational Swimming Pool	2.60	1000sqft	0.06	2,600.00	0
Condo/Townhouse	48.00	Dwelling Unit	1.23	62,941.00	137

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Watermark Del Mar Project (Option 1). CO2 intensity factor adjusted to refect 33% RPS.

Land Use - Project consists of 48 dwelling units, 2600 sf pool, and 108 space parking structure on a 2.37 acre site.

Construction Phase - Construction to begin June 2019 and would be completed by May 2021.

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Trips and VMT - Project specific information - 120 haul trips. Worker and vendor trip length = 8 miles, hauling trip length = 5 miles. Assumed water and asphalt trucks as vendor trips.

Grading - Export of 23,600 cy of soil

Architectural Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Vehicle Trips - Recreational amentites would not generate trips

Woodstoves - assumes all units have gas fireplaces

Area Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Energy Use - Default energy use intensity

Water And Wastewater - Default water and wastewater

Solid Waste - Default solid waste

Construction Off-road Equipment Mitigation - water exposed area 2x per day

Energy Mitigation - Meet 2016 Title 24 standards (28% more efficient than 2013)

Water Mitigation - 20% indoor and outdoor water consumption reduction per City CAP goal.

Waste Mitigation - 80% waste diversion consistent with the City's CAP.

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tblArchitecturalCoating	ConstArea_Residential_Interior	127,456.00	132,107.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaCoating	Area_Residential_Exterior	42485	44036
tblAreaCoating	Area_Residential_Interior	127456	132107
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0

tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	369.00
tblConstructionPhase	NumDays	6.00	25.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	3.00	10.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	26.40	48.00
tblFireplaces	NumberNoFireplace	4.80	0.00
tblFireplaces	NumberWood	16.80	0.00
tblGrading	MaterialExported	0.00	23,600.00
tblLandUse	BuildingSpaceSquareFeet	43,200.00	46,808.00
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tblLandUse	BuildingSpaceSquareFeet	48,000.00	62,941.00
tblLandUse	LandUseSquareFeet	43,200.00	46,808.00
tblLandUse	LandUseSquareFeet	640.00	600.00
tblLandUse	LandUseSquareFeet	48,000.00	62,941.00
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tblLandUse	LotAcreage	3.00	1.23
tblLandUse	RecSwimmingAreaAllowEdit	1.00	0.00
tblLandUse	RecSwimmingAreaSquareFeet	2,600.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
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tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	OperationalYear	2018	2022
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	2,950.00	120.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
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tblTripsAndVMT	WorkerTripNumber	8.00	15.00
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tblVehicleTrips	ST_TR	9.10	0.00
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tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0654	0.6443	0.5399	9.8000e-004	0.0207	0.0353	0.0560	3.8900e-003	0.0331	0.0370	0.0000	87.8195	87.8195	0.0193	0.0000	88.3027
2020	0.2103	1.8516	1.8845	3.5900e-003	0.0560	0.1035	0.1594	0.0152	0.0993	0.1145	0.0000	318.1734	318.1734	0.0397	0.0000	319.1652
2021	0.3547	0.5447	0.6094	1.1600e-003	0.0171	0.0291	0.0461	4.6200e-003	0.0281	0.0327	0.0000	102.0783	102.0783	0.0119	0.0000	102.3756
Maximum	**0.3547**	**1.8516**	**1.8845**	**3.5900e-003**	**0.0560**	**0.1035**	**0.1594**	**0.0152**	**0.0993**	**0.1145**	**0.0000**	**318.1734**	**318.1734**	**0.0397**	**0.0000**	**319.1652**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0654	0.6442	0.5399	9.8000e-004	0.0147	0.0353	0.0500	3.2000e-003	0.0331	0.0363	0.0000	87.8194	87.8194	0.0193	0.0000	88.3026
2020	0.2103	1.8516	1.8845	3.5900e-003	0.0560	0.1035	0.1594	0.0152	0.0993	0.1145	0.0000	318.1731	318.1731	0.0397	0.0000	319.1649
2021	0.3547	0.5447	0.6094	1.1600e-003	0.0171	0.0291	0.0461	4.6200e-003	0.0281	0.0327	0.0000	102.0782	102.0782	0.0119	0.0000	102.3755
Maximum	**0.3547**	**1.8516**	**1.8845**	**3.5900e-003**	**0.0560**	**0.1035**	**0.1594**	**0.0152**	**0.0993**	**0.1145**	**0.0000**	**318.1731**	**318.1731**	**0.0397**	**0.0000**	**319.1649**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**6.41**	**0.00**	**2.30**	**2.92**	**0.00**	**0.37**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3031	0.0368	0.3717	2.3000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	38.3914	38.3914	1.2900e-003	6.9000e-004	38.6302
Energy	4.4600e-003	0.0382	0.0164	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003	0.0000	184.8340	184.8340	8.4500e-003	2.3800e-003	185.7555
Mobile	0.0774	0.3461	0.9345	3.2900e-003	0.2919	2.7500e-003	0.2946	0.0782	2.5700e-003	0.0807	0.0000	303.9603	303.9603	0.0158	0.0000	304.3546
Waste						0.0000	0.0000		0.0000	0.0000	8.2313	0.0000	8.2313	0.4865	0.0000	20.3927
Water						0.0000	0.0000		0.0000	0.0000	1.0530	16.1608	17.2138	0.1090	2.7300e-003	20.7542
Total	**0.3849**	**0.4210**	**1.3226**	**3.7600e-003**	**0.2919**	**0.0104**	**0.3023**	**0.0782**	**0.0103**	**0.0884**	**9.2843**	**543.3464**	**552.6307**	**0.6210**	**5.8000e-003**	**569.8873**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3031	0.0368	0.3717	2.3000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	38.3914	38.3914	1.2900e-003	6.9000e-004	38.6302
Energy	3.5200e-003	0.0301	0.0129	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003	0.0000	162.1397	162.1397	7.5500e-003	2.0600e-003	162.9432
Mobile	0.0774	0.3461	0.9345	3.2900e-003	0.2919	2.7500e-003	0.2946	0.0782	2.5700e-003	0.0807	0.0000	303.9603	303.9603	0.0158	0.0000	304.3546
Waste						0.0000	0.0000		0.0000	0.0000	1.6463	0.0000	1.6463	0.0973	0.0000	4.0785
Water						0.0000	0.0000		0.0000	0.0000	0.8424	12.9286	13.7710	0.0872	2.1900e-003	16.6034
Total	**0.3840**	**0.4130**	**1.3191**	**3.7100e-003**	**0.2919**	**9.7900e-003**	**0.3017**	**0.0782**	**9.6100e-003**	**0.0878**	**2.4886**	**517.4199**	**519.9086**	**0.2091**	**4.9400e-003**	**526.6099**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.24**	**1.91**	**0.26**	**1.33**	**0.00**	**6.23**	**0.21**	**0.00**	**6.34**	**0.74**	**73.20**	**4.77**	**5.92**	**66.32**	**14.83**	**7.59**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/14/2019	5	10	
2	Grading	Grading	6/15/2019	7/19/2019	5	25	
3	Trenching	Trenching	10/12/2019	11/8/2019	5	20	
4	Building Construction	Building Construction	11/19/2019	4/16/2021	5	369	
5	Paving	Paving	11/19/2019	12/6/2019	5	14	
6	Architectural Coating	Architectural Coating	4/17/2021	5/21/2021	5	25	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 1.07

Residential Indoor: 132,107; Residential Outdoor: 44,036; Non-Residential Indoor: 4,800; Non-Residential Outdoor: 1,600; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	3	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	13.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	15.00	2.00	120.00	8.00	8.00	5.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	56.00	13.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	15.00	2.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	11.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6500e-003	0.0000	2.6500e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0900e-003	0.0604	0.0331	7.0000e-005		2.8700e-003	2.8700e-003		2.6400e-003	2.6400e-003	0.0000	5.9669	5.9669	1.8900e-003	0.0000	6.0141
Total	**5.0900e-003**	**0.0604**	**0.0331**	**7.0000e-005**	**2.6500e-003**	**2.8700e-003**	**5.5200e-003**	**2.9000e-004**	**2.6400e-003**	**2.9300e-003**	**0.0000**	**5.9669**	**5.9669**	**1.8900e-003**	**0.0000**	**6.0141**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.5000e-003	0.0000	3.9000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3640	0.3640	1.0000e-005	0.0000	0.3643
Total	**2.1000e-004**	**1.5000e-004**	**1.5000e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**3.9000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3640**	**0.3640**	**1.0000e-005**	**0.0000**	**0.3643**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1900e-003	0.0000	1.1900e-003	1.3000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0900e-003	0.0604	0.0331	7.0000e-005		2.8700e-003	2.8700e-003		2.6400e-003	2.6400e-003	0.0000	5.9669	5.9669	1.8900e-003	0.0000	6.0141
Total	**5.0900e-003**	**0.0604**	**0.0331**	**7.0000e-005**	**1.1900e-003**	**2.8700e-003**	**4.0600e-003**	**1.3000e-004**	**2.6400e-003**	**2.7700e-003**	**0.0000**	**5.9669**	**5.9669**	**1.8900e-003**	**0.0000**	**6.0141**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.5000e-003	0.0000	3.9000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3640	0.3640	1.0000e-005	0.0000	0.3643
Total	**2.1000e-004**	**1.5000e-004**	**1.5000e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**3.9000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3640**	**0.3640**	**1.0000e-005**	**0.0000**	**0.3643**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2900e-003	0.0000	8.2900e-003	9.7000e-004	0.0000	9.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0187	0.2052	0.1463	2.6000e-004		0.0107	0.0107		9.8200e-003	9.8200e-003	0.0000	23.0820	23.0820	7.3000e-003	0.0000	23.2646
Total	**0.0187**	**0.2052**	**0.1463**	**2.6000e-004**	**8.2900e-003**	**0.0107**	**0.0190**	**9.7000e-004**	**9.8200e-003**	**0.0108**	**0.0000**	**23.0820**	**23.0820**	**7.3000e-003**	**0.0000**	**23.2646**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2000e-004	9.0400e-003	1.7100e-003	2.0000e-005	2.6000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.6119	1.6119	2.0000e-004	0.0000	1.6169
Vendor	1.2000e-004	3.2900e-003	8.8000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.1000e-004	5.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7153	0.7153	6.0000e-005	0.0000	0.7167
Worker	6.0000e-004	4.4000e-004	4.3400e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0499	1.0499	3.0000e-005	0.0000	1.0507
Total	**9.4000e-004**	**0.0128**	**6.9300e-003**	**4.0000e-005**	**1.5500e-003**	**5.0000e-005**	**1.6100e-003**	**4.2000e-004**	**5.0000e-005**	**4.7000e-004**	**0.0000**	**3.3771**	**3.3771**	**2.9000e-004**	**0.0000**	**3.3843**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7300e-003	0.0000	3.7300e-003	4.4000e-004	0.0000	4.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0187	0.2052	0.1463	2.6000e-004		0.0107	0.0107		9.8200e-003	9.8200e-003	0.0000	23.0820	23.0820	7.3000e-003	0.0000	23.2645
Total	**0.0187**	**0.2052**	**0.1463**	**2.6000e-004**	**3.7300e-003**	**0.0107**	**0.0144**	**4.4000e-004**	**9.8200e-003**	**0.0103**	**0.0000**	**23.0820**	**23.0820**	**7.3000e-003**	**0.0000**	**23.2645**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2000e-004	9.0400e-003	1.7100e-003	2.0000e-005	2.6000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.6119	1.6119	2.0000e-004	0.0000	1.6169
Vendor	1.2000e-004	3.2900e-003	8.8000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.1000e-004	5.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7153	0.7153	6.0000e-005	0.0000	0.7167
Worker	6.0000e-004	4.4000e-004	4.3400e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0499	1.0499	3.0000e-005	0.0000	1.0507
Total	**9.4000e-004**	**0.0128**	**6.9300e-003**	**4.0000e-005**	**1.5500e-003**	**5.0000e-005**	**1.6100e-003**	**4.2000e-004**	**5.0000e-005**	**4.7000e-004**	**0.0000**	**3.3771**	**3.3771**	**2.9000e-004**	**0.0000**	**3.3843**

3.4 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9800e-003	0.0701	0.0691	9.0000e-005		4.6800e-003	4.6800e-003		4.3100e-003	4.3100e-003	0.0000	8.3699	8.3699	2.6500e-003	0.0000	8.4361
Total	**6.9800e-003**	**0.0701**	**0.0691**	**9.0000e-005**		**4.6800e-003**	**4.6800e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**8.3699**	**8.3699**	**2.6500e-003**	**0.0000**	**8.4361**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**2.6000e-004**	**1.9000e-004**	**1.8500e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4480**	**0.4480**	**1.0000e-005**	**0.0000**	**0.4483**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9800e-003	0.0701	0.0691	9.0000e-005		4.6800e-003	4.6800e-003		4.3100e-003	4.3100e-003	0.0000	8.3699	8.3699	2.6500e-003	0.0000	8.4361
Total	**6.9800e-003**	**0.0701**	**0.0691**	**9.0000e-005**		**4.6800e-003**	**4.6800e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**8.3699**	**8.3699**	**2.6500e-003**	**0.0000**	**8.4361**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**2.6000e-004**	**1.9000e-004**	**1.8500e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4480**	**0.4480**	**1.0000e-005**	**0.0000**	**0.4483**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0239	0.2115	0.1997	3.1000e-004		0.0139	0.0139		0.0134	0.0134	0.0000	27.4313	27.4313	4.2500e-003	0.0000	27.5374
Total	**0.0239**	**0.2115**	**0.1997**	**3.1000e-004**		**0.0139**	**0.0139**		**0.0134**	**0.0134**	**0.0000**	**27.4313**	**27.4313**	**4.2500e-003**	**0.0000**	**27.5374**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0265	7.1100e-003	6.0000e-005	1.4700e-003	1.9000e-004	1.6600e-003	4.2000e-004	1.8000e-004	6.1000e-004	0.0000	5.7653	5.7653	4.5000e-004	0.0000	5.7766
Worker	2.7800e-003	2.0300e-003	0.0201	5.0000e-005	5.1600e-003	4.0000e-005	5.2000e-003	1.3700e-003	4.0000e-005	1.4100e-003	0.0000	4.8602	4.8602	1.6000e-004	0.0000	4.8642
Total	**3.7800e-003**	**0.0285**	**0.0272**	**1.1000e-004**	**6.6300e-003**	**2.3000e-004**	**6.8600e-003**	**1.7900e-003**	**2.2000e-004**	**2.0200e-003**	**0.0000**	**10.6256**	**10.6256**	**6.1000e-004**	**0.0000**	**10.6408**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0239	0.2115	0.1997	3.1000e-004		0.0139	0.0139		0.0134	0.0134	0.0000	27.4313	27.4313	4.2500e-003	0.0000	27.5374
Total	**0.0239**	**0.2115**	**0.1997**	**3.1000e-004**		**0.0139**	**0.0139**		**0.0134**	**0.0134**	**0.0000**	**27.4313**	**27.4313**	**4.2500e-003**	**0.0000**	**27.5374**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0265	7.1100e-003	6.0000e-005	1.4700e-003	1.9000e-004	1.6600e-003	4.2000e-004	1.8000e-004	6.1000e-004	0.0000	5.7653	5.7653	4.5000e-004	0.0000	5.7766
Worker	2.7800e-003	2.0300e-003	0.0201	5.0000e-005	5.1600e-003	4.0000e-005	5.2000e-003	1.3700e-003	4.0000e-005	1.4100e-003	0.0000	4.8602	4.8602	1.6000e-004	0.0000	4.8642
Total	**3.7800e-003**	**0.0285**	**0.0272**	**1.1000e-004**	**6.6300e-003**	**2.3000e-004**	**6.8600e-003**	**1.7900e-003**	**2.2000e-004**	**2.0200e-003**	**0.0000**	**10.6256**	**10.6256**	**6.1000e-004**	**0.0000**	**10.6408**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1815	1.6334	1.6754	2.6600e-003		0.1021	0.1021		0.0980	0.0980	0.0000	230.0075	230.0075	0.0348	0.0000	230.8783
Total	**0.1815**	**1.6334**	**1.6754**	**2.6600e-003**		**0.1021**	**0.1021**		**0.0980**	**0.0980**	**0.0000**	**230.0075**	**230.0075**	**0.0348**	**0.0000**	**230.8783**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8700e-003	0.2027	0.0539	5.0000e-004	0.0124	1.0300e-003	0.0134	3.5700e-003	9.9000e-004	4.5600e-003	0.0000	48.3844	48.3844	3.6100e-003	0.0000	48.4745
Worker	0.0219	0.0155	0.1552	4.4000e-004	0.0436	3.3000e-004	0.0439	0.0116	3.0000e-004	0.0119	0.0000	39.7816	39.7816	1.2300e-003	0.0000	39.8124
Total	**0.0288**	**0.2182**	**0.2091**	**9.4000e-004**	**0.0560**	**1.3600e-003**	**0.0573**	**0.0152**	**1.2900e-003**	**0.0165**	**0.0000**	**88.1659**	**88.1659**	**4.8400e-003**	**0.0000**	**88.2869**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1815	1.6334	1.6754	2.6600e-003		0.1021	0.1021		0.0980	0.0980	0.0000	230.0072	230.0072	0.0348	0.0000	230.8780
Total	**0.1815**	**1.6334**	**1.6754**	**2.6600e-003**		**0.1021**	**0.1021**		**0.0980**	**0.0980**	**0.0000**	**230.0072**	**230.0072**	**0.0348**	**0.0000**	**230.8780**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8700e-003	0.2027	0.0539	5.0000e-004	0.0124	1.0300e-003	0.0134	3.5700e-003	9.9000e-004	4.5600e-003	0.0000	48.3844	48.3844	3.6100e-003	0.0000	48.4745
Worker	0.0219	0.0155	0.1552	4.4000e-004	0.0436	3.3000e-004	0.0439	0.0116	3.0000e-004	0.0119	0.0000	39.7816	39.7816	1.2300e-003	0.0000	39.8124
Total	**0.0288**	**0.2182**	**0.2091**	**9.4000e-004**	**0.0560**	**1.3600e-003**	**0.0573**	**0.0152**	**1.2900e-003**	**0.0165**	**0.0000**	**88.1659**	**88.1659**	**4.8400e-003**	**0.0000**	**88.2869**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0472	0.4303	0.4824	7.7000e-004		0.0253	0.0253		0.0243	0.0243	0.0000	66.7243	66.7243	9.8800e-003	0.0000	66.9712
Total	**0.0472**	**0.4303**	**0.4824**	**7.7000e-004**		**0.0253**	**0.0253**		**0.0243**	**0.0243**	**0.0000**	**66.7243**	**66.7243**	**9.8800e-003**	**0.0000**	**66.9712**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6100e-003	0.0528	0.0142	1.4000e-004	3.5900e-003	1.2000e-004	3.7100e-003	1.0400e-003	1.1000e-004	1.1500e-003	0.0000	13.9065	13.9065	1.0000e-003	0.0000	13.9316
Worker	5.9900e-003	4.0800e-003	0.0420	1.2000e-004	0.0127	9.0000e-005	0.0127	3.3600e-003	9.0000e-005	3.4500e-003	0.0000	11.1523	11.1523	3.3000e-004	0.0000	11.1605
Total	**7.6000e-003**	**0.0569**	**0.0561**	**2.6000e-004**	**0.0162**	**2.1000e-004**	**0.0165**	**4.4000e-003**	**2.0000e-004**	**4.6000e-003**	**0.0000**	**25.0588**	**25.0588**	**1.3300e-003**	**0.0000**	**25.0921**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0472	0.4303	0.4824	7.7000e-004		0.0253	0.0253		0.0243	0.0243	0.0000	66.7242	66.7242	9.8800e-003	0.0000	66.9712
Total	**0.0472**	**0.4303**	**0.4824**	**7.7000e-004**		**0.0253**	**0.0253**		**0.0243**	**0.0243**	**0.0000**	**66.7242**	**66.7242**	**9.8800e-003**	**0.0000**	**66.9712**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6100e-003	0.0528	0.0142	1.4000e-004	3.5900e-003	1.2000e-004	3.7100e-003	1.0400e-003	1.1000e-004	1.1500e-003	0.0000	13.9065	13.9065	1.0000e-003	0.0000	13.9316
Worker	5.9900e-003	4.0800e-003	0.0420	1.2000e-004	0.0127	9.0000e-005	0.0127	3.3600e-003	9.0000e-005	3.4500e-003	0.0000	11.1523	11.1523	3.3000e-004	0.0000	11.1605
Total	**7.6000e-003**	**0.0569**	**0.0561**	**2.6000e-004**	**0.0162**	**2.1000e-004**	**0.0165**	**4.4000e-003**	**2.0000e-004**	**4.6000e-003**	**0.0000**	**25.0588**	**25.0588**	**1.3300e-003**	**0.0000**	**25.0921**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.0900e-003	0.0534	0.0513	8.0000e-005		2.8900e-003	2.8900e-003		2.6600e-003	2.6600e-003	0.0000	7.1663	7.1663	2.2700e-003	0.0000	7.2230
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0900e-003**	**0.0534**	**0.0513**	**8.0000e-005**		**2.8900e-003**	**2.8900e-003**		**2.6600e-003**	**2.6600e-003**	**0.0000**	**7.1663**	**7.1663**	**2.2700e-003**	**0.0000**	**7.2230**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	1.8400e-003	4.9000e-004	0.0000	1.0000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4006	0.4006	3.0000e-005	0.0000	0.4014
Worker	3.4000e-004	2.5000e-004	2.4300e-003	1.0000e-005	6.2000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5879	0.5879	2.0000e-005	0.0000	0.5884
Total	**4.1000e-004**	**2.0900e-003**	**2.9200e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.5000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.9885**	**0.9885**	**5.0000e-005**	**0.0000**	**0.9898**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	5.0900e-003	0.0534	0.0513	8.0000e-005		2.8900e-003	2.8900e-003		2.6600e-003	2.6600e-003	0.0000	7.1663	7.1663	2.2700e-003	0.0000	7.2230
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0900e-003**	**0.0534**	**0.0513**	**8.0000e-005**		**2.8900e-003**	**2.8900e-003**		**2.6600e-003**	**2.6600e-003**	**0.0000**	**7.1663**	**7.1663**	**2.2700e-003**	**0.0000**	**7.2230**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	1.8400e-003	4.9000e-004	0.0000	1.0000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4006	0.4006	3.0000e-005	0.0000	0.4014
Worker	3.4000e-004	2.5000e-004	2.4300e-003	1.0000e-005	6.2000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5879	0.5879	2.0000e-005	0.0000	0.5884
Total	**4.1000e-004**	**2.0900e-003**	**2.9200e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.5000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.9885**	**0.9885**	**5.0000e-005**	**0.0000**	**0.9898**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2913					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2100e-003	0.0573	0.0682	1.1000e-004		3.5300e-003	3.5300e-003		3.5300e-003	3.5300e-003	0.0000	9.5747	9.5747	6.6000e-004	0.0000	9.5911
Total	**0.2995**	**0.0573**	**0.0682**	**1.1000e-004**		**3.5300e-003**	**3.5300e-003**		**3.5300e-003**	**3.5300e-003**	**0.0000**	**9.5747**	**9.5747**	**6.6000e-004**	**0.0000**	**9.5911**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.6000e-004	2.7100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7206	0.7206	2.0000e-005	0.0000	0.7211
Total	**3.9000e-004**	**2.6000e-004**	**2.7100e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.2000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7206**	**0.7206**	**2.0000e-005**	**0.0000**	**0.7211**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2913					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2100e-003	0.0573	0.0682	1.1000e-004		3.5300e-003	3.5300e-003		3.5300e-003	3.5300e-003	0.0000	9.5747	9.5747	6.6000e-004	0.0000	9.5911
Total	**0.2995**	**0.0573**	**0.0682**	**1.1000e-004**		**3.5300e-003**	**3.5300e-003**		**3.5300e-003**	**3.5300e-003**	**0.0000**	**9.5747**	**9.5747**	**6.6000e-004**	**0.0000**	**9.5911**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.6000e-004	2.7100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7206	0.7206	2.0000e-005	0.0000	0.7211
Total	**3.9000e-004**	**2.6000e-004**	**2.7100e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.2000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7206**	**0.7206**	**2.0000e-005**	**0.0000**	**0.7211**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0774	0.3461	0.9345	3.2900e-003	0.2919	2.7500e-003	0.2946	0.0782	2.5700e-003	0.0807	0.0000	303.9603	303.9603	0.0158	0.0000	304.3546
Unmitigated	0.0774	0.3461	0.9345	3.2900e-003	0.2919	2.7500e-003	0.2946	0.0782	2.5700e-003	0.0807	0.0000	303.9603	303.9603	0.0158	0.0000	304.3546

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	278.88	272.16	232.32	774,554	774,554
Enclosed Parking with Elevator	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	278.88	272.16	232.32	774,554	774,554

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Racquet Club	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Recreational Swimming Pool	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Condo/Townhouse	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	127.2820	127.2820	6.8800e-003	1.4200e-003	127.8784
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	140.6747	140.6747	7.6100e-003	1.5700e-003	141.3338
NaturalGas Mitigated	3.5200e-003	0.0301	0.0129	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003	0.0000	34.8577	34.8577	6.70E-04	6.4000e-004	35.0648
NaturalGas Unmitigated	4.4600e-003	0.0382	0.0164	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003	0.0000	44.1593	44.1593	8.5000e-004	8.10E-04	44.4217

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	820560	4.4200e-003	0.0378	0.0161	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.7882	43.7882	8.4000e-004	8.0000e-004	44.0484
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	6954	4.0000e-005	3.4000e-004	2.9000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3711	0.3711	1.0000e-005	1.0000e-005	0.3733
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.4600e-003**	**0.0382**	**0.0164**	**2.4000e-004**		**3.0900e-003**	**3.0900e-003**		**3.0900e-003**	**3.0900e-003**	**0.0000**	**44.1593**	**44.1593**	**8.5000e-004**	**8.1000e-004**	**44.4217**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	646983	3.4900e-003	0.0298	0.0127	1.9000e-004		2.4100e-003	2.4100e-003		2.4100e-003	2.4100e-003	0.0000	34.5255	34.5255	6.6000e-004	6.3000e-004	34.7306
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	6224.88	3.0000e-005	3.1000e-004	2.6000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3322	0.3322	1.0000e-005	1.0000e-005	0.3342
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**3.5200e-003**	**0.0301**	**0.0130**	**1.9000e-004**		**2.4300e-003**	**2.4300e-003**		**2.4300e-003**	**2.4300e-003**	**0.0000**	**34.8576**	**34.8576**	**6.7000e-004**	**6.4000e-004**	**35.0648**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	257665	62.6870	3.3900e-003	7.0000e-004	62.9807
Enclosed Parking with Elevator	315486	76.7542	4.1500e-003	8.6000e-004	77.1138
Racquet Club	5070	1.2335	7.0000e-005	1.0000e-005	1.2393
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**140.6747**	**7.6100e-003**	**1.5700e-003**	**141.3338**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	254206	61.8456	3.3400e-003	6.9000e-004	62.1354
Enclosed Parking with Elevator	264109	64.2549	3.4700e-003	7.2000e-004	64.5559
Racquet Club	4856.64	1.1816	6.0000e-005	1.0000e-005	1.1871
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**127.2820**	**6.8700e-003**	**1.4200e-003**	**127.8784**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3031	0.0368	0.3717	2.3000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	38.3914	38.3914	1.2900e-003	6.9000e-004	38.6302
Unmitigated	0.3031	0.0368	0.3717	2.3000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	38.3914	38.3914	1.2900e-003	6.9000e-004	38.6302

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0271					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2613					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.8200e-003	0.0327	0.0139	2.1000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	37.8072	37.8072	7.2000e-004	6.9000e-004	38.0319
Landscaping	0.0109	4.1200e-003	0.3578	2.0000e-005		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	0.5842	0.5842	5.7000e-004	0.0000	0.5983
Total	**0.3031**	**0.0368**	**0.3717**	**2.3000e-004**		**4.6200e-003**	**4.6200e-003**		**4.6200e-003**	**4.6200e-003**	**0.0000**	**38.3914**	**38.3914**	**1.2900e-003**	**6.9000e-004**	**38.6302**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0271					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2613					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.8200e-003	0.0327	0.0139	2.1000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	37.8072	37.8072	7.2000e-004	6.9000e-004	38.0319
Landscaping	0.0109	4.1200e-003	0.3578	2.0000e-005		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	0.5842	0.5842	5.7000e-004	0.0000	0.5983
Total	**0.3031**	**0.0368**	**0.3717**	**2.3000e-004**		**4.6200e-003**	**4.6200e-003**		**4.6200e-003**	**4.6200e-003**	**0.0000**	**38.3914**	**38.3914**	**1.2900e-003**	**6.9000e-004**	**38.6302**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.7710	0.0872	2.1900e-003	16.6034
Unmitigated	17.2138	0.1090	2.7300e-003	20.7542

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	3.12739 / 1.97162	16.2285	0.1027	2.5800e-003	19.5646
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0378516 / 0.023864	0.1946	1.2400e-003	3.0000e-005	0.2350
Recreational Swimming Pool	0.153772 / 0.0942475	0.7907	5.0500e-003	1.3000e-004	0.9547
Total		**17.2138**	**0.1090**	**2.7400e-003**	**20.7542**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	2.50191 / 1.57729	12.9828	0.0822	2.0600e-003	15.6517
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0302813 / 0.0195506	0.1557	9.9000e-004	2.0000e-005	0.1880
Recreational Swimming Pool	0.123018 / 0.075398	0.6325	4.0400e-003	1.0000e-004	0.7637
Total		**13.7710**	**0.0872**	**2.1800e-003**	**16.6034**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.6463	0.0973	0.0000	4.0785
Unmitigated	8.2313	0.4865	0.0000	20.3927

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	22.08	4.4820	0.2649	0.0000	11.1041
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	3.65	0.7409	0.0438	0.0000	1.8356
Recreational Swimming Pool	14.82	3.0083	0.1778	0.0000	7.4530
Total		**8.2313**	**0.4865**	**0.0000**	**20.3927**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	4.416	0.8964	0.0530	0.0000	2.2208
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.73	0.1482	8.7600e-003	0.0000	0.3671
Recreational Swimming Pool	2.964	0.6017	0.0356	0.0000	1.4906
Total		**1.6463**	**0.0973**	**0.0000**	**4.0785**

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MEMORANDUM

To:	City of Del Mar
From:	Ian McIntire, *Dudek*
Subject:	Watermark Del Mar Specific Plan Greenhouse Gas Emissions Assessment for Option B
Date:	September 27, 2017
Attachment A:	Greenhouse Gas Emissions Calculations

Dudek is pleased to submit this greenhouse gas (GHG) emissions assessment to assist the City of Del Mar with environmental planning requirements for Option B of the proposed Watermark Del Mar Specific Plan (proposed project) located in the City of Del Mar (City). The proposed project would develop 38 residential units on a 2.37 acre site. This memorandum estimates GHG emissions from construction and operation of Option B This assessment also compares the Option B's estimated amortized construction and operational GHG emissions to the California Air Pollution Control Officers Association (CAPCOA) screening-level threshold of 900 metric tons of CO_2 equivalent (MT CO_2E) and the conclusions provided in the *2017 Greenhouse Gas Emissions Technical Report* for Option A (48 units).

The contents and organization of this memorandum are as follows: project description; general analysis and methodology; threshold of significance and an impact analysis for the GHG assessment; conclusions; and references cited.

1 PROJECT DESCRIPTION

Under Option B, the project design has been modified to address input received during various community workshops on the project (Figure 1). The Specific Plan for Option B has been modified along with revised design plans to incorporate changes in response to concerns raised.

This option includes modifications to the building placement on the site, which was of particular concern as viewed from Jimmy Durante Boulevard. The changes to the buildings that front on this street include modifications to the setbacks on the first and second floors, adding building separation between the units as well as reconfiguring the pool area to eliminate the masonry columns and trellis at the corner of San Dieguito Drive and Jimmy Durante Blvd, replacing them with additional trees and landscaping. The open areas internal to the site have been enlarged. The parking provided on site has also been increased to be above standard requirements, based on

concerns that there was no on-street parking in the immediate area. The result of all these changes is that the total unit count would be reduced by 10 to 38 housing units.

Option B would include 38 residential units on 103,282 square feet (approximately 2.37 acres) of gross land area for a maximum density of 16.1 dwelling units per acre. The proposed 16.1 dwelling-units-per-acre density is below the City of Del Mar Community Plan Housing Element's prescribed density range.

Option B would provide for a building area of 60,660 square feet and a total lot coverage of approximately 45%. Similar to Option A, the lot coverage calculation for Option B does not include the parking structure floor area (non-habitable building area). Option B proposes a floor area ratio of 0.62 based on 61,860 square feet of floor area (habitable building area) on net land area of 103,237 square feet.

The proposed structures would be situated on the site to provide a minimum 15-foot setback from the adjacent residentially zoned properties. The design considers no additional setback required where the structures would be adjacent to the public right-of-way along Jimmy Durante Boulevard. However, unlike Option A, Option B would provide an additional 10-foot setback adjacent to the public right-of-way along San Dieguito Drive. The residential units provided would be a mix of studio, one-bedroom, two-bedroom, and three-bedroom units.

2 GENERAL ANALYSIS AND METHODOLOGY

Option B is located within the San Diego Air Basin (SDAB) and is within the jurisdictional boundaries of the San Diego Air Pollution Control District (SDAPCD), which has jurisdiction over San Diego County. The California Emissions Estimator Model (CalEEMod) version 2016.3.1 was used to estimate project-related construction and operational GHG emissions from Option B.

GHGs are gases that absorb infrared radiation in the atmosphere. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect. Principal GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), O_3, and water vapor. If the atmospheric concentrations of GHGs rise, the average temperature of the lower atmosphere will gradually increase. Globally, climate change has the potential to impact numerous environmental resources though uncertain impacts related to future air temperatures and precipitation patterns. Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. Climate change is already affecting California: average temperatures have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have

been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP), which varies among GHGs. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG emissions are typically measured in terms of pounds or MT CO_2E.[1]

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs (CAT 2010). This approach is consistent with the *Final Statement of Reasons for Regulatory Action* for amendments to the CEQA Guidelines, which confirms that an environmental impact report or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009).

GHG emissions associated with construction of the proposed project were estimated for the following emission sources: operation of off-road construction equipment, on-road hauling and vendor trucks, and worker vehicles. GHG emission sources associated with operation of the proposed project were evaluated for energy use (generation of electricity consumed by the project); water supply, area sources, and project-generated vehicular traffic. The detailed proposed project construction and operational assumptions are included in Attachment A.

2.1 Construction Assumptions

Emissions from the construction phase of Option B was estimated using the CalEEMod model. The analysis contained herein is based on the following assumptions (duration of phases is approximate):

- Site preparation – 2 weeks (June 2019)
- Grading – 5 weeks (June 2019 – July 2019)
- Trenching – 4 weeks (October 2019 – November 2019)
- Building construction – 75 weeks (November 2019 – April 2021)

[1] The CO_2E for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons of CO_2E = (metric tons of a GHG) × (GWP of the GHG). CalEEMod assumes that the GWP for CH_4 is 25, which means that emissions of 1 metric ton of CH_4 are equivalent to emissions of 25 metric tons of CO_2, and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report.

- Paving – 4 weeks (November 2019 – December 2019)
- Application of architectural coatings – 5 weeks (May 2021 – June 2021)

Construction is anticipated to commence following completion of entitlement efforts and completion of building design and associated permits. Construction would last for approximately 2 years, at which point building occupancy would occur. Construction equipment would include rollers, rubber-tired dozers, scrapers, water trucks, pavers, paving equipment, forklifts, and tractors/loaders/backhoes. Concrete and delivery trucks would also be used. Construction equipment would be used intermittently depending on construction phase.

Construction phasing would consist of parking structure construction, disturbed slope grading, residential structures over parking structure podium construction, and construction of the balance of the residential structures. Construction activities would take place within the limits of the construction hours identified in the City of Del Mar's Noise Regulations (City of Del Mar 1997).

Construction phasing specifications were provided by the project applicant, while the default values generated by CalEEMod were used for the construction equipment mix. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week (22 days per month) during project construction. Default construction worker, vendor trips, and trip lengths as provided in CalEEMod were utilized, with the exception of haul trips which were adjusted accordingly based on information provided by the applicant. CalEEMod default values were generated for worker and vendor trips. These assumptions are summarized Table 1.

Table 1
Construction Scenario Assumptions

Construction Phase	Average Daily Worker One-Way Trips	Average Daily Vendor One-Way Trips	Total Haul Truck One-Way Trips	Equipment	Quantity	Usage Hours
Site Preparation	8	0	0	Crawler Tractors	1	8
				Tractors/Loaders/Backhoes	2	7
Grading	13	2	135	Excavators	1	8
				Graders	1	8
				Sweepers/Scrubbers	1	8
				Tractors/Loaders/Backhoes	2	8
Trenching	8	0	0	Tractors/Loaders/Backhoes	3	8
Building Construction	51	13	0	Forklifts	3	7
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	1	8
Paving	8	2	0	Pavers	1	8
				Paving Equipment	1	8
				Rollers	1	8
Architectural Coating	10	0	0	Air Compressors	3	6

Notes: See Attachment A for details.
N/A = not applicable/not proposed

A detailed depiction of the construction schedule—including information regarding subphases and equipment used during each subphase—is included in Attachment A of this memorandum.

3 GREENHOUSE GAS EMISSIONS ASSESSMENT

3.1 Thresholds of Significance

The California Natural Resources Agency (CNRA) adopted amendments to the CEQA Guidelines on December 30, 2009, which became effective on March 18, 2010. With respect to GHG emissions, the amended CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4(a)). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

- The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.

- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." Similarly, the revisions to Appendix G, Environmental Checklist Form, which is often used as a basis for lead agencies' selection of significance thresholds, do not prescribe specific thresholds.

Rather, the CEQA Guidelines establish two CEQA thresholds related to GHGs used to discuss the significance of project impacts (14 CCR 15000 et seq.):

1. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
2. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Accordingly, the CEQA Guidelines do not prescribe specific methodologies for performing an assessment, establish specific thresholds of significance, or mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance that are consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009).

The City of Del Mar has not established a GHG significance threshold to date. Several lead agencies in California have adopted a screening threshold as recommended by the CAPCOA, which proposes a screening-level threshold of 900 MT CO_2E. The annual 900 MT CO_2E screening level referenced in the CAPCOA white paper is an acceptable conservative criterion which can be used to determine if GHG emissions for a given project would require further analysis or mitigation in order to reduce its climate change impact (CAPCOA 2008). Therefore, this analysis uses the 900 MT CO_2E in order to assess the significance of Option B's GHG emissions.

3.2 Impact Analysis

3.2.1 Construction Greenhouse Gas Emissions Analysis

Construction of Option B would slightly decrease the intensity of development compared with Option A. Option B result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. GHG emissions associated with temporary construction activity were quantified using CalEEMod. Table 1 presents a comparison between the GHG emissions associated with the construction of Option A and the estimated annual GHG construction emissions associated with Option B. Details of the emission calculations are provided in Attachment A of this memorandum.

Table 1
Estimated Annual Construction Greenhouse Gas Emissions for Option A and Option B

Year	CO_2	CH_4	N_2O	CO_2E
	metric tons per year			
Option A (48 units) Estimated Emissions				
Option A Project	508.07	0.07	0.00	509.84
Option B (38 units) Estimated Emissions				
2019	83.74	0.02	0.00	84.22
2020	305.69	0.04	0.00	306.60
2021	110.03	0.01	0.00	110.34
Total Emissions	**499.46**	**0.01**	**0.00**	**501.16**

Notes: See Attachment A for detailed results.
CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2E = carbon dioxide equivalent

As shown in Table 1, the estimated GHG emissions generated during the construction of the Option B would be approximately 501 MT CO_2E. Option A proposed for the same location would result in approximately 510 MT CO_2E. The implementation of Option B would, therefore, result in a slight decrease in GHG emissions generated during construction. Estimated annualized project-generated construction emissions would be approximately 17 MT CO_2E over a 30-year project life. However, since there is no established GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis below. Per guidance from the South Coast Air Quality Management District (SCAQMD 2008), construction emissions are amortized over a 30-year period to account for the contribution of construction emissions over the lifetime of a project.

3.2.2 Operational Greenhouse Gas Emissions Analysis

Option B includes the construction of 38 residential units and would slightly decrease the intensity of development compared with Option 1. The proposed project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile and stationary sources, including vehicular traffic and area sources (water heating and landscaping).

Optoin B would generate GHG emissions through an increase in vehicular traffic generated by project residents and visitors. CalEEMod was utilized to estimate daily emissions from proposed vehicular sources (refer to Attachment A). CalEEMod default data, including temperature, trip characteristics, variable start information, vehicle mix, and emissions factors, were conservatively used for the model inputs. Emission factors representing the vehicle mix and emissions for 2022 (first year full buildout) were used to estimate emissions.

In addition to estimating mobile source emissions, CalEEMod was also used to estimate emissions from project area sources, including natural gas combustion for hearths and appliances, and landscape maintenance. Natural gas usage for the proposed project was based upon the CalEEMod default usage rates. Because the project design does not include wood burning fireplaces, the default CalEEMod hearth data was updated to reflect no wood burning fireplaces. The CalEEMod default value for wood burning fireplaces was distributed into the natural gas fireplace option within the CalEEMod model.

Emissions from energy sources, which include natural gas appliances and space and water heating, were also estimated using CalEEMod. Default values for indoor and outdoor water use, solid waste generation, and natural gas consumption (through Title 24 and non-Title 24 natural gas energy intensities) were used for the proposed project. The proposed project is expected to meet the 2016 Title 24 standards, which requires that new residential development are required to achieve a 28% energy savings compared with 2013 Title 24 standards (CEC 2015). Additionally, the proposed project scenario also takes into account the procurement of renewable energy by SDG&E to meet the required 33% renewable portfolio standard by 2020.

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, transportation of waste, and disposal. Solid waste generation rates were estimated from CalEEMod Model, and GHG emissions from solid waste management were estimated using the model, assuming landfilling of solid waste with flaring. Consistent with the state's diversion rate goals set forth in Assembly Bill 341, which requires that jurisdictions to achieve a 75% diversion rate by 2020, the City is aiming to exceed state requirements with a diversion rate of 80% by 2020.

Water supplied to Option B requires the use of electricity. Accordingly, the supply, conveyance, treatment, and distribution of water would indirectly result in GHG emissions through use of electricity. Option B would meet a 20% reduction in indoor water use is required per CALGreen and 25% reduction in outdoor water use is required per Executive Order B-29-15.

Table 2 presents a comparison of GHG emissions associated with the operation of Option A and the estimated annual GHG operational GHG emissions associated with Option B. Complete details of the emissions calculations are provided in Attachment A.

Table 2
Estimated Annual Operational GHG Emissions for Option A and Option B

Emission Source	CO_2	CH_4	N_2O	CO_2E
	metric tons per year			
Option A (48 units) Estimated Emissions				
Option A Project	519.91	0.22	0.00	543.59
Option B (38 units) Estimated Emissions				
Area	30.39	0.00	0.00	30.58
Energy	152.67	0.01	0.00	153.42
Mobile	240.64	0.01	0.00	240.95
Waste	1.42	0.08	0.00	3.51
Water	11.02	0.07	0.01	13.29
Amortized Construction Emissions	—	—	—	16.71
Total Emissions	**436.14**	**0.17**	**0.01**	**458.46**

Source: See Attachment A for detailed results
Notes: These estimates reflect compliance with 2016 Title 24 standards requiring residential to be 28% more efficient than 2013 standards, compliance with CALGreen and EO B-29-15 (20% indoor and 25% outdoor reduction in water consumption), and compliance with City's goal of 80% waste diverted.
CH_4 = methane; CO_2 = carbon dioxide; CO_2E = carbon dioxide equivalent; N_2O = nitrous oxide

As shown in Table 2, the estimated GHG emissions generated during the operation of Option B would be approximately 458 MT CO_2E. Option 1A proposed for the same location would result in approximately 544 MT CO_2E. The implementation of Option B would therefore, result in a decrease in operational GHG emissions. Because the Option B's GHG emissions would be below the CAPCOA's 900 MT CO_2E screening threshold, impacts would be **less than significant**.

4 CONCLUSIONS

Construction of Option B which includes 38 residential units instead of the 48 residential units proposed under Option A would result a decrease in GHG emissions. Project-generated operational GHG emissions from area sources, energy usage, motor vehicles, and water

consumption, and amortized construction emissions, would be approximately 458 MT CO_2E per year, which is below the screening level threshold of 900 MT CO_2E per year. Accordingly, potential cumulative GHG impacts would be **less than significant**.

5 REFERENCES

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SCAQMD (South Coast Air Quality Management District). 2008. *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. October 2008.

SOURCE: Benson & Bohl Architects 2017

FIGURE 1
Conceptual Site Plan - Option B (38 Units)

ATTACHMENT A

Greenhouse Gas Emissions Calculations

Watermark (Option 2)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	100.00	Space	1.23	53,430.00	0
Racquet Club	1.20	1000sqft	0.03	1,200.00	0
Recreational Swimming Pool	1.85	1000sqft	0.04	1,850.00	0
Condo/Townhouse	38.00	Dwelling Unit	1.07	60,660.00	109

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Watermark Del Mar Project (Option 2). CO2 intensity factor adjusted to refect 33% RPS.

Land Use - Project consists of 38 dwelling units, 1,850 sf pool, and 100 space parking structure on a 2.37 acre site.

Construction Phase - Construction to begin June 2019 and would be completed by June 2021.

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Off-road Equipment - project specific equipment

Trips and VMT - 135 haul trips. Worker and vendor trip length = 8 miles, hauling trip length = 5 miles. Assumed water and asphalt trucks as vendor trips.

Grading - Export of 26,500 cy of soil

Architectural Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Vehicle Trips - Recreational amentites would not generate trips

Woodstoves - assumes all units have gas fireplaces

Area Coating - Comply with SDAPCD Rule 67.1 (flat - 50 g/l and non flat - 100 g/l)

Energy Use - Default energy use intensity

Water And Wastewater - Default water and wastewater

Solid Waste - Default solid waste

Construction Off-road Equipment Mitigation - water exposed area 2x per day

Energy Mitigation - Meet 2016 Title 24 standards (28% more efficient than 2013).

Water Mitigation - 20% indoor and outdoor water consumption reduction per City CAP goal.

Waste Mitigation - 80% waste diversion consistent with the City's CAP.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	375.00
tblConstructionPhase	NumDays	6.00	25.00

tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	10.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	20.90	38.00
tblFireplaces	NumberNoFireplace	3.80	0.00
tblFireplaces	NumberWood	13.30	0.00
tblGrading	MaterialExported	0.00	26,500.00
tblLandUse	BuildingSpaceSquareFeet	40,000.00	53,430.00
tblLandUse	BuildingSpaceSquareFeet	38,000.00	60,660.00
tblLandUse	LandUseSquareFeet	40,000.00	53,430.00
tblLandUse	LandUseSquareFeet	38,000.00	60,660.00
tblLandUse	LotAcreage	0.90	1.23
tblLandUse	LotAcreage	2.38	1.07
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	OperationalYear	2018	2022
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	3,313.00	135.00
tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripLength	7.30	8.00

tblTripsAndVMT	VendorTripLength	7.30	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblTripsAndVMT	WorkerTripLength	10.80	8.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0621	0.6225	0.5147	9.3000e-004	0.0193	0.0337	0.0530	3.4900e-003	0.0315	0.0350	0.0000	83.7420	83.7420	0.0191	0.0000	84.2198
2020	0.2015	1.7812	1.7960	3.4500e-003	0.0521	0.0991	0.1512	0.0141	0.0953	0.1094	0.0000	305.6856	305.6856	0.0367	0.0000	306.6024
2021	0.3237	0.5880	0.6515	1.2500e-003	0.0178	0.0312	0.0491	4.8300e-003	0.0302	0.0350	0.0000	110.0283	110.0283	0.0124	0.0000	110.3379
Maximum	**0.3237**	**1.7812**	**1.7960**	**3.4500e-003**	**0.0521**	**0.0991**	**0.1512**	**0.0141**	**0.0953**	**0.1094**	**0.0000**	**305.6856**	**305.6856**	**0.0367**	**0.0000**	**306.6024**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0621	0.6225	0.5147	9.3000e-004	0.0132	0.0337	0.0469	2.7800e-003	0.0315	0.0343	0.0000	83.7419	83.7419	0.0191	0.0000	84.2197
2020	0.2015	1.7812	1.7960	3.4500e-003	0.0521	0.0991	0.1512	0.0141	0.0953	0.1094	0.0000	305.6853	305.6853	0.0367	0.0000	306.6021
2021	0.3237	0.5880	0.6515	1.2500e-003	0.0178	0.0312	0.0491	4.8300e-003	0.0302	0.0350	0.0000	110.0282	110.0282	0.0124	0.0000	110.3378
Maximum	**0.3237**	**1.7812**	**1.7960**	**3.4500e-003**	**0.0521**	**0.0991**	**0.1512**	**0.0141**	**0.0953**	**0.1094**	**0.0000**	**305.6853**	**305.6853**	**0.0367**	**0.0000**	**306.6021**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**6.87**	**0.00**	**2.42**	**3.16**	**0.00**	**0.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2815	0.0291	0.2944	1.8000e-004		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	30.3934	30.3934	1.0200e-003	5.5000e-004	30.5825
Energy	3.5800e-003	0.0306	0.0133	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	175.1148	175.1148	8.2300e-003	2.2100e-003	175.9797
Mobile	0.0612	0.2740	0.7398	2.6100e-003	0.2311	2.1800e-003	0.2333	0.0619	2.0400e-003	0.0639	0.0000	240.6352	240.6352	0.0125	0.0000	240.9474
Waste						0.0000	0.0000		0.0000	0.0000	7.0783	0.0000	7.0783	0.4183	0.0000	17.5362
Water						0.0000	0.0000		0.0000	0.0000	0.8427	12.9324	13.7751	0.0873	2.1900e-003	16.6085
Total	**0.3463**	**0.3337**	**1.0475**	**2.9900e-003**	**0.2311**	**8.3000e-003**	**0.2394**	**0.0619**	**8.1600e-003**	**0.0700**	**7.9210**	**459.0757**	**466.9967**	**0.5273**	**4.9500e-003**	**481.6544**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2815	0.0291	0.2944	1.8000e-004		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	30.3934	30.3934	1.0200e-003	5.5000e-004	30.5825
Energy	2.8300e-003	0.0242	0.0106	1.5000e-004		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	152.6664	152.6664	7.2800e-003	1.9100e-003	153.4168
Mobile	0.0612	0.2740	0.7398	2.6100e-003	0.2311	2.1800e-003	0.2333	0.0619	2.0400e-003	0.0639	0.0000	240.6352	240.6352	0.0125	0.0000	240.9474
Waste						0.0000	0.0000		0.0000	0.0000	1.4157	0.0000	1.4157	0.0837	0.0000	3.5072
Water						0.0000	0.0000		0.0000	0.0000	0.6742	10.3459	11.0201	0.0698	1.7500e-003	13.2868
Total	**0.3456**	**0.3273**	**1.0448**	**2.9400e-003**	**0.2311**	**7.7800e-003**	**0.2389**	**0.0619**	**7.6400e-003**	**0.0695**	**2.0898**	**434.0409**	**436.1307**	**0.1743**	**4.2100e-003**	**441.7409**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.22**	**1.92**	**0.26**	**1.67**	**0.00**	**6.27**	**0.22**	**0.00**	**6.37**	**0.74**	**73.62**	**5.45**	**6.61**	**66.95**	**14.95**	**8.29**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/14/2019	5	10	
2	Grading	Grading	6/15/2019	7/19/2019	5	25	
3	Trenching	Trenching	10/26/2019	11/22/2019	5	20	
4	Building Construction	Building Construction	11/23/2019	4/30/2021	5	375	
5	Paving	Paving	11/23/2019	12/20/2019	5	20	
6	Architectural Coating	Architectural Coating	5/1/2021	6/4/2021	5	25	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 1.23

Residential Indoor: 122,837; Residential Outdoor: 40,946; Non-Residential Indoor: 1,800; Non-Residential Outdoor: 600; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	3	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	135.00	8.00	8.00	5.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	51.00	13.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	2.00	0.00	8.00	8.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	10.00	0.00	0.00	8.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6500e-003	0.0000	2.6500e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0900e-003	0.0604	0.0331	7.0000e-005		2.8700e-003	2.8700e-003		2.6400e-003	2.6400e-003	0.0000	5.9669	5.9669	1.8900e-003	0.0000	6.0141
Total	**5.0900e-003**	**0.0604**	**0.0331**	**7.0000e-005**	**2.6500e-003**	**2.8700e-003**	**5.5200e-003**	**2.9000e-004**	**2.6400e-003**	**2.9300e-003**	**0.0000**	**5.9669**	**5.9669**	**1.8900e-003**	**0.0000**	**6.0141**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	9.0000e-005	9.3000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2240	0.2240	1.0000e-005	0.0000	0.2242
Total	**1.3000e-004**	**9.0000e-005**	**9.3000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2240**	**0.2240**	**1.0000e-005**	**0.0000**	**0.2242**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1900e-003	0.0000	1.1900e-003	1.3000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0900e-003	0.0604	0.0331	7.0000e-005		2.8700e-003	2.8700e-003		2.6400e-003	2.6400e-003	0.0000	5.9669	5.9669	1.8900e-003	0.0000	6.0141
Total	**5.0900e-003**	**0.0604**	**0.0331**	**7.0000e-005**	**1.1900e-003**	**2.8700e-003**	**4.0600e-003**	**1.3000e-004**	**2.6400e-003**	**2.7700e-003**	**0.0000**	**5.9669**	**5.9669**	**1.8900e-003**	**0.0000**	**6.0141**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	9.0000e-005	9.3000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2240	0.2240	1.0000e-005	0.0000	0.2242
Total	**1.3000e-004**	**9.0000e-005**	**9.3000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2240**	**0.2240**	**1.0000e-005**	**0.0000**	**0.2242**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.4900e-003	0.0000	8.4900e-003	1.0000e-003	0.0000	1.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0180	0.1979	0.1391	2.5000e-004		0.0102	0.0102		9.3700e-003	9.3700e-003	0.0000	22.2101	22.2101	7.0300e-003	0.0000	22.3858
Total	**0.0180**	**0.1979**	**0.1391**	**2.5000e-004**	**8.4900e-003**	**0.0102**	**0.0187**	**1.0000e-003**	**9.3700e-003**	**0.0104**	**0.0000**	**22.2101**	**22.2101**	**7.0300e-003**	**0.0000**	**22.3858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5000e-004	0.0102	1.9200e-003	2.0000e-005	2.9000e-004	2.0000e-005	3.1000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.8134	1.8134	2.2000e-004	0.0000	1.8190
Vendor	1.2000e-004	3.2900e-003	8.8000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.1000e-004	5.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7153	0.7153	6.0000e-005	0.0000	0.7167
Worker	5.2000e-004	3.8000e-004	3.7600e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.9099	0.9099	3.0000e-005	0.0000	0.9106
Total	**8.9000e-004**	**0.0138**	**6.5600e-003**	**4.0000e-005**	**1.4400e-003**	**5.0000e-005**	**1.4900e-003**	**3.9000e-004**	**5.0000e-005**	**4.4000e-004**	**0.0000**	**3.4386**	**3.4386**	**3.1000e-004**	**0.0000**	**3.4463**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.8200e-003	0.0000	3.8200e-003	4.5000e-004	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0180	0.1979	0.1391	2.5000e-004		0.0102	0.0102		9.3700e-003	9.3700e-003	0.0000	22.2101	22.2101	7.0300e-003	0.0000	22.3858
Total	**0.0180**	**0.1979**	**0.1391**	**2.5000e-004**	**3.8200e-003**	**0.0102**	**0.0140**	**4.5000e-004**	**9.3700e-003**	**9.8200e-003**	**0.0000**	**22.2101**	**22.2101**	**7.0300e-003**	**0.0000**	**22.3858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5000e-004	0.0102	1.9200e-003	2.0000e-005	2.9000e-004	2.0000e-005	3.1000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.8134	1.8134	2.2000e-004	0.0000	1.8190
Vendor	1.2000e-004	3.2900e-003	8.8000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.1000e-004	5.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7153	0.7153	6.0000e-005	0.0000	0.7167
Worker	5.2000e-004	3.8000e-004	3.7600e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.9099	0.9099	3.0000e-005	0.0000	0.9106
Total	**8.9000e-004**	**0.0138**	**6.5600e-003**	**4.0000e-005**	**1.4400e-003**	**5.0000e-005**	**1.4900e-003**	**3.9000e-004**	**5.0000e-005**	**4.4000e-004**	**0.0000**	**3.4386**	**3.4386**	**3.1000e-004**	**0.0000**	**3.4463**

3.4 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9800e-003	0.0701	0.0691	9.0000e-005		4.6800e-003	4.6800e-003		4.3100e-003	4.3100e-003	0.0000	8.3699	8.3699	2.6500e-003	0.0000	8.4361
Total	**6.9800e-003**	**0.0701**	**0.0691**	**9.0000e-005**		**4.6800e-003**	**4.6800e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**8.3699**	**8.3699**	**2.6500e-003**	**0.0000**	**8.4361**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**2.6000e-004**	**1.9000e-004**	**1.8500e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4480**	**0.4480**	**1.0000e-005**	**0.0000**	**0.4483**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9800e-003	0.0701	0.0691	9.0000e-005		4.6800e-003	4.6800e-003		4.3100e-003	4.3100e-003	0.0000	8.3699	8.3699	2.6500e-003	0.0000	8.4361
Total	**6.9800e-003**	**0.0701**	**0.0691**	**9.0000e-005**		**4.6800e-003**	**4.6800e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**8.3699**	**8.3699**	**2.6500e-003**	**0.0000**	**8.4361**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**2.6000e-004**	**1.9000e-004**	**1.8500e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4480**	**0.4480**	**1.0000e-005**	**0.0000**	**0.4483**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0200	0.1763	0.1662	2.6000e-004		0.0116	0.0116		0.0112	0.0112	0.0000	22.9502	22.9502	3.4000e-003	0.0000	23.0351
Total	**0.0200**	**0.1763**	**0.1662**	**2.6000e-004**		**0.0116**	**0.0116**		**0.0112**	**0.0112**	**0.0000**	**22.9502**	**22.9502**	**3.4000e-003**	**0.0000**	**23.0351**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.7000e-004	0.0231	6.1900e-003	5.0000e-005	1.2800e-003	1.7000e-004	1.4400e-003	3.7000e-004	1.6000e-004	5.3000e-004	0.0000	5.0214	5.0214	3.9000e-004	0.0000	5.0312
Worker	2.2000e-003	1.6100e-003	0.0159	4.0000e-005	4.0900e-003	3.0000e-005	4.1200e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.8551	3.8551	1.3000e-004	0.0000	3.8583
Total	**3.0700e-003**	**0.0247**	**0.0221**	**9.0000e-005**	**5.3700e-003**	**2.0000e-004**	**5.5600e-003**	**1.4600e-003**	**1.9000e-004**	**1.6500e-003**	**0.0000**	**8.8766**	**8.8766**	**5.2000e-004**	**0.0000**	**8.8895**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0200	0.1763	0.1662	2.6000e-004		0.0116	0.0116		0.0112	0.0112	0.0000	22.9501	22.9501	3.4000e-003	0.0000	23.0351
Total	**0.0200**	**0.1763**	**0.1662**	**2.6000e-004**		**0.0116**	**0.0116**		**0.0112**	**0.0112**	**0.0000**	**22.9501**	**22.9501**	**3.4000e-003**	**0.0000**	**23.0351**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.7000e-004	0.0231	6.1900e-003	5.0000e-005	1.2800e-003	1.7000e-004	1.4400e-003	3.7000e-004	1.6000e-004	5.3000e-004	0.0000	5.0214	5.0214	3.9000e-004	0.0000	5.0312
Worker	2.2000e-003	1.6100e-003	0.0159	4.0000e-005	4.0900e-003	3.0000e-005	4.1200e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.8551	3.8551	1.3000e-004	0.0000	3.8583
Total	**3.0700e-003**	**0.0247**	**0.0221**	**9.0000e-005**	**5.3700e-003**	**2.0000e-004**	**5.5600e-003**	**1.4600e-003**	**1.9000e-004**	**1.6500e-003**	**0.0000**	**8.8766**	**8.8766**	**5.2000e-004**	**0.0000**	**8.8895**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1747	1.5644	1.6007	2.5500e-003		0.0977	0.0977		0.0940	0.0940	0.0000	221.0716	221.0716	0.0319	0.0000	221.8701
Total	**0.1747**	**1.5644**	**1.6007**	**2.5500e-003**		**0.0977**	**0.0977**		**0.0940**	**0.0940**	**0.0000**	**221.0716**	**221.0716**	**0.0319**	**0.0000**	**221.8701**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8700e-003	0.2027	0.0539	5.0000e-004	0.0124	1.0300e-003	0.0134	3.5700e-003	9.9000e-004	4.5600e-003	0.0000	48.3844	48.3844	3.6100e-003	0.0000	48.4745
Worker	0.0200	0.0141	0.1413	4.0000e-004	0.0397	3.0000e-004	0.0400	0.0106	2.7000e-004	0.0108	0.0000	36.2297	36.2297	1.1200e-003	0.0000	36.2577
Total	**0.0268**	**0.2168**	**0.1953**	**9.0000e-004**	**0.0521**	**1.3300e-003**	**0.0534**	**0.0141**	**1.2600e-003**	**0.0154**	**0.0000**	**84.6140**	**84.6140**	**4.7300e-003**	**0.0000**	**84.7322**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1747	1.5644	1.6007	2.5500e-003		0.0977	0.0977		0.0940	0.0940	0.0000	221.0713	221.0713	0.0319	0.0000	221.8699
Total	**0.1747**	**1.5644**	**1.6007**	**2.5500e-003**		**0.0977**	**0.0977**		**0.0940**	**0.0940**	**0.0000**	**221.0713**	**221.0713**	**0.0319**	**0.0000**	**221.8699**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8700e-003	0.2027	0.0539	5.0000e-004	0.0124	1.0300e-003	0.0134	3.5700e-003	9.9000e-004	4.5600e-003	0.0000	48.3844	48.3844	3.6100e-003	0.0000	48.4745
Worker	0.0200	0.0141	0.1413	4.0000e-004	0.0397	3.0000e-004	0.0400	0.0106	2.7000e-004	0.0108	0.0000	36.2297	36.2297	1.1200e-003	0.0000	36.2577
Total	**0.0268**	**0.2168**	**0.1953**	**9.0000e-004**	**0.0521**	**1.3300e-003**	**0.0534**	**0.0141**	**1.2600e-003**	**0.0154**	**0.0000**	**84.6140**	**84.6140**	**4.7300e-003**	**0.0000**	**84.7322**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0514	0.4665	0.5216	8.4000e-004		0.0275	0.0275		0.0264	0.0264	0.0000	72.5693	72.5693	0.0102	0.0000	72.8251
Total	**0.0514**	**0.4665**	**0.5216**	**8.4000e-004**		**0.0275**	**0.0275**		**0.0264**	**0.0264**	**0.0000**	**72.5693**	**72.5693**	**0.0102**	**0.0000**	**72.8251**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8200e-003	0.0598	0.0160	1.6000e-004	4.0600e-003	1.3000e-004	4.2000e-003	1.1700e-003	1.3000e-004	1.3000e-003	0.0000	15.7363	15.7363	1.1400e-003	0.0000	15.7647
Worker	6.1700e-003	4.2000e-003	0.0433	1.3000e-004	0.0130	1.0000e-004	0.0131	3.4600e-003	9.0000e-005	3.5500e-003	0.0000	11.4929	11.4929	3.4000e-004	0.0000	11.5014
Total	**7.9900e-003**	**0.0640**	**0.0593**	**2.9000e-004**	**0.0171**	**2.3000e-004**	**0.0173**	**4.6300e-003**	**2.2000e-004**	**4.8500e-003**	**0.0000**	**27.2292**	**27.2292**	**1.4800e-003**	**0.0000**	**27.2661**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0514	0.4665	0.5216	8.4000e-004		0.0275	0.0275		0.0264	0.0264	0.0000	72.5692	72.5692	0.0102	0.0000	72.8250
Total	**0.0514**	**0.4665**	**0.5216**	**8.4000e-004**		**0.0275**	**0.0275**		**0.0264**	**0.0264**	**0.0000**	**72.5692**	**72.5692**	**0.0102**	**0.0000**	**72.8250**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8200e-003	0.0598	0.0160	1.6000e-004	4.0600e-003	1.3000e-004	4.2000e-003	1.1700e-003	1.3000e-004	1.3000e-003	0.0000	15.7363	15.7363	1.1400e-003	0.0000	15.7647
Worker	6.1700e-003	4.2000e-003	0.0433	1.3000e-004	0.0130	1.0000e-004	0.0131	3.4600e-003	9.0000e-005	3.5500e-003	0.0000	11.4929	11.4929	3.4000e-004	0.0000	11.5014
Total	**7.9900e-003**	**0.0640**	**0.0593**	**2.9000e-004**	**0.0171**	**2.3000e-004**	**0.0173**	**4.6300e-003**	**2.2000e-004**	**4.8500e-003**	**0.0000**	**27.2292**	**27.2292**	**1.4800e-003**	**0.0000**	**27.2661**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.2700e-003	0.0762	0.0733	1.1000e-004		4.1200e-003	4.1200e-003		3.7900e-003	3.7900e-003	0.0000	10.2376	10.2376	3.2400e-003	0.0000	10.3186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.2700e-003**	**0.0762**	**0.0733**	**1.1000e-004**		**4.1200e-003**	**4.1200e-003**		**3.7900e-003**	**3.7900e-003**	**0.0000**	**10.2376**	**10.2376**	**3.2400e-003**	**0.0000**	**10.3186**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	2.6300e-003	7.1000e-004	1.0000e-005	1.5000e-004	2.0000e-005	1.6000e-004	4.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.5722	0.5722	4.0000e-005	0.0000	0.5734
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**3.6000e-004**	**2.8200e-003**	**2.5600e-003**	**1.0000e-005**	**6.3000e-004**	**2.0000e-005**	**6.4000e-004**	**1.7000e-004**	**2.0000e-005**	**1.9000e-004**	**0.0000**	**1.0202**	**1.0202**	**5.0000e-005**	**0.0000**	**1.0217**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.2700e-003	0.0762	0.0733	1.1000e-004		4.1200e-003	4.1200e-003		3.7900e-003	3.7900e-003	0.0000	10.2376	10.2376	3.2400e-003	0.0000	10.3186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.2700e-003**	**0.0762**	**0.0733**	**1.1000e-004**		**4.1200e-003**	**4.1200e-003**		**3.7900e-003**	**3.7900e-003**	**0.0000**	**10.2376**	**10.2376**	**3.2400e-003**	**0.0000**	**10.3186**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	2.6300e-003	7.1000e-004	1.0000e-005	1.5000e-004	2.0000e-005	1.6000e-004	4.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.5722	0.5722	4.0000e-005	0.0000	0.5734
Worker	2.6000e-004	1.9000e-004	1.8500e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4480	0.4480	1.0000e-005	0.0000	0.4483
Total	**3.6000e-004**	**2.8200e-003**	**2.5600e-003**	**1.0000e-005**	**6.3000e-004**	**2.0000e-005**	**6.4000e-004**	**1.7000e-004**	**2.0000e-005**	**1.9000e-004**	**0.0000**	**1.0202**	**1.0202**	**5.0000e-005**	**0.0000**	**1.0217**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2558					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2100e-003	0.0573	0.0682	1.1000e-004		3.5300e-003	3.5300e-003		3.5300e-003	3.5300e-003	0.0000	9.5747	9.5747	6.6000e-004	0.0000	9.5911
Total	**0.2640**	**0.0573**	**0.0682**	**1.1000e-004**		**3.5300e-003**	**3.5300e-003**		**3.5300e-003**	**3.5300e-003**	**0.0000**	**9.5747**	**9.5747**	**6.6000e-004**	**0.0000**	**9.5911**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.4000e-004	2.4700e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.5000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.6551	0.6551	2.0000e-005	0.0000	0.6556
Total	**3.5000e-004**	**2.4000e-004**	**2.4700e-003**	**1.0000e-005**	**7.4000e-004**	**1.0000e-005**	**7.5000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6551**	**0.6551**	**2.0000e-005**	**0.0000**	**0.6556**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2558					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2100e-003	0.0573	0.0682	1.1000e-004		3.5300e-003	3.5300e-003		3.5300e-003	3.5300e-003	0.0000	9.5747	9.5747	6.6000e-004	0.0000	9.5911
Total	**0.2640**	**0.0573**	**0.0682**	**1.1000e-004**		**3.5300e-003**	**3.5300e-003**		**3.5300e-003**	**3.5300e-003**	**0.0000**	**9.5747**	**9.5747**	**6.6000e-004**	**0.0000**	**9.5911**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.4000e-004	2.4700e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.5000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.6551	0.6551	2.0000e-005	0.0000	0.6556
Total	**3.5000e-004**	**2.4000e-004**	**2.4700e-003**	**1.0000e-005**	**7.4000e-004**	**1.0000e-005**	**7.5000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6551**	**0.6551**	**2.0000e-005**	**0.0000**	**0.6556**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0612	0.2740	0.7398	2.6100e-003	0.2311	2.1800e-003	0.2333	0.0619	2.0400e-003	0.0639	0.0000	240.6352	240.6352	0.0125	0.0000	240.9474
Unmitigated	0.0612	0.2740	0.7398	2.6100e-003	0.2311	2.1800e-003	0.2333	0.0619	2.0400e-003	0.0639	0.0000	240.6352	240.6352	0.0125	0.0000	240.9474

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	220.78	215.46	183.92	613,189	613,189
Enclosed Parking with Elevator	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	220.78	215.46	183.92	613,189	613,189

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Racquet Club	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Recreational Swimming Pool	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Condo/Townhouse	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	124.6693	124.6693	6.7400e-003	1.3900e-003	125.2534
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	139.7069	139.7069	7.5500e-003	1.5600e-003	140.3615
NaturalGas Mitigated	2.8300e-003	0.0242	0.0106	1.5000e-004		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	27.9970	27.9970	5.4000e-004	5.1000e-004	28.1634
NaturalGas Unmitigated	3.5800e-003	0.0306	0.0133	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4079	35.4079	6.8000e-004	6.5000e-004	35.6183

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	649610	3.5000e-003	0.0299	0.0127	1.9000e-004		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	34.6657	34.6657	6.6000e-004	6.4000e-004	34.8717
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	13908	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7422	0.7422	1.0000e-005	1.0000e-005	0.7466
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**3.5700e-003**	**0.0306**	**0.0133**	**1.9000e-004**		**2.4700e-003**	**2.4700e-003**		**2.4700e-003**	**2.4700e-003**	**0.0000**	**35.4079**	**35.4079**	**6.7000e-004**	**6.5000e-004**	**35.6183**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	512195	2.7600e-003	0.0236	0.0100	1.5000e-004		1.9100e-003	1.9100e-003		1.9100e-003	1.9100e-003	0.0000	27.3327	27.3327	5.2000e-004	5.0000e-004	27.4951
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	12449.8	7.0000e-005	6.1000e-004	5.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6644	0.6644	1.0000e-005	1.0000e-005	0.6683
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8300e-003**	**0.0242**	**0.0106**	**1.5000e-004**		**1.9600e-003**	**1.9600e-003**		**1.9600e-003**	**1.9600e-003**	**0.0000**	**27.9970**	**27.9970**	**5.3000e-004**	**5.1000e-004**	**28.1634**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	203985	49.6272	2.6800e-003	5.6000e-004	49.8597
Enclosed Parking with Elevator	360118	87.6127	4.7400e-003	9.8000e-004	88.0232
Racquet Club	10140	2.4670	1.3000e-004	3.0000e-005	2.4785
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**139.7069**	**7.5500e-003**	**1.5700e-003**	**140.3615**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	201247	48.9611	2.6500e-003	5.5000e-004	49.1905
Enclosed Parking with Elevator	301473	73.3451	3.9700e-003	8.2000e-004	73.6888
Racquet Club	9713.28	2.3631	1.3000e-004	3.0000e-005	2.3742
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**124.6693**	**6.7500e-003**	**1.4000e-003**	**125.2534**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2815	0.0291	0.2944	1.8000e-004		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	30.3934	30.3934	1.0200e-003	5.5000e-004	30.5825
Unmitigated	0.2815	0.0291	0.2944	1.8000e-004		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	30.3934	30.3934	1.0200e-003	5.5000e-004	30.5825

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0248					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2451					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.0200e-003	0.0258	0.0110	1.6000e-004		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	29.9307	29.9307	5.7000e-004	5.5000e-004	30.1086
Landscaping	8.6200e-003	3.2700e-003	0.2834	1.0000e-005		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	0.4627	0.4627	4.5000e-004	0.0000	0.4740
Total	**0.2815**	**0.0291**	**0.2944**	**1.7000e-004**		**3.6500e-003**	**3.6500e-003**		**3.6500e-003**	**3.6500e-003**	**0.0000**	**30.3934**	**30.3934**	**1.0200e-003**	**5.5000e-004**	**30.5825**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0248					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2451					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.0200e-003	0.0258	0.0110	1.6000e-004		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	29.9307	29.9307	5.7000e-004	5.5000e-004	30.1086
Landscaping	8.6200e-003	3.2700e-003	0.2834	1.0000e-005		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	0.4627	0.4627	4.5000e-004	0.0000	0.4740
Total	**0.2815**	**0.0291**	**0.2944**	**1.7000e-004**		**3.6500e-003**	**3.6500e-003**		**3.6500e-003**	**3.6500e-003**	**0.0000**	**30.3934**	**30.3934**	**1.0200e-003**	**5.5000e-004**	**30.5825**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.0201	0.0698	1.7500e-003	13.2868
Unmitigated	13.7751	0.0873	2.1900e-003	16.6085

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	2.47585 / 1.56086	12.8476	0.0813	2.0400e-003	15.4886
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0709718 / 0.0434089	0.3649	2.3300e-003	6.0000e-005	0.4406
Recreational Swimming Pool	0.109415 / 0.0670607	0.5626	3.5900e-003	9.0000e-005	0.6793
Total		**13.7751**	**0.0873**	**2.1900e-003**	**16.6085**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	1.98068 / 1.24869	10.2781	0.0651	1.6300e-003	12.3909
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.0567774 /	0.2919	1.8600e-003	5.0000e-005	0.3525
Recreational Swimming Pool	0.0875319 /	0.4501	2.8800e-003	7.0000e-005	0.5434
Total		**11.0201**	**0.0698**	**1.7500e-003**	**13.2868**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.4157	0.0837	0.0000	3.5072
Unmitigated	7.0783	0.4183	0.0000	17.5362

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	17.48	3.5483	0.2097	0.0000	8.7907
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	6.84	1.3885	0.0821	0.0000	3.4399
Recreational Swimming Pool	10.55	2.1416	0.1266	0.0000	5.3056
Total		**7.0783**	**0.4183**	**0.0000**	**17.5362**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	3.496	0.7097	0.0419	0.0000	1.7581
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	1.368	0.2777	0.0164	0.0000	0.6880
Recreational Swimming Pool	2.11	0.4283	0.0253	0.0000	1.0611
Total		**1.4157**	**0.0837**	**0.0000**	**3.5072**

APPENDIX G

Geological Hazard Evaluation and Addendum

CHRISTIAN WHEELER
ENGINEERING

REPORT OF PRELIMINARY GEOLOGIC HAZARD EVALUATION

PROPOSED DURANTE APARTMENTS
2100 JIMMY DURANTE BOULEVARD
DEL MAR, CALIFORNIA

PREPARED FOR

SAN DEGUITO LAND PARTNERS
576 CAMINO EL DORADO
ENCINITAS, CALIFORNIA 92024

PREPARED BY

CHRISTIAN WHEELER ENGINEERING
3980 HOME AVENUE
SAN DIEGO, CALIFORNIA 92105

CHRISTIAN WHEELER
ENGINEERING

September 24, 2012

San Dieguito Land Partners
576 Camino el Dorado
Encinitas, California 92024
Attention: Mr. Tony Cassolato

CWE 2120190.01

Subject: **Report of Preliminary Geologic Hazard Evaluation,**
Proposed Durante Apartments, 2100 Jimmy Durante Boulevard, Del Mar, California.

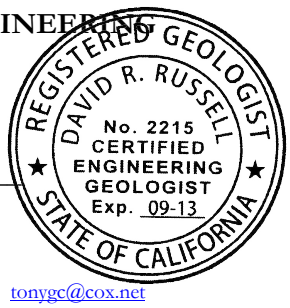
Ladies and Gentlemen:

In accordance with our Proposal dated May 4, 2012, we have completed a preliminary geologic hazard evaluation for the subject project to address the anticipated geologic and geotechnical conditions that are expected to most significantly affect the proposed development. We are presenting our findings herein.

Based on the results of our evaluation, we have found that the subject site is underlain by Quaternary-age alluvium talus, and old paralic deposits, and Tertiary-age sediments of the Torrey Sandstone and Delmar Formation. A thin and irregular veneer of man-placed fill also mantles portions of the site. The geologic hazards and geotechnical conditions expected to most significantly affect the development of the site as proposed include static settlement of the alluvium, fill and talus, shallow groundwater, liquefaction and possible lateral spreading of the alluvium and saturated portions of the old paralic deposits, dissimilar bearing conditions across the main structure, and ground shaking in the event of major, proximal seismic event.

If you have any questions after reviewing this report, please do not hesitate to contact our office. This opportunity to be of professional service is sincerely appreciated.

Respectfully submitted,
CHRISTIAN WHEELER ENGINEERING



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CHRISTIAN WHEELER
ENGINEERING

PRELIMINARY GEOLOGIC HAZARD EVALUATION

PROPOSED DURANTE APARTMENTS
2100 JIMMY DURANTE BOULEVARD
SAN DIEGO, CALIFORNIA

INTRODUCTION AND PROJECT DESCRIPTION

This report presents the results of a preliminary geologic hazard evaluation performed for the proposed apartment project to be constructed at 2100 Jimmy Durante Boulevard in the city of Del Mar, California. Figure Number 1, presented on the following page, provides a site vicinity map showing the approximate location of the property.

To assist in the preparation of this report, we were provided with a set of preliminary architectural plans prepared by Bokal & Sneed Architects. A copy of the architectural plans was used as a base map for our Site Plan and Geotechnical Map as well as our Site Disturbance Map, included herein as Plates Number 1 and 3, respectively.

Based on our review of the architectural plans, we understand that it is proposed to construct a new ±55 unit residential development on the site. The proposed development will include a main complex along the western and southern portions of the site that will consist of two stories of living units above a partially subterranean parking level. A separate, two-story structure, which will support three residential units above a level of partially subterranean garages, is proposed within the north-central portion of the site. Additionally proposed site improvements are expected to consist of recreational facilities, site retaining walls, driveways, trash enclosures, and other normally associated appurtenances.

We expect that the subterranean portions of the proposed structures will be of concrete or masonry construction and that the above grade portions of the structures will be of conventional wood-frame construction. On-grade concrete floor slabs are expected within the lower levels of the structures. Although a report of preliminary geotechnical investigation for the proposed project has not been issued, given the variability of the geotechnical conditions across the site it is, at this time, anticipated that the proposed structures and improvements will be supported by some combination of conventional, shallow foundations, mat foundations, or deep foundation systems such as cast-in-place concrete piers or driven piles.

Site Vicinity Map

PROPOSED DURANTE APARTMENTS
2100 JIMMY DURANTE BOULEVARD
DEL MAR, CALIFORNIA

CWE 2120190.01 SEPTEMBER 2012 FIGURE 1

Although no grading plans have been provided to us for review, we expect that grading to accommodate the proposed construction will include cuts and fills of up to about 15 feet and 10 feet from existing site grades, respectively. It is our understanding that the garage level of the main structure of the development will be accessed via a driveway that is elevated in order to prevent flood waters from entering that structure. We also understand that no development or grading is proposed along the southeast portion of the site where a wetland and wetland buffer area exist.

This report has been prepared for the exclusive use of the San Dieguito Land Partners and its design consultants for specific application to the project described herein. As development plans are finalized, the modified plans should be submitted to Christian Wheeler Engineering for review and to assist in the development of a scope to prepare a report of preliminary geotechnical investigation for the proposed development which will include additional subsurface investigation, laboratory testing and geotechnical recommendations for the proposed construction and grading. Our professional services have been performed, our findings obtained and our conclusions presented in accordance with generally accepted engineering principles and practices. This warranty is in lieu of all other warranties, express or implied.

PROJECT SCOPE

Our preliminary geologic hazard evaluation consisted of surface reconnaissance, subsurface exploration, obtaining representative soil samples, laboratory testing, analysis of the field and laboratory data and review of relevant geologic literature. Our scope of service did not include the performance of a geotechnical investigation of the site or preparation of a report of preliminary geotechnical investigation for the subject development, determining the presence of hazardous materials, evaluating environmental or cultural issues at the site, providing recommendations to prevent moisture intrusion into the structures, providing an evaluation or design of storm water infiltration facilities, providing archaeological or paleontological monitoring during site investigation, value engineering, participating in meetings and/or hearings with governmental review agencies during the project's permitting phase, or any other services not specifically described in the scope of services presented below. More specifically, the intent of our preliminary evaluation was to:

- Drill three small diameter borings across the northern, alluviated areas of the site with a conventional truck-mounted drill rig. Our scope of services also included the excavation of a series of test trenches across the site with a rubber tire backhoe. The borings and test trenches were advanced in order to explore the existing soil conditions to the depths influenced by the proposed construction and to collect representative samples of the soils and earth materials underlying the site. A

piezometer was also installed within one of the borings (B-1), drilled within the northwest portion of the site, in order to periodically monitor the groundwater level in that portion of the site.

- Monitor, on a weekly basis for a period of four weeks, the groundwater level within the installed piezometer.
- Evaluate, by laboratory tests and our past experience with similar soil types, the engineering properties of the various soil strata that may influence the proposed construction, including bearing capacities, expansive characteristics and settlement potential.
- Describe the general geology at the site including possible geologic hazards that could have an effect on the proposed construction.
- Address potential construction difficulties that may be encountered due to soil conditions, groundwater or geologic hazards, and provide recommendations concerning these problems.
- Quantitatively address the potential for soil liquefaction and dynamic settlement at the site in the event of the design level seismic event.
- Quantitatively address the global and surficial stabilities of the slopes on and adjacent to the site in its proposed configuration.
- Provide this report that presents the results of our geologic hazard evaluation and which includes a plot plan showing the location of our subsurface explorations, excavation logs, laboratory test results, and summaries of how the encountered geologic conditions of the site and geologic hazards may affect the proposed site development.

FINDINGS

SITE DESCRIPTION

The subject site is approximately 2½ acres in area and consists of two adjacent parcels identified as Assessor's Parcel Numbers 299-10-47 and -48, which are located adjacent to and south of the intersection of Jimmy Durante Boulevard and Dieguito Drive in the city of Del Mar, California. The site is currently vacant. Topographically, the northern and western portions of the site are characterized by relatively level areas along the adjacent roadways. A graded, level pad area exists within the south-central portion of the site. The southern and eastern portions of the site are characterized by moderately to steeply sloping hillsides that ascend to the southern and eastern perimeters of the site. An unimproved roadway/bench has been cut into the ascending hillside within the southeast portion of the site. On-site elevations range from approximately 12 feet near the northeast corner of the site to 63 feet along the western portion of the site's southern perimeter.

SITE HISTORY

No evidence of previous structures or other permanent improvements on-site was noted during our review of the referenced documents, topographic maps and aerial photographs. Review of the referenced photographs and maps indicates that prior to 1959 the only significant disturbance to the site included minor leveling and grading along the northern and western portions of the site near San Dieguito Road and Jimmy Durante Boulevard, respectively. Significant grading, including cuts of up to as much as 15 to 20 feet, occurred between 1959 and 1979 along the southern and southeastern portions of the site. The approximate 1959 topography of the site along geologic cross section C-C' (taken from the County of San Diego 200-Scale topographic map sheet 290-1689) is presented on Plate No. 2 of this report. Additionally, Plate No. 3 of this report presents a Site Disturbance Map, which delineates the areas of the site affected by previous excavation and grading.

GENERAL GEOLOGY AND SUBSURFACE CONDITIONS

GEOLOGIC SETTING AND SOIL DESCRIPTION: The subject site is located in the Coastal Plains Physiographic Province of San Diego County. Based upon the results of our subsurface exploration and analysis of readily available, pertinent geologic literature, we have determined that the site is underlain by Tertiary-age sedimentary deposits of the Delmar Formation and Torrey Sandstone, Quaternary-age alluvial, talus, and old paralic deposits, and a relatively thin and irregular veneer of man-placed fill soils. These materials are described below in order of increasing age:

ARTIFICIAL FILL (Qaf): Artificial fill material was encountered near the surface within each of our exploratory borings and test trenches. Typically, the encountered fill was noted to be less than 2 feet in thickness across the explored portions of the site. However, slightly deeper fills were noted within the southern portion of the site, within the vicinity of our test trenches T-1 and T-3. The Site Plan and Geotechnical Map included as Plate No. 1 of this report depicts this area. The encountered fill materials generally consisted of light brown to medium grayish-brown, silty sand (SM) which was typically dry to damp and loose to medium dense in consistency. The existing fill is expected to possess a "low" expansion index and a low to moderate potential for static settlement. It is anticipated that geotechnical recommendations for site development would include the complete removal and, where necessary to achieve planned site grades, re-compaction of all existing fill soils from those portions of the site to be developed.

TALUS DEPOSITS (Qtl): Quaternary-age talus deposits/debris consisting of both granular, colluvial deposits and relatively intact blockfalls flank the base of the slopes along the northeast and central portion of the site. The anticipated areal extent of such deposits is presented on Plate No. 1 of this report. Where observed in our explorations, the talus material was noted to extend to an approximate depth of 8 feet below existing site grades and consist of light brown silty sand (SM) that was moist and loose to medium dense in consistency. During our site visits over the summer of 2012, seepage was noted along the ground surface in the area of talus accumulation within the northeast portion of the site. The talus is expected to possess a "low" expansion index and a moderate potential for static settlement. It is anticipated that geotechnical recommendations for site development would include the complete removal of all talus materials from all portions of the site to support new fills or settlement sensitive improvements.

ALLUVIUM (Qal): Quaternary-age alluvial deposits underlie the central and northern portions of the site. Plate Nos. 1 and 2 depict the currently anticipated spatial distribution of the alluvium across the site. It should, however, be recognized that as part of a full scale geotechnical evaluation of the site additional deep explorations may be necessary across the central and northern portions of the site to further define the thicknesses and consistencies of the alluvium in those areas.

Approximately 19 feet, 2 feet, and 35 feet of alluvium was encountered within our borings B-1, B-2, and B-3, respectively. Alluvium was also encountered within test trenches T-4 and T-5, which were excavated within the central portion of the site. In general, the alluvium was noted to consist of light brown to yellowish-brown, silty sands, poorly-graded sands (SP) and poorly-graded sands with silt (SP-SM). These materials were noted to be generally dry to saturated (below the water table) and loose to medium dense in consistency. Caving of granular alluvial materials was noted along the sidewalls of the test trenches where such materials were encountered.

The alluvial soils are expected to possess a "low" expansion index and moderate to high potentials for static and dynamic settlements. It is anticipated that geotechnical recommendations for site development would not include reliance on such materials, in their present condition, for bearing support of proposed improvements. The liquefaction potential of the alluvium is discussed in the "Liquefaction" section of this report.

OLD PARALIC DEPOSITS (Qbd): Quaternary-age old paralic deposits, locally referred to as the Bay Point Formation, underlie the fill and crop out along the ground surface within portions of the southern part of the site (see Plate No. 1). These materials were observed to generally consist of

medium brown to orangish-brown, silty sands (SM) that were generally damp to moist and medium dense to dense in consistency. It is anticipated that findings and recommendations presented in a full report of preliminary geotechnical investigation for the subject development will consider these deposits to possess a low to moderate potential for static settlement and, where saturated and in close proximity to the contact with the underlying alluvium, a moderate potential for dynamic settlement.

TORREY SANDSTONE (Tt): Tertiary-age sedimentary deposits of the Torrey Sandstone crop out along the upper portions of the slope areas of the site. These materials are also expected to underlie the old paralic deposits within the southern portion of the site. The geologic cross sections presented on Plate No. 2 of this report depict the anticipated spatial distribution of the Torrey Sandstone across the site. Where not previously eroded by wave action or the San Dieguito River, materials of the Torrey Sandstone are expected to extend to an approximate elevation of 12 feet (Bokal and Sneed, 2012) across the site. These materials typically consist of light brown, silty sand (SM) that are generally damp to moist and dense to very dense in consistency. These materials are expected to possess low settlement potential and are also expected to be considered suitable in their present condition to support proposed fills and settlement sensitive improvements.

DELMAR FORMATION (Td): Underlying the materials of the Torrey Sandstone, talus deposits, and alluvium, the site is underlain by Tertiary-age sedimentary deposits of the Delmar Formation. These materials were not observed to crop out along any of the slopes on-site, however, within our explorations the upper surface of this unit were noted at depths ranging from 1½ to 35 feet below existing site grades. Such depths correspond to approximate elevations of 11 feet to -22 feet (Bokal and Sneed, 2012) Where encountered in our explorations, these deposits generally consisted of olive brown to gray, clayey sand (SC) and clayey silt (ML) with lesser amounts of silty sand (SM). It should, however, be recognized that lenses of sandy and silty clay (CL and CH) are also commonly encountered within the Delmar Formation. The encountered materials of the Delmar Formation were typically moist to saturated and dense to very dense/hard in consistency. These materials are expected to possess low settlement potential and are expected to be considered suitable in their present condition to support the proposed development.

GROUNDWATER: Groundwater was encountered within our exploratory borings at approximate depths of 5½ to 11 feet below existing site grades. These depths correspond to approximate elevations of about 1½ to 7 feet (elevations based on Bokal & Sneed, 2012). Additionally, wet to saturated conditions were encountered within the lower portions of the alluvium within our test trenches T-4 and T-5 at approximate

elevations of 7 and 9 feet, respectively. Due to the close proximity of the site to the San Dieguito Lagoon/River, variations in the local groundwater table may be expected with tidal fluctuations. Ponded surface water was also noted several times during our site visits conducted between May and August of 2012 along the street area adjacent to San Dieguito Road and also along the base of the relatively steep slope along the eastern and northeast portion of the site.

As part of our authorized scope of services, a 25-foot-deep piezometer was installed within the resultant borehole from our exploratory boring B-1. The following Table I presents the results of our monitoring of the groundwater level in the borehole over an approximately one month period from May 29, 2012 to June 28, 2012.

TABLE I – PIEZOMETER MONITORING DATA

Date of Measurement	Surface Elevation (ft.)	Measured Depth to Water (ft.)	Measured Elevation of Water (ft.)
05/29/12	12.0	10.50	1.50
06/07/12	12.0	10.17	1.83
06/15/12	12.0	10.33	1.67
06/21/12	12.0	10.17	1.83
06/28/12	12.0	10.33	1.67

Note: Elevations taken from Architectural Plans prepared by Bokal & Sneed Architects.

TECTONIC SETTING: No faults are known to traverse the subject site. However, it should be noted that much of Southern California, including the San Diego County area, is characterized by a series of Quaternary-age fault zones that consist of several individual, en echelon faults that generally strike in a northerly to northwesterly direction. Some of these fault zones (and the individual faults within the zone) are classified as "active" according to the criteria of the California Division of Mines and Geology. Active fault zones are those that have shown conclusive evidence of faulting during the Holocene Epoch (the most recent 11,000 years).

The Division of Mines and Geology used the term "potentially active" on Earthquake Fault Zone maps until 1988 to refer to all Quaternary-age (last 1.6 million years) faults for the purpose of evaluation for possible zonation in accordance with the Alquist-Priolo Earthquake Fault Zoning Act and identified all Quaternary-age faults as "potentially active" except for certain faults that were presumed to be inactive based on direct geologic evidence of inactivity during all of Holocene time or longer. Some faults considered to be "potentially active" would be considered to be "active" but lack specific criteria used by the State Geologist, such as *sufficiently active* and *well-defined*. Faults older than Quaternary-age are not specifically defined in Special Publication 42, Fault Rupture Hazard Zones in California, published by the California Division of Mines and

Geology. However, it is generally accepted that faults showing no movement during the Quaternary period may be considered to be "inactive". Two relatively small, presumably inactive faults are exposed along the face of the slope on and adjacent to the eastern portion of the site (see Plate No. 1). Structural setbacks from these faults to structures for human occupancy are not anticipated. As such, these minor faults should not affect site development.

The site is not located within an Alquist-Priolo Earthquake Fault Zone. A review of available geologic maps indicates that the active Rose Canyon Fault Zone is located approximately 3.9 kilometers to the west of the subject site. Other active fault zones in the region that could possibly affect the site include the Coronado Bank Fault Zone to the west, the Newport-Inglewood and Palos Verdes Fault Zones to the northwest, and the Elsinore and Earthquake Valley Fault Zones to the northeast. The following Table II presents those proximal, active faults that are anticipated to most significantly contribute to the ground-motion hazard at the site.

TABLE II: PROXIMAL FAULT ZONES

Fault Zone	Distance	Max. Magnitude Earthquake
Rose Canyon	3.9 km	7.2 Magnitude
Coronado Bank	26 km	7.6 Magnitude
Newport-Inglewood	26 km	7.1 Magnitude
Elsinore (Julian)	50 km	7.1 Magnitude
Earthquake Valley	68 km	6.5 Magnitude
Palos Verdes	72 km	7.3 Magnitude

GEOLOGIC HAZARDS

LANDSLIDE POTENTIAL AND SLOPE STABILITY

GENERAL: The Relative Landslide Susceptibility and Landslide Distribution Map of the Del Mar Quadrangle prepared by the California Division of Mines and Geology indicates that the site is situated within Relative Landslide Susceptibility Area 3-1. Area 3 is considered to be "generally susceptible" to slope failures. Subarea 3-1 includes slopes considered to be at or near their stability limits due to a combination of slope steepness and material strengths. Although most slopes within Subarea 3-1 are not considered to contain landslides, they are considered subject to failure if adversely modified (Tan and Giffen, 1995). Based on our investigation, the slopes on and adjacent to the site were found to be comprised of relatively dense, Tertiary-age sediments. However, areas of talus exist along the base of these slopes. As part of our scope of services, we have prepared a quantitative slope stability analysis of the existing slope area along the east side of the site.

As project planning and design progress, additional analyses should be included within a report of preliminary geotechnical investigation for the project.

STABILITY ANALYSIS: To analyze the stability of the site and proximal slope areas, the proposed topography along geologic cross section B-B' (see Plate No. 2) was analyzed. The results of the stability analysis are presented on Appendix C. A description of the geologic units comprising the slope areas is presented above in the "Geologic Setting and Soil Description" section of this report.

Our slope stability analysis has been performed incorporating circular-type modes of failure observed during historic slope failures within the earth materials that underlie the site. Given the favorable neutral orientation of the Tertiary-age sedimentary units comprising the on- and off-site sloping areas, the modeling of block-type failure mechanisms was not considered necessary or performed during our stability analysis. As presented herein, the minimum factor-of-safety that is considered stable is 1.5.

STRENGTH PARAMETERS: The strength parameters for the materials comprising the slope and adjacent areas were estimated based on the results of direct shear testing and our experience with similar soil types in the vicinity of the site. The unit weights of the earth materials that underlie the subject site and adjacent areas utilized in our stability analysis were chosen based on the results of our laboratory testing and our experience with similar materials in the vicinity of the subject site. It is our professional opinion that the strength parameters and unit weights presented below and utilized in our stability analyses provide for conservative slope stability analyses.

Soil Type	Unit Weight, γ	Phi, ϕ	Cohesion, c
Artificial Fill (Qaf)	115 pcf	32 °	50 psf
Torrey Sandstone (Tt)	120 pcf	34 °	400 psf
Delmar Formation (Td)	120 pcf (wet)	29 °	800 psf

METHOD OF ANALYSIS: The analysis of the gross stability of the slope along the east side of the site was performed using Version 2 of the GSTABL7© computer program developed by Garry H. Gregory, PE. The program analyzes circular, block, specified, and randomly shaped failure surfaces using the Modified Bishop, Janbu, or Spencer's Methods. The STEDwin© computer program, developed by Harald W. Van Aller, P. E., was used in conjunction with this program for data entry and graphics display.

The proposed topography of the subject site and adjacent areas along geologic cross sections B-B' (assuming removal of talus) was analyzed for circular-type failures originating at the toe of the slope face. Each failure

analysis was programmed to run at least 2,000 random failure surfaces. The most critical failure surfaces from each analysis were accumulated and sorted by value of the factor-of-safety. After the specified number of failure surfaces were successfully generated and analyzed, the ten most critical surfaces were plotted so that the pattern may be studied.

RESULTS OF GROSS STABILITY ANALYSIS: The results of our stability analyses indicate that the lowest static factors-of-safety for the existing slope along the east side of the site is approximately 1.5 along cross section B-B (see Appendix C).

SURFICAL STABILITY: The results of our surficial slope stability analysis, which was performed to model the steepest portions of the on-site slopes (1:1 (H:V)), indicates that the slopes display a factor-of- safety of 1.5 or greater against surficial slope failures for saturation depths of approximately 3 feet or less. The results of these analyses are included at the rear of Appendix C of this report. It should, however, be recognized that improper or unmaintained site drainage and/or irrigation practices may lead to accelerated slope erosion over the design life of the proposed improvements.

LIQUEFACTION: The northern and central portions of the site that are underlain by Quaternary-age alluvial soils and saturated old paralic deposits are within an area considered susceptible to liquefaction. In order to be subject to liquefaction, three general conditions must be present: loose, sandy and silty deposits of a specified plasticity; shallow groundwater; and, earthquake shaking of sufficient magnitude and duration. Based on our study, it appears that shallow groundwater is present at the site and strong earthquake shaking may affect the site. Additionally, as described in the "Geologic Setting and Soil Description" section of this report, the alluvial materials below the water table contain varying layers of silty sands (SM), poorly-graded sands with silty (SP-SM), and poorly-graded sands (SP), all of which are expected to possess consistencies and plasticities conducive to liquefaction. As such, we have evaluated the potential for liquefaction at the site using the LIQUEFY2 computer program, version 1.50 (Blake, 1998).

Our analysis, which was performed in accordance with the procedure recommended by the National Center For Earthquake Engineering Research (NCEER, 1997) and Youd et. al. (2001), incorporates the geotechnical data obtained from the ground surface to 35 feet below existing site grades as observed in our boring B-3 (where the greatest depth of alluvium was encountered). As permitted in Section 1802.2.7 of the California Building Code, our calculations were performed using a peak ground acceleration equal to forty percent of the Design Spectral Response at 0.2 second (S_{DS}), which equates to 0.396 g. We used an earthquake

magnitude of 7.1 and a groundwater depth of 8 feet below existing site grades (it was measured at the time of exploration to be ±11 feet below existing site grades at the location of B-3) in our liquefaction analysis.

The results of our analyses indicate that most of the alluvium beneath the water table (modeled at a depth of 8 feet) is considered liquefiable in the event of code-based peak ground acceleration. The average calculated factors-of-safety against soil liquefaction of the modeled layers of alluvium ranged from approximately 0.35 to 1.0. The uppermost portions of the alluvium modeled in our analysis were calculated to demonstrate factors-of-safety of less than 1.3 against liquefaction and are thus considered to be potentially liquefiable. A printout of the results of our analyses is presented in Appendix B of this report.

It should be noted that the above analysis is in no way a guarantee that the analyses will accurately predict the liquefaction potential at the site. The analysis provides general information only on the site liquefaction potential. It should again be noted that many of the parameters used in liquefaction evaluations are subjective and open to interpretation, and that much is yet unknown about both the seismicity of the San Diego area and the phenomenon of liquefaction. It is suggested that additional deep explorations (borings or cone penetrometer tests) be performed across the alluviated portions of the site prior to the development of final geotechnical recommendations or building plans to further define the alluvium profile and liquefaction potential across the site.

Good engineering practice requires that where the evaluation indicates that liquefaction is likely, the hazards that might reasonably be caused by liquefaction that could result in the collapse of a structure and/or loss of life be mitigated. Foundation recommendations for the proposed development should address this situation and provide a life-safety performance level for the proposed site improvements.

LIQUEFACTION INDUCED SETTLEMENTS: The estimated liquefaction-induced settlements of the site in its present condition are presented in Appendix B (page B-4). Our analysis of the data obtained from Boring B-3 indicates that the alluviated portions of the site have a potential for up to approximately 3½ inches of seismically-induced, total settlement as the result of soil liquefaction caused by the design seismic event.

As described in the referenced CDMG Special Publication 117, considerable difficulty exists in trying to "reliably estimate" the amount of differential settlement at a site caused by soil liquefaction (CDMG, 1997). As such, the Recommended Procedures for the Implementation of Special Publication 117 suggests that conservative estimates of differential settlement at any given site can be assumed to be one-half to two-thirds of the total liquefaction-induced settlement (CDMG, 1999). It is further suggested that differential settlement estimates for a given site be used as representative of the minimum differential settlements between adjacent

structural supports (CDMG, 1999). Based on this and the seismically-induced, total settlement calculated in our analysis of the geologic data from Boring B-3, it is our professional opinion that a conservative estimate of the maximum differential settlement across the proposed improvements, for the existing site conditions, would be one-half of the total estimated settlement, which equates to approximately 1¾ inches of seismically-induced, differential settlement.

LATERAL SPREADING: As discussed in the previous section of this report, the alluvium and possibly some saturated portions of the older paralic deposits that underlie the site are considered subject to soil liquefaction in the event of the design seismic ground motion. As such, another potential geologic hazard that may affect site is the possibility of lateral ground spreading that could occur within the area of the subject site. Lateral ground spreading can occur when viscous liquefied soils flow downslope, usually towards a river channel or shoreline. Lateral spreads have occurred along ground surfaces with very slight (0.3<3%) gradients.

Analysis of lateral spread potential and prediction of potential horizontal displacements as the result of soil liquefaction often includes assumptions made regarding the lateral continuity/consistency of subsurface conditions across wide areas. Recent advancements and studies relating to potentially strain softening soils and the use of the cone penetrometer test (CPT) method to estimate cyclic resistance ratios and liquefaction-induced soil deformation (i.e. lateral spreading) has, in our professional opinion and judgment, significantly improved the predictability of lateral spreads. Now that the general subsurface conditions of the site have been evaluated, it is recommended that, prior to development of final plans or recommendations, the alluviated portions of the site be further evaluated with the use of CPTs to quantitatively address the potential, if indeed present, for lateral spreading at the site in the event of soil liquefaction.

FLOODING: As delineated on the referenced Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency, the relatively level areas of the site along Jimmy Durante Boulevard and San Dieguito Road are located within the boundary of a special flood hazard area AE which is considered subject to inundation by the 1% annual chance flood with a base flood elevation of ±20 feet (elevation based on North American Vertical Datum 1988). We understand that mitigation of the flood potential at the site will be addresses by building designs (i.e. elevations) and possibly site grading. If necessary, further assessment of site flooding potential should be provided by a civil engineering consultant.

TSUNAMIS: Tsunamis are great sea waves produced by a submarine earthquake or volcanic eruption. Historically, the San Diego area has been free of tsunami-related hazards and tsunamis reaching San Diego have generally been well within the normal tidal range. It is thought that the wide continental margin off the

coast acts to diffuse and reflect the wave energy of remotely generated tsunamis. The largest historical tsunami to reach San Diego's coast was 4.6 feet high, generated by the 1960 earthquake in Chile. A lack of knowledge about the offshore fault systems makes it difficult to assess the risk due to locally generated tsunamis.

According to the San Diego County Multi-Jurisdictional Hazard Mitigation Plan, the lower, relatively flat areas of the subject site along Jimmy Durante Boulevard and San Dieguito Road are located within the limits of the maximum projected tsunami runup. It should be noted that the tsunami hazard at the subject site is not greater than it is along other proximal areas of coastal Del Mar. Similar to other proximal areas, the tsunami hazard at the site could be mitigated with a regional warning system and or evacuation protocol (signage) to be followed in the event of a tsunami warning.

SEICHES: Seiches are periodic oscillations in large bodies of water such as lakes, harbors, bays or reservoirs. Due to the geology and configuration of the San Dieguito Rive/Lagoon, the site is considered to have a relatively low risk potential for damage caused by seiches.

CONCLUSIONS

In general, our findings indicate that, from a geologic and geotechnical perspective, the subject site would be suitable for the proposed construction provided sound geotechnical evaluation and site specific recommendations are performed and presented to the project design team as the project planning and permitting progresses. The geologic hazards and geotechnical conditions expected to most significantly affect the development of the site as proposed include static settlement of the alluvium, fill and talus, shallow groundwater, liquefaction and possible lateral spreading of the alluvium and saturated portions of the old paralic deposits, dis-similar bearing conditions across the footprint of the main structure, and ground shaking in the event of major, proximal seismic event.

It is expected that any future development of the site would include the complete removal of all talus and man-placed fill soils from all areas of the site to receive settlement sensitive improvements or structural fill. Such remedial earthwork would serve to address the static settlement of the fill and talus.

The presence of the liquefiable and settlement-prone alluvium within the central and northern portions of the site, as well as the anticipated dis-similarity of bearing conditions across the site, will likely require some combination of remedial grading (i.e. removal and re-compaction of near surface soils), ground improvement techniques (such as stone columns), and/or special foundation design (i.e. driven piles, auger-cast piles, or

structural mat foundations). It should also be noted that lowering the proposed grades of the site within the alluviated areas would serve to potentially exacerbate the liquefaction potential across those areas of the site by the reducing the overburden forces on the underlying alluvial soils.

The presence of relatively shallow groundwater across portions of the site may affect the stability of temporary excavations that may be required for utility installations, temporary cut slopes, and remedial grading operations in the alluviated areas. It should also be recognized that, due to the proximity of the site to the San Dieguito River and the anticipated hydraulic conductivity of the alluvium underlying the site, any proposed de-watering during site construction or grading would need to be designed by de-watering specialist to handle large volumes of water. Furthermore, rapid or significant de-watering, if required to allow for deep excavations on-site, may result in ground subsidence around the de-watering areas.

Some degree of ground shaking due to seismic activity along one of the regional active faults should be expected over the design life of the proposed project. However, construction in accordance with the requirements of the most recent edition of the California Building Code and the local governmental agencies should provide a level of life-safety suitable for the type of development proposed.

FIELD EXPLORATIONS

Ten subsurface explorations were made at the locations indicated on the attached Plate Number 1 on May 29, 2012. These explorations consisted of three small-diameter borings drilled using a truck-mounted, Marl M-5 Unimog drill rig and seven test trenches excavated with a rubber tire backhoe. The fieldwork was conducted under the observation of our engineering geology personnel. The explorations were carefully logged when made. The explorations were carefully logged when made.

The boring and test trench logs are presented on the following Plate Numbers 4 through 15. The soils are described in accordance with the Unified Soils Classification. In addition, a verbal textural description, the wet color, the apparent moisture and the density or consistency are provided. The density of the granular soils is given as very loose, loose, medium dense, dense or very dense.

Relatively undisturbed drive samples were collected using a modified California sampler. The sampler, with an external diameter of 3.0 inches, is lined with 1-inch-long, thin, brass rings with inside diameters of approximately 2.4 inches. The sample barrel was driven into the ground with the weight of a 140-pound hammer falling 30 inches in general accordance with ASTM D 3550-84. The driving weight is permitted to fall freely. The number of blows per foot of driving, or as indicated, are presented on the boring logs as an

index to the relative resistance of the sampled materials. The samples were removed from the sample barrel in the brass rings, and sealed. Bulk samples of the encountered earth materials were also collected. Samples were transported to our laboratory for testing.

LABORATORY TESTING

Laboratory tests were performed in accordance with the generally accepted American Society for Testing and Materials (ASTM) test methods or suggested procedures. A brief description of the tests performed is presented below:

a) **CLASSIFICATION:** Field classifications were verified in the laboratory by visual examination. The final soil classifications are in accordance with the Unified Soil Classification System.

b) **MOISTURE-DENSITY:** In-place moisture contents and dry densities were determined for representative soil samples. This information was an aid to classification and permitted recognition of variations in material consistency with depth. The dry unit weight is determined in pounds per cubic foot, and the in-place moisture content is determined as a percentage of the soil's dry weight. The results are summarized in the boring and test trench logs.

c) **MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT:** The maximum dry density and optimum moisture content of typical soils were determined in the laboratory in accordance with ASTM Standard Test D-1557, Method A. The results of these tests are presented in Appendix D of this report

d) **DIRECT SHEAR TEST:** Direct shear tests were performed on representative samples of the on-site soils to determine the failure envelope based on yield shear strength. The shear box was designed to accommodate a sample having a diameter of 2.375 inches or 2.50 inches and a height of 1.0 inch. The samples were saturated and tested at different vertical loads. The shear stress was applied at a constant rate of strain of approximately 0.05 inch per minute. The results of these tests are presented on Appendix D of this report.

e) **GRAIN SIZE DISTRUBUTION:** The grain size distributions of selected samples were determined in accordance with ASTM C136 and/or ASTM D422. The results of these tests are presented in Appendix D of this report.

SCALE: 1" = 20'

Qtl
Qal
Qtl
Tt
Tt
Tt
Qop
Qtl
Qal
Qal
Qal
Qop
Qaf
Qop
Qal
Qop

B-2
T-7
T-6
T-2
B-3
T-3
T-1
T-4
T-5
B-1

75
27
30

A
A'
B
B'
C
C'

SAN DEGUITO ROAD

JIMMY DURANTE BLVD.

NOTES

PARKING GARAGE CALCULATIONS

96 RESERVED PARKING SPACES
2% OF RESERVED PARKING IS RESERVED AS H.C. PARKING AS REQUIRED PER I.B.C.

TYPICAL PARKING SPACE = 9'-0" x 18'-0"

TOTAL GARAGE AREA: 35226 SQ. FT.
(INCLUDES ALL STORAGE RMS, EQUIPMENT RMS, ELEVATORS & STAIRWELLS)

10 GUEST PARKING SPACES
INCLUDING 1 REQUIRED H.C. SPACE

LEGEND

PROPERTY LINE

WETLANDS

50 FT. REQUIRED WETLANDS BUFFER

CWE LEGEND

B-3	APPROXIMATE BORING LOCATION
T-6	APPROXIMATE TEST TRENCH LOCATION
	ACTIVE SEEP
	BEDDING ATTITUDE
	BEDDING HORIZONTAL
	MINOR FAULT AND DIP DIRECTION
	MINOR FAULT (VERTICAL)
	GEOLOGIC CONTACT
	GEOLOGIC CROSS SECTION
Qaf	ARTIFICIAL FILL
Qtl	TALUS DEPOSITS
Qal	ALLUVIUM
Qop	OLD PARALIC DEPOSITS
Tt	TORREY SANDSTONE

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92014

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SCHEMATIC DESIGN

Sheet Title
PARKING GARAGE
ELEVATION 12

LICENSED ARCHITECT
JAMES E. BOKAL
No. C 21312
REN. 7/31/2013
STATE OF CALIFORNIA

Scale	AS NOTED
Printed	09-10-2012
Drawn	JDP
Checked	JEB
Job No.	0912

A-1.0

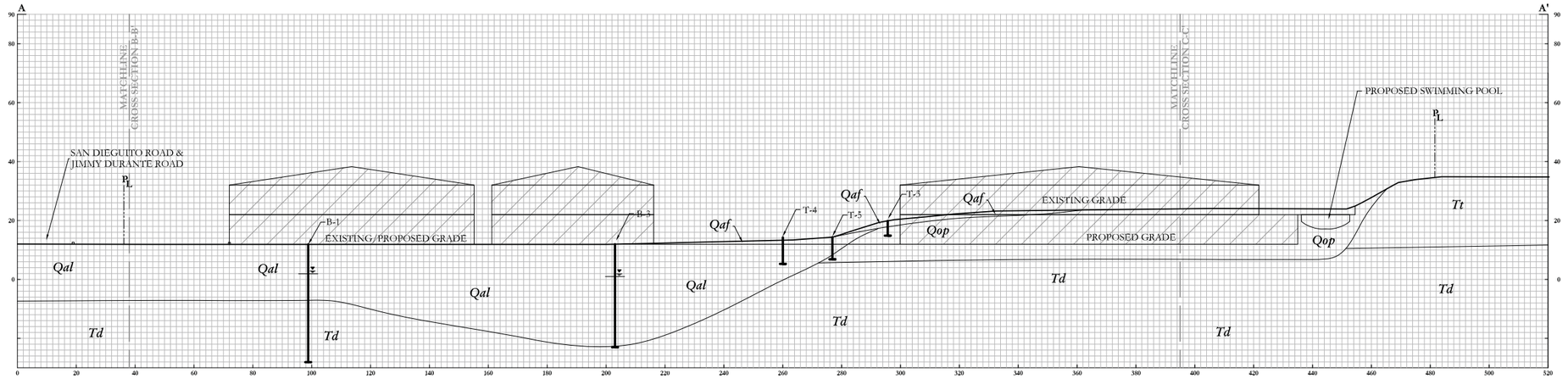
SITE PLAN AND GEOTECHNICAL MAP

PROPOSED DURANTE APARTMENTS
2100 JIMMY DURANTE BOULEVARD
DEL MAR, CALIFORNIA

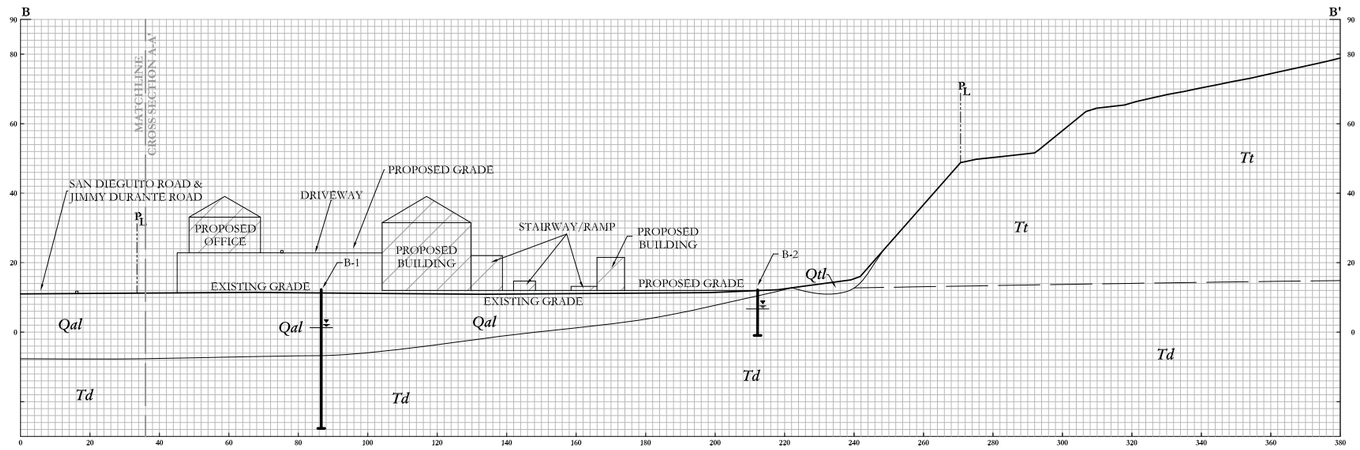
DATE:	SEPTEMBER 2012	JOB NO.:	2120190.01
BY:	DRR/JDB	PLATE NO.:	1

CHRISTIAN WHEELER ENGINEERING

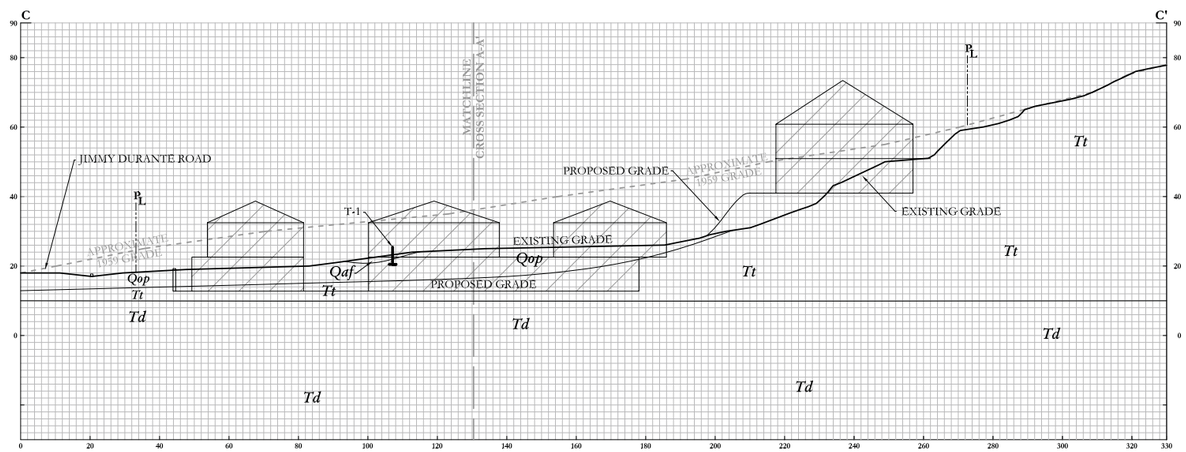
GEOLOGIC CROSS SECTION A-A'



GEOLOGIC CROSS SECTION B-B'



GEOLOGIC CROSS SECTION C-C'



CWE LEGEND	
Qaf	ARTIFICIAL FILL
Qtl	TALUS DEPOSITS
Qal	ALLUVIUM
Qop	OLD PARALIC DEPOSITS
Tt	TORREY SANDSTONE
Td	DEL MAR FORMATION

0 20' 40'

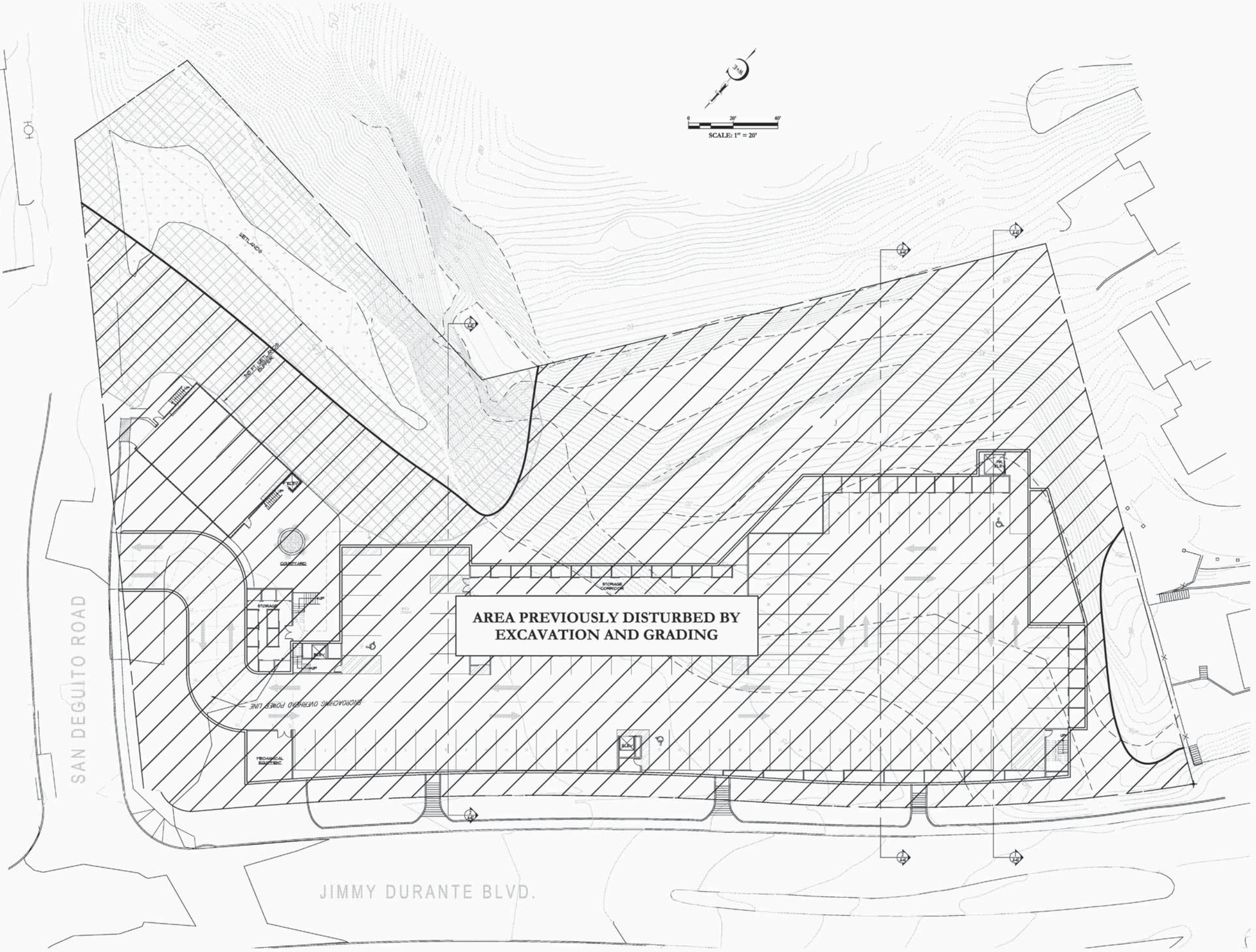
SCALE: 1" = 20'

GEOLOGIC CROSS SECTIONS A-A', B-B', AND C-C'

PROPOSED DURANTE APARTMENTS
2100 JIMMY DURANTE BOULEVARD
DEL MAR, CALIFORNIA

DATE:	SEPTEMBER 2012	JOB NO.:	2120190.01
BY:	DRR/JDB	PLATE NO.:	2

CHRISTIAN WHEELER ENGINEERING



NOTES

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2% OF RESERVED PARKING IS RESERVED AS H.C. PARKING AS REQUIRED PER I.B.C.

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(INCLUDES ALL STORAGE RMS, EQUIPMENT RMS, ELEVATORS & STAIRWELLS)

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INCLUDING 1 REQUIRED H.C. SPACE

LEGEND

PROPERTY LINE

WETLANDS

50 FT. REQUIRED WETLAND'S BUFFER

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SCHEMATIC DESIGN

Sheet Title
PARKING GARAGE ELEVATION 12

LICENSED ARCHITECT JAMES B. SNEED No. C 21312 REN. 7/31/2013 STATE OF CALIFORNIA

Scale	AS NOTED
Printed	09-12-2012
Drawn	JDF
Checked	JBS
Job No.	1262

A-1.0

SITE DISTURBANCE MAP

PROPOSED DURANTE APARTMENTS
2100 JIMMY DURANTE BOULEVARD
DEL MAR, CALIFORNIA

DATE:	SEPTEMBER 2012	JOB NO.:	2120190.01
BY:	DRR/JDB	PLATE NO.:	3

CHRISTIAN WHEELER ENGINEERING

LOG OF TEST BORING B-1

Date Drilled:	5/29/2012	Equipment:	Unimog Marl M-5
Logged by:	TSW	Auger Type:	Hollow Stem
Existing Elevation:	12 feet	Drive Type:	140 lb/30 in
Proposed Elevation:	-- feet	Depth to Water:	10.6 feet

Sample Type and Laboratory Test Legend

Cal Modified California Sampler
SPT Standard Penetration Test
ST Shelby Tube
CK Chunk Sample
DR Density Ring

MD Maximum Density
SO4 Soluble Sulfates
SA Sieve Analysis
HA Hydrometer
SE Sand Equivalent
PI Plasticity Index
DS Direct Shear
Con Consolidation
EI Expansion Index
R-Val Resistance Value
Chl Soluble Chlorides
Res pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	SATURATION (%)	LABORATORY TESTS
0	12		SM	**Artificial Fill/ Younger Alluvium Undifferenciated (Qaf/Qyal):** Light to medium brown, damp, medium dense to dense, fine- to medium-grained, SILTY SAND.							
				Damp to moist.	68	Cal		3.3	123.2		
5	7				42	Cal		3.7	125.0		
			SP	**Younger Alluvuim (Qyal):** Reddish-brown and dark gray, moist, medium dense, medium- to coarse-grained, POORLY GRADED SAND.	29	Cal					SA
10	2			Saturated, groundwater measured at 10½ feet.	23	*SPT					
				Flowing sands and surge at 13 feet.	16	SPT					
15	-3										
20	-8		SM	**Delmar Formation (Td):** Light gray and orange, saturated, medium dense, fine- to medium-grained, micaceous, SILTY SAND.	24	SPT					SA
25	-13				19	SPT					SA
30	-18										

Boring continued on Plate 2.

Symbol Legend

- Groundwater
- Apparent Seepage
- * No Sample Recovery
- ** Erroneous Blow Count (rocks present)

CHRISTIAN WHEELER ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY: DJF	DATE: September 2012
JOB NO.: 2120190	PLATE NO.: 4

LOG OF TEST BORING B-1 (Continued)

Date Drilled: 5/29/2012 | Equipment: Unimog Marl M-5
Logged by: TSW | Auger Type: Hollow Stem
Existing Elevation: 12 feet | Drive Type: 140 lb/30 in
Proposed Elevation: -- feet | Depth to Water: 10.6 feet

Sample Type and Laboratory Test Legend

Cal Modified California Sampler | CK Chunk Sample
SPT Standard Penetration Test | DR Density Ring
ST Shelby Tube

MD Maximum Density | DS Direct Shear
SO4 Soluble Sulfates | Con Consolidation
SA Sieve Analysis | EI Expansion Index
HA Hydrometer | R-Val Resistance Value
SE Sand Equivalent | Chl Soluble Chlorides
PI Plasticity Index | Res pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	SATURATION (%)	LABORATORY TESTS
30	-18		SM	**Delmar Formation (Td):** Light gray and orange, saturated, medium dense, fine- to medium-grained, micaceous, SILTY SAND.	44	SPT					SA
35	-23		CL	Dark gray, saturated, hard, SILTY CLAY.	35	SPT					
					34	SPT					
40	-28			Boring terminated at 40 feet. Groundwater encountered at 10½ feet. Piezometer installed to a depth of 25 feet.							
45	-33										
50	-38										
55	-43										
60	-48										

Symbol Legend

- Groundwater
- Apparent Seepage
- * No Sample Recovery
- ** Erroneous Blow Count (rocks present)

CHRISTIAN WHEELER ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY: DJF | DATE: September 2012
JOB NO.: 2120190 | PLATE NO.: 5

LOG OF TEST BORING B-2

Date Drilled: 5/29/2012 | Equipment: Unimog Marl M-5
Logged by: TSW | Auger Type: Hollow Stem
Existing Elevation: 12½ feet | Drive Type: 140 lb/30 in
Proposed Elevation: -- feet | Depth to Water: 5½ feet

Sample Type and Laboratory Test Legend

Cal Modified California Sampler | CK Chunk Sample
SPT Standard Penetration Test | DR Density Ring
ST Shelby Tube

MD Maximum Density | DS Direct Shear
SO4 Soluble Sulfates | Con Consolidation
SA Sieve Analysis | EI Expansion Index
HA Hydrometer | R-Val Resistance Value
SE Sand Equivalent | Chl Soluble Chlorides
PI Plasticity Index | Res pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	SATURATION (%)	LABORATORY TESTS
0	12½		SM	**Artificial Fill/ Younger Alluvium Undifferenciated (Qaf/Qyal):** Light to medium brown, damp, medium dense to dense, fine- to medium-grained, SILTY SAND.							
			SM	**Delmar Formation (Td):** Olive gray with orange iron staining, moist, dense to very dense, fine- to medium-grained, SILTY SAND WITH TRACE CLAY.	62	Cal					MD
5	7½		▼	Saturated, groundwater measured at 5½ feet.	50/4"	Cal					
10	2½				50/4"	Cal		7.7	125.7		DS
					50/3"	Cal					
15	-3½			Boring terminated at 14 feet. Groundwater encountered at 5½ feet.							
20	-8½										
25	-13½										
30	-18½										

Symbol Legend

▼ Groundwater
Apparent Seepage
* No Sample Recovery
** Erroneous Blow Count (rocks present)

CHRISTIAN WHEELER ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY: DJF | DATE: September 2012
JOB NO.: 2120190 | PLATE NO.: 6

LOG OF TEST BORING B-3

Date Drilled:	5/29/2012	Equipment:	Unimog Marl M-5
Logged by:	TSW	Auger Type:	Hollow Stem
Existing Elevation:	13 feet	Drive Type:	140 lb/30 in
Proposed Elevation:	-- feet	Depth to Water:	11 feet

Sample Type and Laboratory Test Legend

Cal Modified California Sampler
SPT Standard Penetration Test
ST Shelby Tube
CK Chunk Sample
DR Density Ring

MD Maximum Density
SO4 Soluble Sulfates
SA Sieve Analysis
HA Hydrometer
SE Sand Equivalent
PI Plasticity Index
DS Direct Shear
Con Consolidation
EI Expansion Index
R-Val Resistance Value
Chl Soluble Chlorides
Res pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	SATURATION (%)	LABORATORY TESTS
0	13		SM	**Artificial Fill/ Younger Alluvium Undifferenciated (Qaf/Qyal):** Light to medium brown, damp, medium dense to dense, fine- to medium-grained, SILTY SAND.							
			SP-SM	**Younger Alluvuim (Qyal):** Reddish-brown and dark gray, damp, medium dense, medium- to coarse-grained, POORLY-GRADED SAND WITH SILT.	33	Cal		1.1	107.9		
5	8				27	Cal		0.8	101.6		
					34	Cal		0.3	102.3		
10	3		▼		37	Cal					
				Saturated, groundwater measured at 11 feet.							
			SP	Dark gray, medium dense, fine- to coarse- grained, POORLY-GRADED SAND. Saturated.							
15	-2				17	SPT					SA
20	-7				14	SPT					SA
			SM	Dark grayish-brown and light green, saturated, medium dense, fine- to medium-grained, micaceous, SILTY SAND.							
25	-12				19	SPT					SA
30	-17										

Boring continued on Plate 6.

Symbol Legend

▼ Groundwater
Apparent Seepage
* No Sample Recovery
** Erroneous Blow Count (rocks present)

CHRISTIAN WHEELER ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY: DJF	DATE: September 2012
JOB NO.: 2120190	PLATE NO.: 7

LOG OF TEST BORING B-3 (Continued)

Sample Type and Laboratory Test Legend

Cal Modified California Sampler
CK Chunk Sample
SPT Standard Penetration Test
DR Density Ring
ST Shelby Tube

MD Maximum Density
SO4 Soluble Sulfates
SA Sieve Analysis
HA Hydrometer
SE Sand Equivalent
PI Plasticity Index
DS Direct Shear
Con Consolidation
EI Expansion Index
R-Val Resistance Value
Chl Soluble Chlorides
Res pH & Resistivity

Date Drilled: 5/29/2012
Logged by: TSW
Existing Elevation: 13 feet
Proposed Elevation: -- feet
Equipment: Unimog Marl M-5
Auger Type: Hollow Stem
Drive Type: 140 lb/30 in
Depth to Water: 11 feet

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	SATURATION (%)	LABORATORY TESTS
30	-17		SP-SM	**Younger Alluvium (Qyal):** Grayish-brown, saturated, medium dense, medium- to coarse-grained, POORLY GRADED SAND WITH SILT.	13	SPT					SA
35	-22		ML	**Delmar Formation (Td):** Greenish-gray, saturated, hard, CLAYEY SILT WITH SAND.	47	SPT					
				Boring terminated at 36 feet. Groundwater encountered at 11 feet.							
40	-27										
45	-32										
50	-37										
55	-42										
60	-47										

Symbol Legend

- Groundwater
- Apparent Seepage
- * No Sample Recovery
- ** Erroneous Blow Count (rocks present)

CHRISTIAN WHEELER ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY: DJF
DATE: September 2012
JOB NO.: 2120190
PLATE NO.: 8

LOG OF TRENCH T-1

Date Excavated:	5/29/12	Equipment:	Case 580L Backhoe
Logged by:	DRR	Bucket Size:	18 inch
Existing Elevation:	23 feet	Drive Weight:	N/A
Proposed Elevation:	N/A	Depth to Water:	N/A

Sample Type and Laboratory Test Legend

Cal	Modified California Sampler	CK	Chunk Sample
SPT	Standard Penetration Test	DR	Density Ring
ST	Shelby Tube		
MD	Maximum Density	DS	Direct Shear
SO4	Soluble Sulfates	Con	Consolidation
SA	Sieve Analysis	EI	Expansion Index
HA	Hydrometer	R-Val	Resistance Value
SE	Sand Equivalent	Chl	Soluble Chlorides
PI	Plasticity Index	Res	pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	RELATIVE COMPACTION (%)	LABORATORY TESTS
0	23		SM	**Artificial Fill (Qaf):** Medium brown, damp, loose, fine- to medium-grained, SILTY SAND.							
1	22		SM	**Old Paralic Deposits (Qop):** Medium brown and orangish-brown, damp to moist, medium dense to dense, fine- to medium-grained, CLAYEY SILTY SAND .		CK		7.2	119.8		
2	21										
3	20					CK		4.1	120.6		
4	19										
5	18					CK					
6	17			Terminated trench excavation at 5 feet. No groundwater or seepage encountered.							
7	16										
8	15										
9	14										
10	13										
11	12										
12	10										
13	9										
14	8										
15	7										

Symbol Legend

- Groundwater
- Apparent Seepage
- * No Sample Recovery
- ** Nonrepresetative Blow Count (rocks present)

CHRISTIAN WHEELER ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY:	DJF	DATE:	September 2012
JOB NO.:	2120190	PLATE NO.:	9

LOG OF TRENCH T-2

Date Excavated:	5/29/12	Equipment:	Case 580L Backhoe
Logged by:	DRR	Bucket Size:	18 inch
Existing Elevation:	28 feet	Drive Weight:	N/A
Proposed Elevation:	N/A	Depth to Water:	N/A

Sample Type and Laboratory Test Legend

Cal	Modified California Sampler	CK	Chunk Sample
SPT	Standard Penetration Test	DR	Density Ring
ST	Shelby Tube		
MD	Maximum Density	DS	Direct Shear
SO4	Soluble Sulfates	Con	Consolidation
SA	Sieve Analysis	EI	Expansion Index
HA	Hydrometer	R-Val	Resistance Value
SE	Sand Equivalent	Chl	Soluble Chlorides
PI	Plasticity Index	Res	pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	RELATIVE COMPACTION (%)	LABORATORY TESTS
0	28		SM	**Artificial Fill (Qaf):** Medium brown, damp, loose, fine- to medium-grained, SILTY SAND with abundant organic debris.							
1	27		SM	**Old Paralic Deposits (Qop):** Medium brown and orangish-brown, damp to moist, medium dense, fine- to medium-grained, CLAYEY SILTY SAND, slightly porous in the upper 12 inches. Dense at 2 feet.							
2	26										
3	25										
4	24			Terminated trench excavation at 4 feet. No groundwater or seepage encountered.							
5	23										
6	22										
7	21										
8	20										
9	19										
10	18										
11	17										
12	16										
13	15										
14	14										
15	13										

Symbol Legend

- Groundwater
- Apparent Seepage
- * No Sample Recovery
- ** Nonrepresetative Blow Count (rocks present)

CHRISTIAN WHEELER ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY:	DJF	DATE:	September 2012
JOB NO.:	2120190	PLATE NO.:	10

LOG OF TRENCH T-3

Date Excavated:	5/29/12	Equipment:	Case 580L Backhoe
Logged by:	DRR	Bucket Size:	18 inch
Existing Elevation:	22 feet	Drive Weight:	N/A
Proposed Elevation:	N/A	Depth to Water:	N/A

Sample Type and Laboratory Test Legend

Cal Modified California Sampler
CK Chunk Sample
SPT Standard Penetration Test
DR Density Ring
ST Shelby Tube

MD Maximum Density
SO4 Soluble Sulfates
SA Sieve Analysis
HA Hydrometer
SE Sand Equivalent
PI Plasticity Index
DS Direct Shear
Con Consolidation
EI Expansion Index
R-Val Resistance Value
Chl Soluble Chlorides
Res pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	RELATIVE COMPACTION (%)	LABORATORY TESTS
0	22		SM	**Artificial Fill (Qaf):** Medium brown, damp, loose, fine- to medium-grained, SILTY SAND with trace gravesl and slight organic debis in the upper 12 inches.							
1	21										MD
2	20		SM	**Old Paralic Deposits (Qop):** Medium brown and orangish-brown, moist,dense, fine- to medium-grained, SILTY SAND .							
3	19					CK		10.8	110.6		
4	18										
5	17					CK		8.7	108.1		DS
6	16					CK		11.5	112.5		
				Terminated trench excavation at 6 feet. No groundwater or seepage encountered.							
7	15										
8	14										
9	13										
10	12										
11	11										
12	10										
13	9										
14	8										
15	7										

Symbol Legend

- Groundwater
- Apparent Seepage
- * No Sample Recovery
- ** Nonrepresetative Blow Count (rocks present)

CHRISTIAN WHEELER
ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY:	DJF	DATE:	September 2012
JOB NO.:	2120190	PLATE NO.:	11

LOG OF TRENCH T-4

Date Excavated:	5/29/12	Equipment:	Case 580L Backhoe
Logged by:	DRR	Bucket Size:	18 inch
Existing Elevation:	14½ feet	Drive Weight:	N/A
Proposed Elevation:	N/A	Depth to Water:	N/A

Sample Type and Laboratory Test Legend

Cal	Modified California Sampler	CK	Chunk Sample
SPT	Standard Penetration Test	DR	Density Ring
ST	Shelby Tube		
MD	Maximum Density	DS	Direct Shear
SO4	Soluble Sulfates	Con	Consolidation
SA	Sieve Analysis	EI	Expansion Index
HA	Hydrometer	R-Val	Resistance Value
SE	Sand Equivalent	Chl	Soluble Chlorides
PI	Plasticity Index	Res	pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)
0	14½	SM	**Artificial Fill (Qaf):** Medium brown, dry, medium dense, fine- to medium-grained, SILTY SAND with trace gravels..
1	13½	SP	**Younger Alluvium (Qyal):** Yellowish-brown, damp, loose to medium dense, fine- to coarse-grained, slightly micaceous, POORLY GRADED SAND.
2	12½		
3	11½		
4	10½		
5	9½		
6	8½		
7	7½		
8	6½		Seepage and caving of trench sidewalls at 7½ feet.
9	5½		Terminated trench excavation at 9 feet due to caving.
10	4½		
11	3½		
12	2½		
13	1½		
14	½		
15	-1½		

PENETRATION (blows) | SAMPLE TYPE | BULK | MOISTURE CONTENT (%) | DRY DENSITY (pcf) | RELATIVE COMPACTION (%) | LABORATORY TESTS

Symbol Legend

- Groundwater
- Apparent Seepage
- * No Sample Recovery
- ** Nonrepresetative Blow Count (rocks present)

CHRISTIAN WHEELER ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY:	DJF	DATE:	September 2012
JOB NO.:	2120190	PLATE NO.:	12

LOG OF TRENCH T-5

Date Excavated:	5/29/12	Equipment:	Case 580L Backhoe
Logged by:	DRR	Bucket Size:	18 inch
Existing Elevation:	15 feet	Drive Weight:	N/A
Proposed Elevation:	N/A	Depth to Water:	N/A

Sample Type and Laboratory Test Legend

Cal	Modified California Sampler	CK	Chunk Sample
SPT	Standard Penetration Test	DR	Density Ring
ST	Shelby Tube		
MD	Maximum Density	DS	Direct Shear
SO4	Soluble Sulfates	Con	Consolidation
SA	Sieve Analysis	EI	Expansion Index
HA	Hydrometer	R-Val	Resistance Value
SE	Sand Equivalent	Chl	Soluble Chlorides
PI	Plasticity Index	Res	pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	RELATIVE COMPACTION (%)	LABORATORY TESTS
0	15		SM	**Artificial Fill (Qaf):** Medium brown, damp, loose, fine- to medium-grained, SILTY SAND with trace asphalt debris.							
1	14										
2	13		SP	**Younger Alluvium (Qyal):** Yellowish-brown, damp, loose to medium dense, fine- to coarse-grained, slightly micaceous, POORLY GRADED SAND.							
3	12										
4	11			Moist.							
5	10			Moist to wet.							
6	9		SM	**Old Paralic Deposits (Qop):** Medium brown, moist, medium dense, fine- to medium-grained, SILTY SAND.		CK		3.0	107.2		
7	8										
8	7			Terminated trench excavation at 7½ feet due to caving.							
9	6										
10	5										
11	4										
12	3										
13	2										
14	1										
15	0										

Symbol Legend

- Groundwater
- Apparent Seepage
- * No Sample Recovery
- ** Nonrepresetative Blow Count (rocks present)

CHRISTIAN WHEELER ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY:	DJF	DATE:	September 2012
JOB NO.:	2120190	PLATE NO.:	13

LOG OF TRENCH T-6

Date Excavated:	5/29/12	Equipment:	Case 580L Backhoe
Logged by:	DRR	Bucket Size:	18 inch
Existing Elevation:	20 feet	Drive Weight:	N/A
Proposed Elevation:	N/A	Depth to Water:	N/A

Sample Type and Laboratory Test Legend

Cal	Modified California Sampler	CK	Chunk Sample
SPT	Standard Penetration Test	DR	Density Ring
ST	Shelby Tube		
MD	Maximum Density	DS	Direct Shear
SO4	Soluble Sulfates	Con	Consolidation
SA	Sieve Analysis	EI	Expansion Index
HA	Hydrometer	R-Val	Resistance Value
SE	Sand Equivalent	Chl	Soluble Chlorides
PI	Plasticity Index	Res	pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	RELATIVE COMPACTION (%)	LABORATORY TESTS
0	20		SM	**Artificial Fill (Qaf):** Medium brown, damp, loose, fine- to medium-grained, SILTY SAND.							
1	19										
2	18		SM	**Talus Debris (Qtal):** Light brown, moist, loose to medium dense, fine- to medium-grained, SILTY SAND with trace gravels.							
3	17										
4	16										
5	15			Slight caving from 5 to 9 feet.							
6	14										
7	13										
8	12		SP-SM	**Younger Alluium (Qyal):** Yellowish brown, moist, loose, fine- to medium-grained, POORLY GRADED SAND WITH SILT.							
9	11										
10	10		SM	**Delmar Formation (Td):** Light brown, moist, dense, fine- to medium-grained, SILTY SAND.							
11	9			Terminated trench excavation at 11 feet.							
12	8										
13	7										
14	6										
15	5										

Symbol Legend

- Groundwater
- Apparent Seepage
- * No Sample Recovery
- ** Nonrepresetative Blow Count (rocks present)

CHRISTIAN WHEELER ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY:	DJF	DATE:	September 2012
JOB NO.:	2120190	PLATE NO.:	14

LOG OF TRENCH T-7

Date Excavated:	5/29/12	Equipment:	Case 580L Backhoe
Logged by:	DRR	Bucket Size:	18 inch
Existing Elevation:	12 feet	Drive Weight:	N/A
Proposed Elevation:	N/A	Depth to Water:	N/A

Sample Type and Laboratory Test Legend

Cal Modified California Sampler
CK Chunk Sample
SPT Standard Penetration Test
DR Density Ring
ST Shelby Tube

MD	Maximum Density	DS	Direct Shear
SO4	Soluble Sulfates	Con	Consolidation
SA	Sieve Analysis	EI	Expansion Index
HA	Hydrometer	R-Val	Resistance Value
SE	Sand Equivalent	Chl	Soluble Chlorides
PI	Plasticity Index	Res	pH & Resistivity

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS SYMBOL	SUMMARY OF SUBSURFACE CONDITIONS (based on Unified Soil Classification System)	PENETRATION (blows)	SAMPLE TYPE	BULK	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	RELATIVE COMPACTION (%)	LABORATORY TESTS
0	12		SM	**Artificial Fill (Qaf):** Medium brown, damp, loose to medium dense, fine- to medium-grained, SILTY SAND.							
1	11										
2	10		SC	**Delmar Formation (Td):** Olive brown, moist, dense to very dense, fine- to coarse-grained, CLAYEY SAND.		CK					
3	9										
4	8					CK					
5	7										
6	6			Terminated trench excavation at 6 feet. No groundwater or seepage encountered.							
7	5										
8	4										
9	3										
10	2										
11	1										
12	0										
13	-1										
14	-2										
15	-3										

Symbol Legend

- Groundwater
- Apparent Seepage
- * No Sample Recovery
- ** Nonrepresetative Blow Count (rocks present)

CHRISTIAN WHEELER
ENGINEERING

DURANTE APARTMENTS
2100 Jimmy Durante Boulevard, Del Mar, California.

BY:	DJF	DATE:	September 2012
JOB NO.:	2120190	PLATE NO.:	15

Appendix A
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TOPOGRAPHIC MAPS

City of San Diego, 1959, Topographic Map Sheet 290-1689; Scale: 1 inch = 200 feet

City of San Diego, 1979, Ortho-Topographic Map Sheet 290-1689; Scale: 1 inch = 200 feet

PHOTOGRAPHS

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PHOTOGRAPHS (continued)

San Diego County, 1953, Flight 8M, Photographs 9 and 10; Scale: 1 inch = 1700 feet (approximate).

San Diego County, 1970, Flight 4, Photographs 8 and 9; Scale: 1 inch= 1000 feet.

San Diego County, 1973, Flight 31, Photographs 29 and 30; Scale: 1 inch= 1000 feet.

San Diego County, 1978, Flight 17B, Photographs 41 and 42; Scale: 1 inch= 1000 feet (approximate).

San Diego County, 1983, Photographs 547 and 548; Scale: 1 inch= 2000 feet (approximate)

San Diego County, 1989, Flight 1, Photograph 207; Scale: 1 inch= 2000 feet (approximate).

Appendix B
Liquefaction Analysis

CWE 2120190.01
Proposed Durante Apartments
2100 Jimmy Durante Boulevard, Del Mar, California

```
*****************************
*                           *
*      L I Q U E F Y 2      *
*                           *
*       Version 1.50        *
*                           *
*****************************
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EMPIRICAL PREDICTION OF
EARTHQUAKE-INDUCED LIQUEFACTION POTENTIAL

JOB NUMBER: 2120190 DATE: 09-24-2012

JOB NAME: Durante Apartments

SOIL-PROFILE NAME: durante.LDW

BORING GROUNDWATER DEPTH: 8.00 ft

CALCULATION GROUNDWATER DEPTH: 8.00 ft

DESIGN EARTHQUAKE MAGNITUDE: 7.10 Mw

SITE PEAK GROUND ACCELERATION: 0.396 g

BOREHOLE DIAMETER CORRECTION FACTOR: 1.15

SAMPLER SIZE CORRECTION FACTOR: 1.00

N60 HAMMER CORRECTION FACTOR: 1.00

MAGNITUDE SCALING FACTOR METHOD: Idriss (1997, in press)

Magnitude Scaling Factor: 1.150

rd-CORRECTION METHOD: NCEER (1997)

FIELD SPT N-VALUES ARE CORRECTED FOR THE LENGTH OF THE DRIVE RODS.

Rod Stick-Up Above Ground: 3.0 ft

CN NORMALIZATION FACTOR: 1.044 tsf

MINIMUM CN VALUE: 0.6

NCEER [1997] Method — LIQUEFACTION ANALYSIS SUMMARY — PAGE 1

File Name: B3durante.OUT

SOIL NO.	CALC. DEPTH (ft)	TOTAL STRESS (tsf)	EFF. STRESS (tsf)	FIELD N (B/ft)	FC DELTA N1_60	C N	CORR. (N1)60 (B/ft)	LIQUE. RESIST RATIO	r d	INDUC. STRESS RATIO	LIQUE. SAFETY FACTOR
1	0.25	0.014	0.014	11	3.41	*	*	*	*	*	**
1	0.75	0.043	0.043	11	3.41	*	*	*	*	*	**
1	1.25	0.072	0.072	11	3.41	*	*	*	*	*	**
2	1.75	0.100	0.100	15	1.87	*	*	*	*	*	**
2	2.25	0.128	0.128	15	1.87	*	*	*	*	*	**
2	2.75	0.155	0.155	15	1.87	*	*	*	*	*	**
2	3.25	0.183	0.183	15	1.87	*	*	*	*	*	**
2	3.75	0.210	0.210	15	1.87	*	*	*	*	*	**
2	4.25	0.238	0.238	15	1.87	*	*	*	*	*	**
2	4.75	0.265	0.265	15	1.87	*	*	*	*	*	**
2	5.25	0.293	0.293	15	1.87	*	*	*	*	*	**
2	5.75	0.320	0.320	15	1.87	*	*	*	*	*	**
3	6.25	0.348	0.348	17	1.80	*	*	*	*	*	**
3	6.75	0.375	0.375	17	1.80	*	*	*	*	*	**
3	7.25	0.402	0.402	17	1.80	*	*	*	*	*	**
3	7.75	0.430	0.430	17	1.80	*	*	*	*	*	**
3	8.25	0.457	0.450	17	1.80	1.514	24.0	0.270	0.981	0.257	1.21
3	8.75	0.485	0.462	17	1.80	1.514	24.0	0.270	0.980	0.265	1.17
3	9.25	0.512	0.473	17	1.80	1.514	24.0	0.270	0.978	0.273	1.14
3	9.75	0.540	0.485	17	1.80	1.514	24.0	0.270	0.977	0.280	1.11
4	10.25	0.569	0.499	20	1.88	1.417	27.4	0.334	0.976	0.287	1.34
4	10.75	0.599	0.513	20	1.88	1.417	27.4	0.334	0.975	0.293	1.31
4	11.25	0.629	0.527	20	1.88	1.417	27.4	0.334	0.974	0.299	1.28
4	11.75	0.659	0.542	20	1.88	1.417	27.4	0.334	0.973	0.304	1.26
4	12.25	0.689	0.556	20	1.88	1.417	27.4	0.334	0.971	0.310	1.24
4	12.75	0.719	0.571	20	1.88	1.417	27.4	0.334	0.970	0.315	1.22
5	13.25	0.749	0.585	17	0.03	1.268	21.6	0.238	0.969	0.319	0.86
5	13.75	0.779	0.599	17	0.03	1.268	21.6	0.238	0.968	0.324	0.84
5	14.25	0.809	0.614	17	0.03	1.268	21.6	0.238	0.967	0.328	0.83
5	14.75	0.839	0.628	17	0.03	1.268	21.6	0.238	0.966	0.332	0.82
5	15.25	0.869	0.643	17	0.03	1.268	21.6	0.238	0.964	0.336	0.81
5	15.75	0.899	0.657	17	0.03	1.268	21.6	0.238	0.963	0.339	0.81
5	16.25	0.929	0.671	17	0.03	1.268	21.6	0.238	0.962	0.343	0.80
5	16.75	0.959	0.686	17	0.03	1.268	21.6	0.238	0.961	0.346	0.79
5	17.25	0.989	0.700	17	0.03	1.268	21.6	0.238	0.960	0.349	0.78
5	17.75	1.019	0.715	17	0.03	1.268	21.6	0.238	0.959	0.352	0.78
6	18.25	1.049	0.729	8	0.01	1.157	10.0	0.109	0.957	0.355	0.35
6	18.75	1.079	0.743	8	0.01	1.157	10.0	0.109	0.956	0.357	0.35
6	19.25	1.109	0.758	8	0.01	1.157	10.0	0.109	0.955	0.360	0.35
6	19.75	1.139	0.772	8	0.01	1.157	10.0	0.109	0.954	0.362	0.35
6	20.25	1.169	0.787	8	0.01	1.157	10.0	0.109	0.953	0.364	0.34
7	20.75	1.199	0.801	19	1.82	1.072	24.7	0.281	0.952	0.367	0.88
7	21.25	1.229	0.815	19	1.82	1.072	24.7	0.281	0.950	0.369	0.88

File Name: B3durante.OUT

SOIL NO.	CALC. DEPTH (ft)	TOTAL STRESS (tsf)	EFF. STRESS (tsf)	FIELD N (B/ft)	FC DELTA N1_60	C N	CORR. (N1)60 (B/ft)	LIQUE. RESIST RATIO	r d	INDUC. STRESS RATIO	LIQUE. SAFETY FACTOR
7	21.75	1.259	0.830	19	1.82	1.072	24.7	0.281	0.949	0.371	0.87
7	22.25	1.289	0.844	19	1.82	1.072	24.7	0.281	0.948	0.373	0.87
7	22.75	1.319	0.859	19	1.82	1.072	24.7	0.281	0.947	0.374	0.86
7	23.25	1.349	0.873	19	1.82	1.072	24.7	0.281	0.946	0.376	0.86
7	23.75	1.379	0.887	19	1.82	1.072	24.7	0.281	0.945	0.378	0.86
7	24.25	1.409	0.902	19	1.82	1.072	24.7	0.281	0.943	0.379	0.85
7	24.75	1.439	0.916	19	1.82	1.072	24.7	0.281	0.942	0.381	0.85
8	25.25	1.469	0.931	20	4.05	1.032	27.8	0.343	0.941	0.382	1.03
8	25.75	1.499	0.945	20	4.05	1.032	27.8	0.343	0.940	0.384	1.03
8	26.25	1.529	0.959	20	4.05	1.032	27.8	0.343	0.939	0.385	1.02
8	26.75	1.559	0.974	20	4.05	1.032	27.8	0.343	0.938	0.386	1.02
8	27.25	1.589	0.988	20	4.05	1.032	27.8	0.343	0.936	0.388	1.02
8	27.75	1.619	1.003	20	4.05	1.032	27.8	0.343	0.935	0.389	1.02
8	28.25	1.649	1.017	20	4.05	1.032	27.8	0.343	0.934	0.390	1.01
8	28.75	1.679	1.031	20	4.05	1.032	27.8	0.343	0.933	0.391	1.01
8	29.25	1.709	1.046	20	4.05	1.032	27.8	0.343	0.932	0.392	1.01
8	29.75	1.739	1.060	20	4.05	1.032	27.8	0.343	0.931	0.393	1.00
9	30.25	1.769	1.075	13	1.60	0.982	16.3	0.176	0.928	0.393	0.51
9	30.75	1.799	1.089	13	1.60	0.982	16.3	0.176	0.924	0.393	0.51
9	31.25	1.829	1.103	13	1.60	0.982	16.3	0.176	0.920	0.392	0.51
9	31.75	1.859	1.118	13	1.60	0.982	16.3	0.176	0.916	0.392	0.52
9	32.25	1.889	1.132	13	1.60	0.982	16.3	0.176	0.912	0.391	0.52
9	32.75	1.919	1.147	13	1.60	0.982	16.3	0.176	0.907	0.391	0.52
9	33.25	1.949	1.161	13	1.60	0.982	16.3	0.176	0.903	0.390	0.52
9	33.75	1.979	1.175	13	1.60	0.982	16.3	0.176	0.899	0.390	0.52
9	34.25	2.009	1.190	13	1.60	0.982	16.3	0.176	0.895	0.389	0.52
9	34.75	2.039	1.204	13	1.60	0.982	16.3	0.176	0.891	0.388	0.52

LIQUEFACTION INDUCED SETTLEMENT

DURANTE APARTMENTS
2100 JIMMY DURANTE BOULEVARD
DEL MAR, CALIFORNIA

Geotechnical Data from Boring B-3 - Groundwater Modeled at 8 feet

Using Peak Ground Acceleration of 0.396 g and earthquake magnitude 7.1

Base of Soil Layer (ft)	Thickness (ft)	USCS Soil Classific.	$N1(60)_{cs}$	Ave. Factor of Safety	ICSR	Volume Strain (%)	Layer Settle. (inches)	Sum Tot. Settle. (inches)
1.5	1.5	SM	NA	NA	NA	0.00%	0.00	0.00
6.0	4.5	SP-SM	NA	NA	NA	0.00%	0.00	0.00
10.0	4.0	SP-SM	24.0	1.16	0.27	0.50%	0.12	0.12
13.0	3.0	SP-SM	27.4	1.28	0.30	0.30%	0.11	0.23
18.0	5.0	SP	21.6	0.82	0.34	1.40%	0.17	0.40
20.5	2.5	SP	10.0	0.35	0.36	2.70%	0.81	1.21
25.0	4.5	SM	24.7	0.87	0.37	1.20%	0.65	1.85
30.0	5.0	SM	27.8	1.02	0.39	0.95%	0.57	2.42
35.0	5.0	SP-SM	16.3	0.52	0.39	1.85%	1.11	3.53

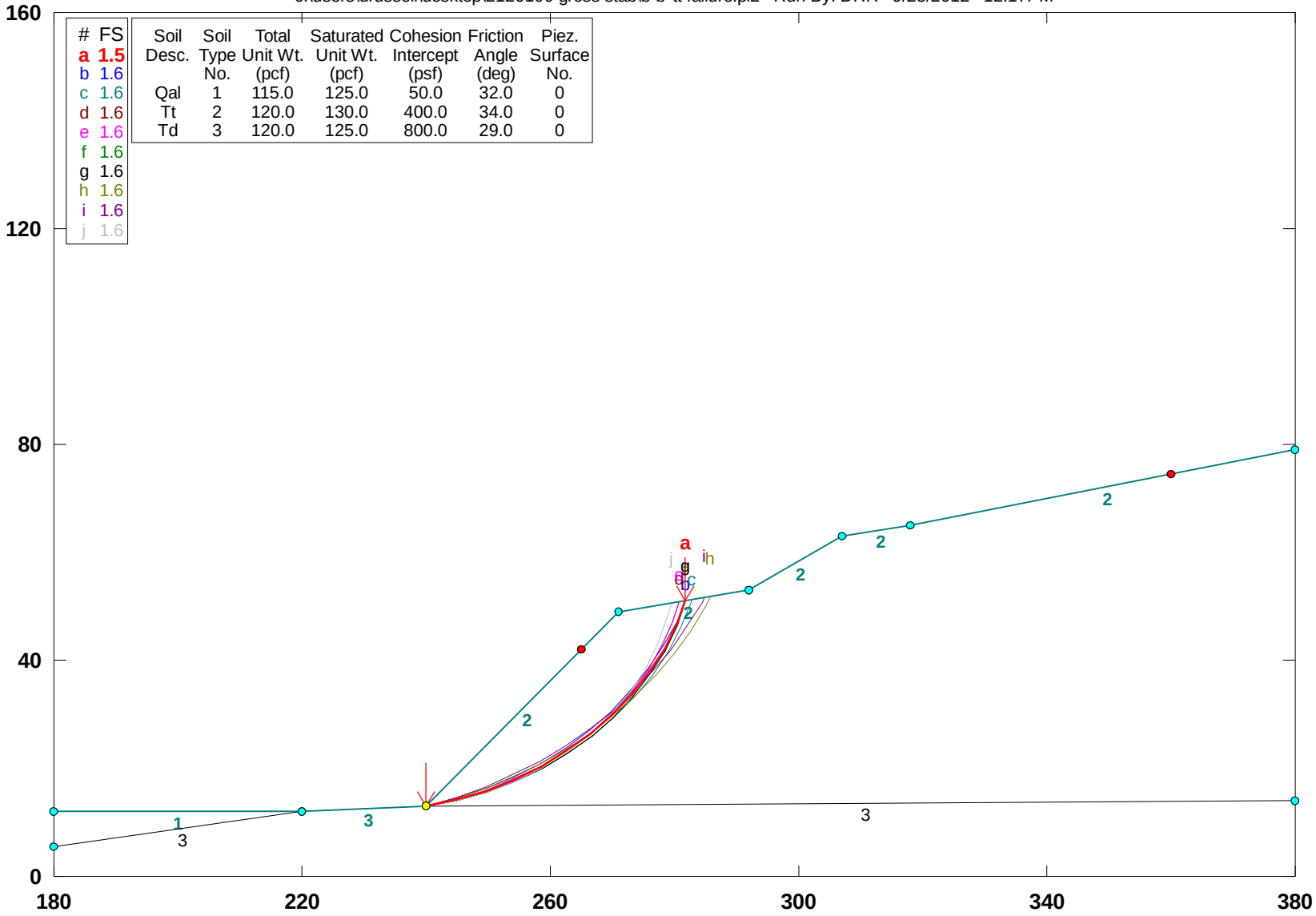
Total Settlement to 35' 3.5

Appendix C
Slope Stability Analyses

CWE 2120190.01
Proposed Durante Apartments
2100 Jimmy Durante Boulevard, Del Mar, California

Duarante Apartments 2120190.01 B-B'

c:\users\drussell\desktop\2120190 gross stab\b-b' tt failure.pl2 Run By: DRR 9/25/2012 12:17PM



GSTABL7 v.2 FSmin=1.5

Safety Factors Are Calculated By The Modified Bishop Method

CHRISTIAN WHEELER ENGINEERING

***** GSTABL7 *****

** GSTABL7 by Garry H. Gregory, P.E. **

** Original Version 1.0, January 1996; Current Version 2.003, June 2002 **

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****

SLOPE STABILITY ANALYSIS SYSTEM

Modified Bishop, Simplified Janbu, or GLE Method of Slices.
(Includes Spencer & Morgenstern-Price Type Analysis)
Including Pier/Pile, Reinforcement, Soil Nail, Tieback,
Nonlinear Undrained Shear Strength, Curved Phi Envelope,
Anisotropic Soil, Fiber-Reinforced Soil, Boundary Loads, Water
Surfaces, Pseudo-Static & Newmark Earthquake, and Applied Forces.

****

Analysis Run Date: 9/25/2012
Time of Run: 12:17PM
Run By: DRR
Input Data Filename: C:\Users\DRussell\Desktop\2120190 Gross Stab\B-B' Tt failure
.in
Output Filename: C:\Users\DRussell\Desktop\2120190 Gross Stab\B-B' Tt failure
.OUT
Unit System: English
Plotted Output Filename: C:\Users\DRussell\Desktop\212019oss Stab\B-B' Tt failure.PLT

PROBLEM DESCRIPTION: Duarante Apartments
2120190.01 B-B'

BOUNDARY COORDINATES

Note: User origin value specified.
Add 180.00 to X-values and 0.00 to Y-values listed.

7 Top Boundaries
9 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	180.00	12.00	220.00	12.00	1
2	220.00	12.00	240.00	13.00	3
3	240.00	13.00	271.00	49.00	2
4	271.00	49.00	292.00	53.00	2
5	292.00	53.00	307.00	63.00	2
6	307.00	63.00	318.00	65.00	2
7	318.00	65.00	380.00	79.00	2
8	240.00	13.00	380.00	14.00	3
9	180.00	5.50	220.00	12.00	3

Default Y-Origin = 0.00(ft)
Default X-Plus Value = 0.00(ft)
Default Y-Plus Value = 0.00(ft)

ISOTROPIC SOIL PARAMETERS

3 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	115.0	125.0	50.0	32.0	0.00	0.0	0
2	120.0	130.0	400.0	34.0	0.00	0.0	0
3	120.0	125.0	800.0	29.0	0.00	0.0	0

A Critical Failure Surface Searching Method, Using A Random
Technique For Generating Circular Surfaces, Has Been Specified.
2000 Trial Surfaces Have Been Generated.
2000 Surface(s) Initiate(s) From Each Of 1 Points Equally Spaced
Along The Ground Surface Between X = 240.01(ft)
and X = 240.01(ft)
Each Surface Terminates Between X = 265.00(ft)
and X = 360.00(ft)
Unless Further Limitations Were Imposed, The Minimum Elevation
At Which A Surface Extends Is Y = 0.00(ft)
5.00(ft) Line Segments Define Each Trial Failure Surface.
Following Are Displayed The Ten Most Critical Of The Trial
Failure Surfaces Evaluated. They Are

Ordered - Most Critical First.
* * Safety Factors Are Calculated By The Modified Bishop Method * *
Total Number of Trial Surfaces Evaluated = 2000
Statistical Data On All Valid FS Values:
FS Max = 6.732 FS Min = 1.549 FS Ave = 2.309
Standard Deviation = 0.489 Coefficient of Variation = 21.17 %
Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	240.01	13.01
2	244.86	14.21
3	249.59	15.85
4	254.15	17.90
5	258.49	20.37
6	262.60	23.22
7	266.43	26.44
8	269.95	29.99
9	273.13	33.84
10	275.95	37.97
11	278.38	42.35
12	280.40	46.92
13	281.80	51.06

Circle Center At X = 229.32 ; Y = 66.76 ; and Radius = 54.80
Factor of Safety
*** 1.549 ***
Individual data on the 13 slices

Slice No.	Width (ft)	Weight (lbs)	Water Force Top (lbs)	Water Force Bot (lbs)	Tie Force Norm (lbs)	Tie Force Tan (lbs)	Earthquake Force Hor (lbs)	Earthquake Force Ver (lbs)	Surcharge Load (lbs)
1	4.9	1292.9	0.0	0.0	0.	0.	0.0	0.0	0.0
2	4.7	3608.8	0.0	0.0	0.	0.	0.0	0.0	0.0
3	4.6	5416.2	0.0	0.0	0.	0.	0.0	0.0	0.0
4	4.3	6688.5	0.0	0.0	0.	0.	0.0	0.0	0.0
5	4.1	7424.3	0.0	0.0	0.	0.	0.0	0.0	0.0
6	3.8	7647.1	0.0	0.0	0.	0.	0.0	0.0	0.0
7	3.5	7404.3	0.0	0.0	0.	0.	0.0	0.0	0.0
8	1.0	2234.7	0.0	0.0	0.	0.	0.0	0.0	0.0
9	2.1	4265.0	0.0	0.0	0.	0.	0.0	0.0	0.0
10	2.8	4654.4	0.0	0.0	0.	0.	0.0	0.0	0.0
11	2.4	2919.8	0.0	0.0	0.	0.	0.0	0.0	0.0
12	2.0	1447.2	0.0	0.0	0.	0.	0.0	0.0	0.0
13	1.4	323.9	0.0	0.0	0.	0.	0.0	0.0	0.0

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	240.01	13.01
2	244.82	14.38
3	249.50	16.15
4	254.00	18.31
5	258.31	20.85
6	262.38	23.75
7	266.19	26.99
8	269.71	30.54
9	272.92	34.38
10	275.78	38.48
11	278.28	42.81
12	280.41	47.33
13	281.78	51.05

Circle Center At X = 226.46 ; Y = 69.90 ; and Radius = 58.48
Factor of Safety
*** 1.550 ***
Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	240.01	13.01

2	244.89	14.11
3	249.65	15.65
4	254.24	17.62
5	258.64	20.00
6	262.80	22.77
7	266.69	25.91
8	270.28	29.39
9	273.54	33.18
10	276.43	37.26
11	278.94	41.59
12	281.04	46.12
13	282.73	50.83
14	282.84	51.25

Circle Center At X = 230.48 ; Y = 66.78 ; and Radius = 54.61

Factor of Safety

*** 1.551 ***

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	240.01	13.01
2	244.88	14.14
3	249.62	15.74
4	254.18	17.79
5	258.52	20.27
6	262.61	23.15
7	266.39	26.42
8	269.85	30.03
9	272.93	33.97
10	275.63	38.18
11	277.90	42.63
12	279.74	47.28
13	280.76	50.86

Circle Center At X = 230.74 ; Y = 63.92 ; and Radius = 51.74

Factor of Safety

*** 1.551 ***

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	240.01	13.01
2	244.88	14.14
3	249.62	15.74
4	254.18	17.79
5	258.52	20.27
6	262.61	23.15
7	266.39	26.42
8	269.85	30.03
9	272.93	33.97
10	275.63	38.18
11	277.90	42.63
12	279.74	47.28
13	280.76	50.86

Circle Center At X = 230.74 ; Y = 63.92 ; and Radius = 51.74

Factor of Safety

*** 1.551 ***

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	240.01	13.01
2	244.90	14.04
3	249.67	15.55
4	254.27	17.50
5	258.67	19.89
6	262.81	22.69
7	266.65	25.89
8	270.18	29.43
9	273.34	33.30

10	276.12	37.46
11	278.48	41.87
12	280.40	46.49
13	281.80	51.06

Circle Center At X = 231.80 ; Y = 64.02 ; and Radius = 51.67

Factor of Safety

*** 1.553 ***

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	240.01	13.01
2	244.90	14.04
3	249.67	15.55
4	254.27	17.50
5	258.67	19.89
6	262.81	22.69
7	266.65	25.88
8	270.18	29.43
9	273.34	33.30
10	276.12	37.46
11	278.48	41.87
12	280.40	46.49
13	281.80	51.06

Circle Center At X = 231.80 ; Y = 64.02 ; and Radius = 51.67

Factor of Safety

*** 1.553 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	240.01	13.01
2	244.79	14.48
3	249.46	16.28
4	253.98	18.40
5	258.34	20.84
6	262.52	23.59
7	266.50	26.62
8	270.25	29.93
9	273.75	33.49
10	277.00	37.30
11	279.97	41.32
12	282.64	45.55
13	285.01	49.95
14	285.86	51.83

Circle Center At X = 221.85 ; Y = 80.94 ; and Radius = 70.32

Factor of Safety

*** 1.556 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	240.01	13.01
2	244.76	14.58
3	249.38	16.48
4	253.87	18.69
5	258.18	21.22
6	262.31	24.04
7	266.23	27.14
8	269.92	30.51
9	273.37	34.14
10	276.55	37.99
11	279.46	42.06
12	282.07	46.32
13	284.38	50.76
14	284.76	51.62

Circle Center At X = 220.13 ; Y = 81.29 ; and Radius = 71.11

Factor of Safety

*** 1.557 ***

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	240.01	13.01
2	244.91	14.02
3	249.67	15.53
4	254.25	17.54
5	258.59	20.02
6	262.65	22.94
7	266.38	26.28
8	269.73	29.98
9	272.68	34.02
10	275.18	38.35
11	277.22	42.92
12	278.77	47.67
13	279.39	50.60

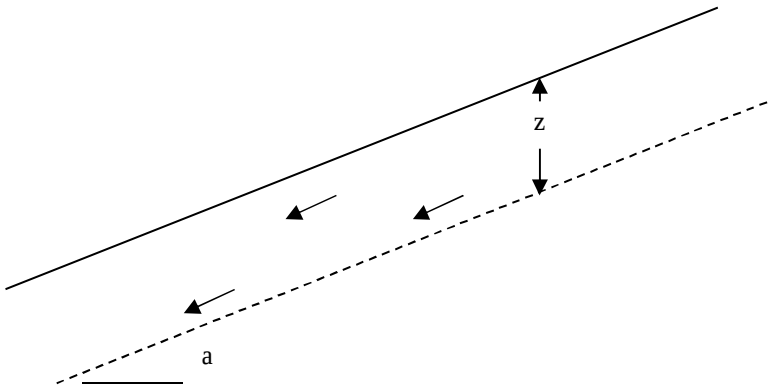
Circle Center At X = 232.92 ; Y = 59.94 ; and Radius = 47.46

Factor of Safety

*** 1.558 ***

**** END OF GSTABL7 OUTPUT ****

SURFICIAL SLOPE STABILITY 1:1 (H:V) Slopes



SEEPAGE PARALLEL TO SLOPE

ASSUMED PARAMETERS

z	Depth of Saturation (ft)	3
a	Slope Angle (H:1)	1
γ_W	Unit Weight of Water (pcf)	62.4
γ_T	Saturated Unit Weight of Soil (pcf)	125
ϕ	Angle of Internal Friction Along Plane of Failure (degrees)	30
c	Cohesion Along Plane of Failure (psf)	250

FACTOR OF SAFETY

$$FS = \frac{c + T(\tan\phi)}{T} \longrightarrow FS = \frac{c + (\gamma_T - \gamma_W)(z)(\cos^2 a)(\tan\phi)}{(\gamma_T)(z)(\sin a)(\cos a)}$$

FS = 1.6

CHRISTIAN WHEELER	**DURANTE APARTMENTS** 2100 Jimmy Durante Boulevard, Del mar, California	
	BY: DRR	DATE: Sep-12
	JOB NO.: 2120190.01	Appendix C

Appendix D
Laboratory Test Results

LABORATORY TEST RESULTS

MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT (ASTM D1557)

Sample Location	**Boring B-2 @ 2'-7'**	**Trench T-3 @ ½' - 2'**
Sample Description	Olive Gray, Silty Sand (SM)	Medium Brown, Silty Sand (SM)
Maximum Density	124.0 pcf	128.7 pcf
Optimum Moisture	10.0 %	8.4%

DIRECT SHEAR (ASTM D3080)

Sample Location	**Boring B-2 @ 10'**	**Trench T-3 @ 5'**
Sample Type	Rel. Undisturbed	Remolded to in-place density
Friction Angle	29°	28º
Cohesion	1,400 psf	200 psf

GRAIN SIZE DISTRIBUTION (ASTM D422)

Sample Location	**Boring B-1 @ 8½'**	**Boring B-1 @ 19'-20'**
Sieve Size	*Percent Passing*	*Percentage Passing*
3/8"	100	100
#4	96	100
#8	79	100
#16	53	98
#30	30	90
#50	15	73
#100	7	38
#200	4	16

Sample Location	**Boring B-1 @ 26'**	**Boring B-1 @ 31'**
Sieve Size	*Percent Passing*	*Percentage Passing*
3/8"	100	100
#4	100	100
#8	99	99
#16	98	98
#30	94	97
#50	78	92
#100	48	68
#200	30	40

Sample Location	**Boring B-3 @ 15'-16'**	**Boring B-3 @ 21½'**
Sieve Size	*Percent Passing*	*Percentage Passing*
3/8"	100	100
#4	97	100
#8	84	99
#16	52	95
#30	26	83
#50	12	59
#100	6	29
#200	3	11

LABORATORY TEST RESULTS (Continued)

GRAIN SIZE DISTRIBUTION (ASTM D422)

Sample Location	**Boring B-3 @ 25'**	**Boring B-3 @ 31'**
Sieve Size	*Percent Passing*	*Percentage Passing*
3/8"	100	100
#4	100	99
#8	100	92
#16	99	77
#30	97	60
#50	83	40
#100	40	14
#200	16	5

CHRISTIAN WHEELER
ENGINEERING

December 12, 2012

San Deguito Land Partners
576 Camino el Dorado
Encinitas, CA 92024
Attention: Mr. Tony Cassolato

CWE2120190.02

Subject: Addendum to Report of Preliminary Geologic Hazard Evaluation, Proposed Durante Apartments, 2100 Jimmy Durante Boulevard, Del Mar, California.

Ladies and Gentlemen:

In accordance with our Proposal dated December 4, 2012, we have prepared this addendum to our referenced Report of Preliminary Geologic Hazard Evaluation (CWE, 2012). This addendum report has been prepared to address the data utilized in our previous assessment of site disturbance. Hard and electronic copies of the most pertinent aerial photographs and a historic topographic map of the site area, which were used in our assessment of site disturbance, are included herein.

As described in our referenced report, "Review of the referenced photographs and maps indicates that prior to 1959 the only significant disturbance to the site included minor leveling and grading along the northern and western portions of the site near San Dieguito Road and Jimmy Durante Boulevard, respectively. Significant grading, including cuts of up to as much as 15 to 20 feet, occurred between 1959 and 1979 along the southern and southeastern portions of the site." A comparison of the site conditions as seen on aerial photographs from 1953 and 1973 is presented on the following page of this report. It is our professional opinion and judgment that these photographs, along with the historic topographic map of the area from 1959 clearly demonstrate not only the grading and leveling along the northern and western portions of the site near San Dieguito Road and Jimmy Durante Boulevard, respectively, but also the significant cutting of site grades along the west facing slope within the southern portion of the site that occurred between 1959 and 1973. Appendix A of this report included copies of the referenced aerial photographs from 1953 and 1973 and a copy of the historic topographic map of the area of the site is included in Appendix B. Electronic copies of such data are included on a CD at the rear of this report.

San Diego County, 1953, Flight 8M, Photograph 9

West facing slope area affected by significant grading activities between 1959 and 1973

San Diego County, 1973, Flight 31, Photograph 29

Included in Appendix C of this report is a copy of the original Site Disturbance Map included in our referenced Report of Preliminary Geologic Hazard Evaluation, which was revised to include the contour lines presented on the referenced 1959 topographic map (County of San Diego 200-Scale topographic map sheet 290-1689). Other than plotting the 1959 topographic contours on the Revised Site Disturbance Map, no other revisions to the originally presented Site Disturbance Map have been made. Comparison of the existing site topography to the 1959 grades of the site provides further evidence of the previous site grading and disturbance.

If you have any questions after reviewing this report, please do not hesitate to contact our office. This opportunity to be of professional service is sincerely appreciated.

Respectfully submitted,

CHRISTIAN WHEELER ENGINEERING

David R. Russell, C.E.G. #2215

Distribution: (2) Submitted
(1) dglatthorn@kitchell.com; tonygc@cox.net

REFERENCE

Christian Wheeler Engineering, 2012, Report of Preliminary Geologic Hazard Evaluation, Proposed Durante Apartments, 2100 Jimmy Durante Boulevard, Del Mar, California, dated September 24, 2012, CWE 2120190.01.

TOPOGRAPHIC MAPS

County of San Diego, 1959, Topographic Map Sheet 290-1689; Scale: 1 inch = 200 feet

County of San Diego, 1979, Ortho-Topographic Map Sheet 290-1689; Scale: 1 inch = 200 feet

PHOTOGRAPHS

Aerial Fotobank Inc., 1996, County of San Diego Aerial Foto-Map Book, Page 1187.

Lenska's Aerial Atlas, 1994, The Thomas Guide, Sheet 1187.

San Diego County, 1953, Flight 8M, Photographs 9 and 10; Scale: 1 inch = 1700 feet (approximate).

San Diego County, 1970, Flight 4, Photographs 8 and 9; Scale: 1 inch = 1000 feet.

San Diego County, 1973, Flight 31, Photographs 29 and 30; Scale: 1 inch = 1000 feet.

San Diego County, 1978, Flight 17B, Photographs 41 and 42; Scale: 1 inch = 1000 feet (approximate).

San Diego County, 1983, Photographs 547 and 548; Scale: 1 inch = 2000 feet (approximate)

San Diego County, 1989, Flight 1, Photograph 207; Scale: 1 inch = 2000 feet (approximate).

Appendix A

Aerial Photographs

San Diego County, 1953, Flight 8M, Photographs 9 and 10; Scale: 1 inch = 1700 feet (approximate).

San Diego County, 1973, Flight 31, Photographs 29 and 30; Scale: 1 inch = 1000 feet (approximate).

4-11-53
AXN-8M-9

4-11-53
AXN-8M-10

-25-73
SDPD 1"=1000'
31-

-25-78
SDPD
1"=1000'
31-

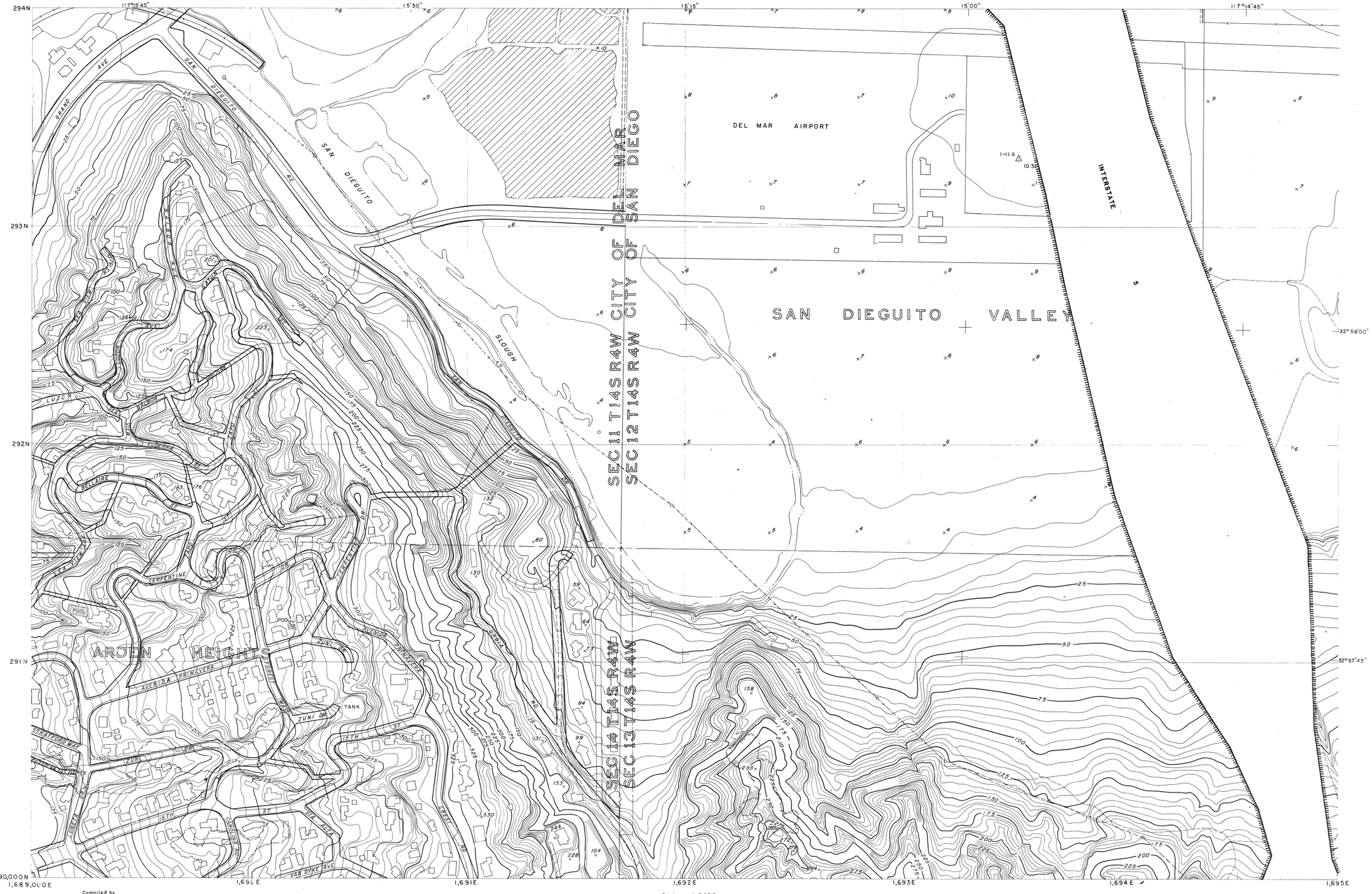
Appendix B

Topographic Map

County of San Diego, 1959, Topographic Map Sheet 290-1689; Scale: 1 inch = 200 feet

CITY OF SAN DIEGO

METROPOLITAN TOPOGRAPHIC SURVEY



Compiled by
American Aerial Surveys, Inc.
Covina, Calif.

By stereophotogrammetric methods, under the direction of the City Engineer of the City of San Diego, California
Control by U.S.C. & G.S., U.S.G.S., the City of San Diego and American Aerial Surveys, Inc.
Photography by A.A.S. dated Oct 4, 1959
North American Datum 1927

BASE MAP	
DRAWN	
REVISED	

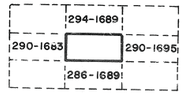
Scale 1:2400

200 0 200 400 600 800 1000 Feet

Contour Interval 5 Feet
Datum is Mean Sea Level

ONE THOUSAND FOOT CALIFORNIA RECTANGULAR GRID (ZONE 6)
THE LAST THREE DIGITS OF THE GRID NUMBERS ARE OMITTED

NOTE: The Rectangular Coordinate Values are shown on the South and West Margins
The Geographic Values are shown on the East and North Margins

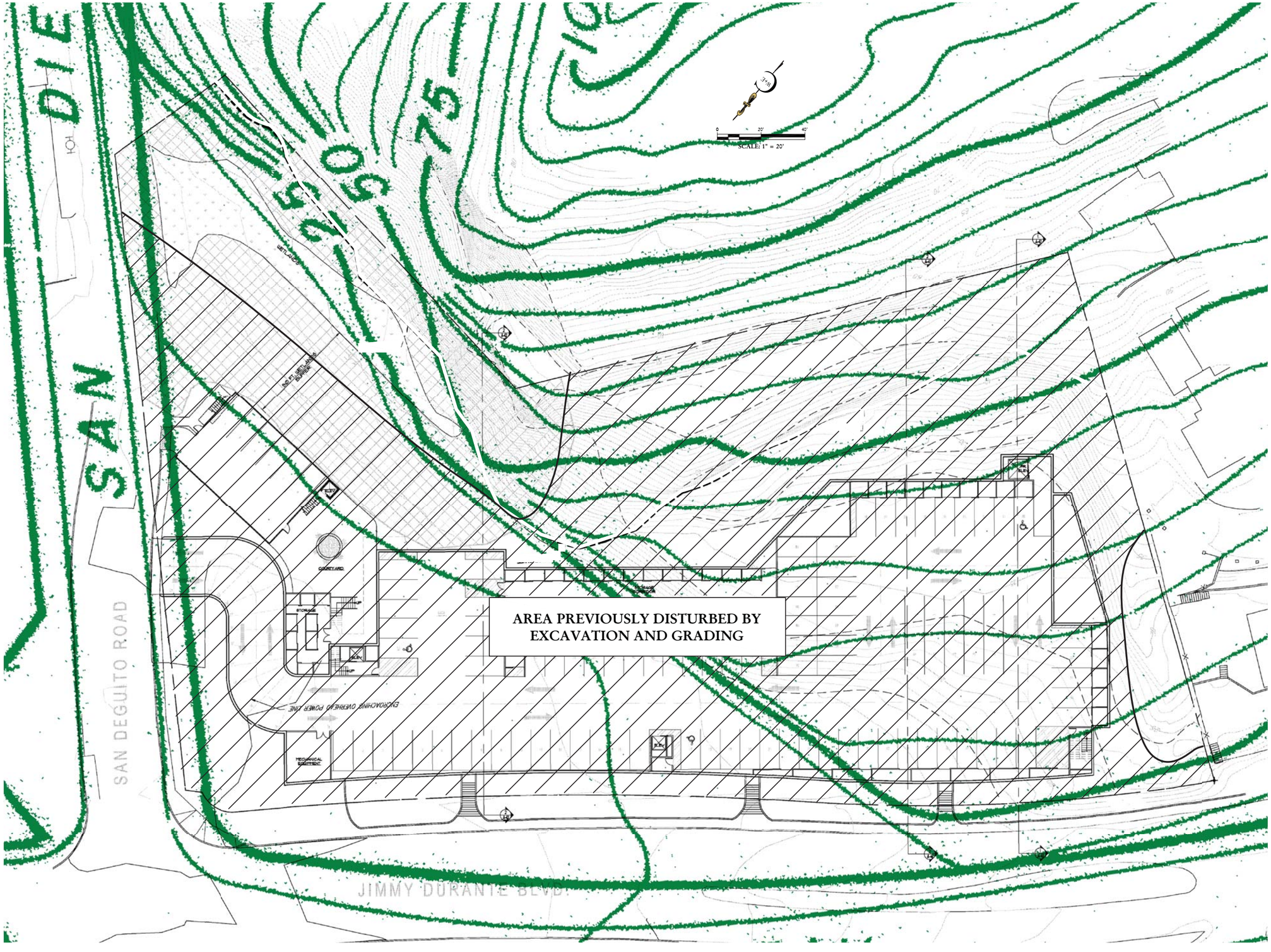


SAN DIEGO
SAN DIEGO COUNTY
CALIFORNIA
METROPOLITAN AREA
EDITION OF 1959
SPEC 1015 A

290 - 1689

Appendix C

Revised Site Disturbance Map



NOTES

PARKING GARAGE CALCULATIONS

96 RESERVED PARKING SPACES
2% OF RESERVED PARKING IS RESERVED AS H.C. PARKING AS REQUIRED PER I.B.C.

TYPICAL PARKING SPACE = 9'-0" x 18'-0"

TOTAL GARAGE AREA: 39226 SQ. FT.
(INCLUDES ALL STORAGE RMS, EQUIPMENT RMS, ELEVATORS & STAIRWELLS)

16 GUEST PARKING SPACES
INCLUDING 1 REQUIRED H.C. SPACE

LEGEND

PROPERTY LINE

WETLANDS

50 FT. REQUIRED WETLANDS BUFFER

2100 JIMMY DURANTE BLVD
DEL MAR, CALIFORNIA
92014

BOKAL & SNEED ARCHITECTS
244 Ninth Street
Del Mar, California 92014
(858) 481-8244
Fax (858) 481-8364

All ideas, designs, and arrangements indicated on these drawings are the property of Bokal & Sneed Architects and are intended to be used in connection with this specific project only and shall not otherwise be used for any purpose whatsoever without the written consent of Bokal & Sneed Architects. There shall be no changes or deviations from these drawings or the accompanying specifications without the written consent of Bokal & Sneed Architects.

SCHEMATIC DESIGN

Sheet Title
PARKING GARAGE ELEVATION 12

LICENSED ARCHITECT JAMES E. SNEED No. C 21312 REN. 7-31-2013 STATE OF CALIFORNIA

Scale	AS NOTED
Printed	08-10-2012
Drawn	JDP
Checked	JES
Job No.	DJD2

A-1.0

REVISED SITE DISTURBANCE MAP

PROPOSED DURANTE APARTMENTS
2100 JIMMY DURANTE BOULEVARD
DEL MAR, CALIFORNIA

DATE:	DECEMBER 2012	JOB NO.:	2120190.02
BY:	DRR/JDB	PLATE NO.:	1

CHRISTIAN WHEELER ENGINEERING

APPENDIX H

Stormwater Quality Management Plans

PRIORITY DEVELOPMENT PROJECT (PDP)
STORM WATER MANAGEMENT PLAN (SWMP)
FOR
Watermark Del Mar
(48 Units)

Southwest corner of Jimmy Durante Blvd. and San Dieguito Drive
Del Mar, California 92014

ASSESSOR'S PARCEL NUMBER(S):
299-100-4700
299-100-4800

ENGINEER OF WORK:

_____

Tory R. Walker, RCE #45005

PREPARED FOR:
Watermark DM, L.P.
1555 Camino Del Mar, Suite 307
Del Mar, CA 92014

PDP SWMP PREPARED BY:
Tory R. Walker Engineering
122 Civic Center Drive
Vista, California 92084
(760) 414-9212

DATE OF SWMP:
July 13, 2017

PLANS PREPARED BY:
Sowards & Brown Engineering
2187 Newcastle Avenue, Suite 103
Cardiff by the Sea, California 92007
(760) 436-8500

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Submittal Record
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FORM 2 Source Control BMP Checklist for All Development Projects
FORM 3 Site Design/LID BMP Checklist for All Development Projects
FORM 4 Summary of PDP Structural BMPs
FORM 5 Harvest and Use Feasibility Checklist
FORM 6 Categorization of Infiltration Feasibility Condition
FORM 7 Factor of Safety and Design Infiltration Rate Worksheet
FORM 8 Downstream Systems Requirements for Preservation of Coarse Sediment Supply

Attachment 1: Backup for PDP Pollutant Control BMPs
- Attachment 1a: DMA Exhibit
- Attachment 1b: Tabular Summary of DMAs and Design Capture Volume Calculations (Worksheet 1.b)
- Attachment 1c: Harvest and Use Feasibility Screening (when applicable)
- Attachment 1d: Categorization of Infiltration Feasibility Condition (when applicable)
- Attachment 1e: Pollutant Control BMP Design Worksheets / Calculations

Attachment 2: Backup for PDP Hydromodification Control Measures
- Attachment 2a: Hydromodification Management Exhibit
- Attachment 2b: Management of Critical Coarse Sediment Yield Areas
- Attachment 2c: Geomorphic Assessment of Receiving Channels
- Attachment 2d: Flow Control Facility Design

Attachment 3: Structural BMP Maintenance Plan
- Attachment 3a: B Structural BMP Maintenance Thresholds and Actions
- Attachment 3b: Draft Maintenance Agreement (when applicable)

Attachment 4: Copy of Plan Sheets Showing Permanent Storm Water BMPs

ACRONYMS

APN	Assessor's Parcel Number
BMP	Best Management Practice
HMP	Hydromodification Management Plan
HSG	Hydrologic Soil Group
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
NRCS	Natural Resources Conservation Service
PDP	Priority Development Project
PE	Professional Engineer
SC	Source Control
SD	Site Design
SDRWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SWMP	Storm Water Management Plan

PDP SWMP PREPARER'S CERTIFICATION PAGE

Project Name: Watermark Del Mar
Permit Application Number: TBD

PREPARER'S CERTIFICATION

I hereby declare that I am the Engineer in Responsible Charge of design of storm water best management practices (BMPs) for this project, and that I have exercised responsible charge over the design of the BMPs as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with the PDP requirements of the City of Del Mar BMP Design Manual, which is a design manual for compliance with the City of Del Mar and the MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

I have read and understand that the City Engineer has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the BMP Design Manual. I certify that this PDP SWMP has been completed to the best of my ability and accurately reflects the project being proposed and the applicable BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this PDP SWMP by the City Engineer is confined to a review and does not relieve me, as the Engineer in Responsible Charge of design of storm water BMPs for this project, of my responsibilities for project design.

RCE# 45005, Exp. 3/31/2018
Engineer of Work's Signature, PE Number & Expiration Date

Tory R. Walker
Print Name

Tory R. Walker Engineering, Inc.
Company

July 13, 2017
Date

Engineer's Seal:

PDP SWMP PROJECT OWNER'S CERTIFICATION PAGE

Project Name: Watermark Del Mar
Permit Application Number: TBD

PROJECT OWNER'S CERTIFICATION

This PDP SWMP has been prepared for Watermark DM, L.P. by Tory R. Walker Engineering. The PDP SWMP is intended to comply with the PDP requirements of the City of Del Mar BMP Design Manual, which is a design manual for compliance with the City of Del Mar and the MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan. Once the undersigned transfers its interests in the property, its successor-in-interest shall bear the aforementioned responsibility to implement the best management practices (BMPs) described within this plan, including ensuring on-going operation and maintenance of structural BMPs. A signed copy of this document shall be available on the subject property into perpetuity.

_____
Project Owner's Signature

Marne Bouillon
Print Name

Watermark DM, L.P.
Company

_____
Date

PROJECT VICINITY MAP

Project Name: Watermark Del Mar
Permit Application Number: TBD

Site Information Checklist For PDPs	Form 1 (PDPs) City of Del Mar BMP Design Manual

Project Summary Information:	
Project Name:	Watermark Del Mar
Permit Application Number:	TBD
Project Hydrologic Unit	Select One: ✓ San Dieguito (HA Solana Beach, HAS Rancho Santa Fe) 905.11 ☐ Los Peñasquitos (HA Miramar Reservoir) 906.1
Project Watershed (Complete Hydrologic Unit, Area, and Subarea Name with Numeric Identifier)	San Dieguito HU, Solana Beach HA, Rancho Santa Fe HSA (905.11)
Parcel Area (total area of Assessor's Parcel(s) associated with the project)	2.37 Acres (103,282 Square Feet)
Area to be Disturbed by the Project (Project Area)	2.35 Acres (102,354 Square Feet)
Project Proposed Impervious Area (subset of Project Area)	1.40 Acres (61,016 Square Feet)
Project Proposed Pervious Area (subset of Project Area)	0.95 Acres (41,338 Square Feet)
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project. This may be less than the Parcel Area.	

Description of Existing Site Condition

Current Status of the Site (select all that apply):

☐ Existing development
✓ Previously graded but not built out
☐ Demolition completed without new construction
☐ Agricultural or other non-impervious use
☐ Vacant, undeveloped/natural

Description / Additional Information:

Form 1
Existing Land Cover Includes (select all that apply): ☐ Vegetative Cover ✓ Non-Vegetated Pervious Areas ☐ Impervious Areas Description / Additional Information: Site is barren, compacted soil overlain by gravel in some areas.
Underlying Soil belongs to Hydrologic Soil Group (select all that apply): ✓ NRCS Type A ☐ NRCS Type B ☐ NRCS Type C ☐ NRCS Type D
Approximate Depth to Groundwater (GW): ☐ GW Depth < 5 feet ✓ 5 feet < GW Depth < 10 feet ☐ 10 feet < GW Depth < 20 feet ☐ GW Depth > 20 feet
Existing Natural Hydrologic Features (select all that apply): ☐ Watercourses ☐ Seeps ☐ Springs ✓ Wetlands ☐ None Description / Additional Information:

Form 1
Description of Existing Site Drainage Patterns

How is storm water runoff conveyed from the site? At a minimum, this description should answer:

(1) whether existing drainage conveyance is natural or urban;

(2) Is runoff from offsite conveyed through the site? if yes, quantify all offsite drainage areas, design flows, and locations where offsite flows enter the project site, and summarize how such flows are conveyed through the site;

(3)Provide details regarding existing project site drainage conveyance network, including any existing storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels; and

(4) Identify all discharge locations from the existing project site along with a summary of conveyance system size and capacity for each of the discharge locations. Provide summary of the pre-project drainage areas and design flows to each of the existing runoff discharge locations.

Describe existing site drainage patterns:

The existing project site is a graded, unpaved, urban lot, sloping east. Runoff is conveyed via overland flow offsite into San Dieguito Drive, where it concentrates along the western curb and gutter. Flows travel northwest until intercepted by an existing curb inlet (City of Del Mar Storm Drain DIB 412) located just southeast of the intersection of San Dieguito Drive and Jimmy Durante Boulevard. The curb inlet intercepts and then conveys flow through an 18" RCP until directly discharging to the San Dieguito River via outfall (City of Del Mar Storm Drain DHB 410). Some off-site runoff from the adjacent hillside to the south likely passes through the site. Based upon United States Geological Survey (USGS) regression hydrology, the estimated pre-development design flow is one cubic foot per second.

Form 1

Description of Proposed Site Development

Project Description / Proposed Land Use and/or Activities:

The proposed project would be a multifamily residential development consisting of 12 structures that would feature 48 residential units, with a proposed density of 20.24 units per acre. The residential units proposed would consist of a mix of studio, one-bedroom, two-bedroom, and three-bedroom units. The proposed project would also include a recreation room, a pool and a spa area for the use of residents and associated maintenance and administrative amenities. The proposed project would provide a secured 108 stall parking structure on the 2.37 acre site. The proposed project includes a vehicular access point from San Dieguito Road to the secured parking structure.

List/describe proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features):

The proposed impervious features include multifamily residential buildings, hardscape and walkways, roadways, a recreation room, and a pool/spa area.

List/describe proposed pervious features of the project (e.g., landscape areas):

The proposed pervious features include landscaped areas complete with planters, trees, shrubs, succulents, marsh, and bluff planting.

Does the project include grading and changes to site topography?

☐ Yes
✓ No

Description / Additional Information:

Project site topography will remain generally unchanged from existing conditions.

Form 1

Description of Proposed Site Drainage Patterns

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

✓ Yes
☐ No

If yes, provide details regarding the proposed project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels, and the method for conveying offsite flows through or around the proposed project site. Identify all discharge locations from the proposed project site along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide a summary of pre- and post-project drainage areas and design flows to each of the runoff discharge locations. Reference the drainage study for detailed calculations.

Describe proposed site drainage patterns:

The Watermark Del Mar project proposes to ultimately discharge stormwater runoff directly into the San Dieguito River via the aforementioned directly discharging outfall. The entire project site proposes to drain stormwater into a biofiltration basin, where an overflow structure will be sized to accommodate the post developed condition peak 100-year flow. The overflow structure will connect to a pipe that joins into the existing storm drain system at the aforementioned curb inlet (DIB 412). From that point, flows will be safely conveyed through the existing infrastructure and directly discharge into the San Dieguito River.

A private storm drain system will be incorporated into the project design to provide storm water treatment for the project including a proposed bioretention basin prior to connecting to the existing storm drain inlet on San Dieguito Drive. The site will drain east through a 6-inch PVC pipe network until pumped into the proposed bioretention basin located at the eastern project corner. The bioretention basin will include a 24-inch corrugated metal pipe (CMP) riser draining to a 24-inch HDPE pipe that drains northwest along San Dieguito Drive until it joins the existing storm drain inlet and discharges to the San Dieguito River through an 18" reinforced concrete pipe (RCP). Based upon United States Geological Survey (USGS) regression hydrology, the estimated post-development design flow is one cubic foot per second. Assuming a 1.2% slope for the 24-inch-diameter HDPE, the Hazen-Williams formula calculates the proposed system capacity as approximately 37 cubic feet per second. Final design flows will be determined when a drainage study is completed during the project engineering phase.

Form 1
Identify whether any of the following features, activities, and/or pollutant source areas will be present (select all that apply): ✓ On-site storm drain inlets ✓ Interior floor drains and elevator shaft sump pumps ✓ Interior parking garages ☐ Need for future indoor & structural pest control ✓ Landscape/Outdoor Pesticide Use ✓ Pools, spas, ponds, decorative fountains, and other water features ☐ Food service ✓ Refuse areas ☐ Industrial processes ☐ Outdoor storage of equipment or materials ☐ Vehicle and Equipment Cleaning ☐ Vehicle/Equipment Repair and Maintenance ☐ Fuel Dispensing Areas ☐ Loading Docks ✓ Fire Sprinkler Test Water ☐ Miscellaneous Drain or Wash Water ✓ Plazas, sidewalks, and parking lots
Description / Additional Information:

Form 1
Identification and Narrative of Receiving Water and Pollutants of Concern
Describe flow path of storm water from the project site discharge location(s), through urban storm conveyance systems as applicable, to receiving creeks, rivers, and lagoons as applicable, and ultimate discharge to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable): The project discharges directly into the San Dieguito River as follows: from the proposed biofiltration basin to the proposed 24" CMP riser, then to the 24" HDPE, then to the existing 18" RCP, then to the 18" outfall directly discharging to the San Dieguito River just south of Jimmy Duarte Boulevard Bridge.
List any 303(d) impaired water bodies within the path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable), identify the pollutant(s)/stressor(s) causing impairment, and identify any TMDLs and/or Highest Priority Pollutants from the WQIP for the impaired water bodies:

303(d) Impaired Water Body	**Pollutant(s)/Stressor(s)**	**TMDLs / WQIP Highest Priority Pollutant**
San Dieguito River	Enterococcus	Indicator Bacteria (Total Coliform, Fecal Coliform, Enterococcus)
	Fecal Coliform	
	Nitrogen	
	Phosphorus	
	Total Dissolved Solids	
	Toxicity	
Pacific Ocean Shoreline at San Dieguito Lagoon Mouth	Enterococcus	
	Total Coliform	
	Fecal Coliform	

Identification of Project Site Pollutants*

***Identification of project site pollutants is only required if flow-through treatment BMPs are implemented onsite in lieu of retention or biofiltration BMPs (note the project must also participate in an alternative compliance program unless prior lawful approval to meet earlier PDP requirements is demonstrated)**

Identify pollutants expected from the project site based on all proposed use(s) of the site (see BMP Design Manual Appendix B.6):

- Sediment
- Nutrients
- Trash & Debris
- Oxygen Demanding Substances
- Bacteria & Viruses
- Pesticides

Form 1			
Pollutant	**Not Applicable to the Project Site**	**Expected from the Project Site**	**Also a Receiving Water Pollutant of Concern**
Sediment		X	
Nutrients		X	X
Heavy Metals	X		
Organic Compounds	X		
Trash & Debris		X	
Oxygen Demanding Substances		X	
Oil & Grease	X		
Bacteria & Viruses		X	X
Pesticides		X	

Form 1
Hydromodification Management Requirements
Do hydromodification management requirements apply (see Section 1.6 of the BMP Design Manual)? ☐ Yes, hydromodification management flow control structural BMPs required. ☐ No, the project will discharge runoff directly to existing underground storm drains discharging directly to an exempt receiving water such as the Pacific Ocean, and exempt river reach, or a tidally-influenced area. ☐ No, the project will discharge runoff directly to conveyance channels whose bed and bank are concrete-lined all the way from the point of discharge to the Pacific Ocean, a tidally-influenced area, or an exempt river reach. ✓ No, the project will discharge runoff directly to an area identified as appropriate for an exemption by the WMAA for the watershed in which the project resides.
Description / Additional Information (to be provided if a 'No' answer has been selected above): Please refer to the hydromodification management exemption memo provided in Attachment 2.

Form 1

Critical Coarse Sediment Yield Areas*

***This Section only required if hydromodification management requirements apply**

Based on the maps provided within the WMAA, do potential critical coarse sediment yield areas exist within the project drainage boundaries?

☐ Yes
☐ No, No critical coarse sediment yield areas to be protected based on WMAA maps

If yes, have any of the optional analyses presented in Section 6.2 of the BMP Design Manual been performed?

☐ 6.2.1 Verification of Geomorphic Landscape Units (GLUs) Onsite
☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment
☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
☐ No optional analyses performed, the project will avoid critical coarse sediment yield areas identified based on WMAA maps

If optional analyses were performed, what is the final result?

☐ No critical coarse sediment yield areas to be protected based on verification of GLUs onsite
☐ Critical coarse sediment yield areas exist but additional analysis has determined that protection is not required. Documentation attached in Attachment 2.b of the SWMP.
☐ Critical coarse sediment yield areas exist and require protection. The project will implement management measures described in Sections 6.2.4 and 6.2.5 as applicable, and the areas are identified on the SWMP Exhibit.

Discussion / Additional Information:

Not applicable due to exemption from hydromodification management requirements.

Form 1
Flow Control for Post-Project Runoff*   ***This Section only required if hydromodification management requirements apply**
List and describe point(s) of compliance (POCs) for flow control for hydromodification management (see Section 6.3.1). For each POC, provide a POC identification name or number correlating to the project's HMP Exhibit and a receiving channel identification name or number correlating to the project's HMP Exhibit.   Not applicable due to exemption from hydromodification management requirements.
Has a geomorphic assessment been performed for the receiving channel(s)?   ☐ No, the low flow threshold is 0.1Q2 (default low flow threshold)   ☐ Yes, the result is the low flow threshold is 0.1Q2   ☐ Yes, the result is the low flow threshold is 0.3Q2   ☐ Yes, the result is the low flow threshold is 0.5Q2   If a geomorphic assessment has been performed, provide title, date, and preparer: Not applicable due to exemption from hydromodification management requirements.
Discussion / Additional Information: (optional)   Not applicable due to exemption from hydromodification management requirements.

Form 1
Other Site Requirements and Constraints
When applicable, list other site requirements or constraints that will influence storm water management design, such as zoning requirements including setbacks and open space, or local codes governing minimum street width, sidewalk construction, allowable pavement types, and drainage requirements.
The driveway entry along San Dieguito Drive will be sloped in order to act as a flood control barrier to protect the subterranean parking from the 100-year flood inundation.

Form 1
Optional Additional Information or Continuation of Previous Sections As Needed
This space provided for additional information or continuation of information from previous sections as needed.

Source Control BMP Checklist for All Development Projects	Form 2 (PDPs) City of Del Mar BMP Design Manual

Project Identification

Project Name: Watermark Del Mar

Permit Application Number: TBD

Source Control BMPs

All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the BMP Design Manual for information to implement source control BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the City of Del Mar BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided.

Source Control Requirement	Applied?		
SC-1 Prevention of Illicit Discharges into the MS4	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-1 not implemented:			
SC-2 Storm Drain Stenciling or Signage	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-2 not implemented:			

Form 2			
Source Control Requirement	**Applied?**		
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	✓ N/A
Discussion / justification if SC-3 not implemented:			
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	✓ N/A
Discussion / justification if SC-4 not implemented:			
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-5 not implemented:			

Form 2			
Source Control Requirement **SC-6** Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)	**Applied?**		
☐ On-site storm drain inlets	✓ Yes	☐ No	☐ N/A
☐ Interior floor drains and elevator shaft sump pumps	✓ Yes	☐ No	☐ N/A
☐ Interior parking garages	✓ Yes	☐ No	☐ N/A
☐ Need for future indoor & structural pest control	✓ Yes	☐ No	☐ N/A
☐ Landscape/Outdoor Pesticide Use	✓ Yes	☐ No	☐ N/A
☐ Pools, spas, ponds, decorative fountains, and other water features	✓ Yes	☐ No	☐ N/A
☐ Food service	☐ Yes	☐ No	✓ N/A
☐ Refuse areas	✓ Yes	☐ No	☐ N/A
☐ Industrial processes	☐ Yes	☐ No	✓ N/A
☐ Outdoor storage of equipment or materials	☐ Yes	☐ No	✓ N/A
☐ Vehicle and Equipment Cleaning	☐ Yes	☐ No	✓ N/A
☐ Vehicle/Equipment Repair and Maintenance	☐ Yes	☐ No	✓ N/A
☐ Fuel Dispensing Areas	☐ Yes	☐ No	✓ N/A
☐ Loading Docks	☐ Yes	☐ No	✓ N/A
☐ Fire Sprinkler Test Water	✓ Yes	☐ No	☐ N/A
☐ Miscellaneous Drain or Wash Water	☐ Yes	☐ No	✓ N/A
☐ Plazas, sidewalks, and parking lots	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for <u>all</u> "No" answers shown above.			

Site Design/LID BMP Checklist for All Development Projects	Form 3 (PDPs) City of Del Mar BMP Design Manual

Project Identification

Project Name: Watermark Del Mar

Permit Application Number: TBD

Site Design/LID BMPs

All development projects must implement site design/LID BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the BMP Design Manual for information to implement site design BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the site design/LID BMP as described in Chapter 4 and/or Appendix E of the City of Del Mar BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.

Site Design Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-1 not implemented:			
SD-2 Conserve Natural Areas, Soils, and Vegetation	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-2 not implemented:			

Form 3			
Source Control Requirement	**Applied?**		
SD-3 Minimize Impervious Area	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-3 not implemented:			
SD-4 Minimize Soil Compaction	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-4 not implemented:			
SD-5 Impervious Area Dispersion	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-5 not implemented:			
SD-6 Runoff Collection	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-6 not implemented:			
SD-7 Landscaping with Native or Drought Tolerant Species	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-7 not implemented:			
SD-8 Harvesting and Using Precipitation	☐ Yes	✓ No	☐ N/A
Discussion / justification if SD-8 not implemented: Harvest and Use not feasible (see Form 5).			

Summary of PDP Structural BMPs	Form 4 (PDPs) City of Del Mar BMP Design Manual
Project Identification	
Project Name: Watermark Del Mar	
Permit Application Number: TBD	
PDP Structural BMPs	

All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the BMP Design Manual). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the BMP Design Manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s).

PDP structural BMPs must be verified by the local jurisdiction at the completion of construction. This may include requiring the project owner or project owner's representative and engineer of record to certify construction of the structural BMPs (see Section 1.12 of the BMP Design Manual). PDP structural BMPs must be maintained into perpetuity, and the local jurisdiction must confirm the maintenance (see Section 7 of the BMP Design Manual).

Use this form to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (page 3 of this form) for each structural BMP within the project (copy the BMP summary information page as many times as needed to provide summary information for each individual structural BMP).

Form 4
Describe the general strategy for structural BMP implementation at the site. This information must describe how the steps for selecting and designing storm water pollutant control BMPs presented in Section 5.1 of the BMP Design Manual were followed, and the results (type of BMPs selected). For projects requiring hydromodification flow control BMPs, indicate whether pollutant control and flow control BMPs are integrated or separate. (Continue on additional pages as necessary)
The strategy for structural BMP implementation follows and implements flow chart provided in the BMPDM Figure 5-1. The project is not considered self-mitigating at the project scale; therefore a DCV was calculated based upon the guidance in BMPDM Appendix B. Harvest and Use was determined to be infeasible based upon the guidance in BMPDM Section 5.4.1 and SWQMP Form 5. The site was classified as a "No Infiltration" condition based upon BMPDM Section 5.5.3 and SWQMP Form 6. Since Harvest and Use had already been determined to be infeasible, Biofiltration was selected for structural BMP implementation. The proposed biofiltration basin has been designed for full treatment of the water quality DCV. Since the project is exempt from hydromodification management requirements, the basin is designed solely for pollutant control.

Form 4 (Copy as many as needed)	
Structural BMP Summary Information **(Copy this page as needed for each individual proposed structural BMP)**	
Structural BMP ID No.	
Construction Plan Sheet No.	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ✓ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-through treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-through treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ✓ Pollutant control only ☐ Hydromodification control only ☐ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the City Engineer (See Section 1.12 of the BMP Design Manual).	Randy Brown, PE Sowards & Brown Engineering 2187 Newcastle Avenue, Suite 100 Cardiff by the Sea, CA, 92007 760-436-8500
Who will be the final owner of this BMP?	HOA
Who will maintain this BMP into perpetuity?	HOA
What is the funding mechanism for maintenance?	HOA

Form 4 (Copy as many as needed)
Structural BMP ID No.
Construction Plan Sheet No.
Discussion (as needed):

Harvest and Use Feasibility Checklist	Form 5 (PDPs) City of Del Mar BMP Design Manual

1. Is there a demand for harvested water (check all that apply) at the project site that is reliably present during the wet season?

☑ Toilet and urinal flushing
☑ Landscape irrigation
☐ Other:_____

2. If there is a demand; estimate the anticipated average wet season demand over a period of 36 hours. Guidance for planning level demand calculations for toilet/urinal flushing and landscape irrigation is provided in Section B.3.2.

Toilet and Urinal Flushing Demand Calculations:

$$18.5\ \frac{\text{gal/cap}}{\text{day}} \times \frac{1.5\ \text{days}}{36\ \text{hours}} \times \frac{1\ \text{cf}}{7.48\ \text{gal}} \times \frac{2.58\ \text{cap}}{\text{household}} \times 48\ \text{households} = \mathbf{459}\ \frac{\mathbf{cf}}{\mathbf{36\ hrs}}$$

Modified ETWU (Low Plant Water Use):

$$390\ \frac{\text{gal/ac}}{36\ \text{hrs}} \times \frac{1\ \text{cf}}{7.48\ \text{gal}} \times 27660\ \text{sf} \times \frac{1\ \text{ac}}{43560\ \text{sf}} = \mathbf{33}\ \frac{\mathbf{cf}}{\mathbf{36\ hrs}}$$

Total Demand:

493 cf

3. Calculate the DCV using worksheet B-2.1.

DCV = 2076 cf

3a. Is the 36 hour demand greater than or equal to the DCV?	3b. Is the 36 hour demand greater than 0.25DCV but less than the full DCV?	3c. Is the 36 hour demand less than 0.25DCV?
☐ Yes / ✓ No ⇨ ⇩	☐ Yes / ✓ No ⇨ ⇩	✓ Yes ⇩
Harvest and use appears to be feasible. Conduct more detailed evaluation and sizing calculations to confirm that DCV can be used at an adequate rate to meet drawdown criteria.	Harvest and use may be feasible. Conduct more detailed evaluation and sizing calculations to determine feasibility. Harvest and use may only be able to be used for a portion of the site, or (optionally) the storage may need to be upsized to meet long term capture targets while draining in longer than 36 hours.	**Harvest and use is considered to be infeasible.**

Is harvest and use feasible based on further evaluation?

☐ Yes, refer to Appendix E to select and size harvest and use BMPs.

✓ No, select alternate BMPs.

Categorization of Infiltration Feasibility Condition	Form 6 (PDPs) City of Del Mar BMP Design Manual

Part 1 - Full Infiltration Feasibility Screening Criteria

Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
1	**Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		

Provide basis:

N/A (see Form 6, Criteria 7)

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.

2	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		✓

Provide basis:

See Form 6, Criteria 7

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.

Form 6			
Criteria	Screening Question	Yes	No
3	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, storm water pollutants or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: N/A (see Form 6, Criteria 7) Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
4	**Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: N/A (see Form 6, Criteria 7) Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
Part 1 Result *	If all answers to rows 1 - 4 are "**Yes**" a full infiltration design is potentially feasible. The feasibility screening category is **Full Infiltration** If any answer from row 1-4 is "**No**", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2		**No**

***To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by Agency/Jurisdictions to substantiate findings

Form 6			
Part 2 – Partial Infiltration vs. No Infiltration Feasibility Screening Criteria **Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?**			
Criteria	Screening Question	Yes	No
5	**Do soil and geologic conditions allow for infiltration in any appreciable rate or volume?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		
Provide basis: N/A (see Form 6, Criteria 7) Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
6	**Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		
Provide basis: N/A (see Form 6, Criteria 7) Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			

Form 6			
Criteria	Screening Question	Yes	No
7	**Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, storm water pollutants or other factors)?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		✓
Provide basis: The Phase 1 Environmental Site Assessment (Kleinfelder, 2014) discusses the regional geologic and hydrogeologic conditions. Christian Wheeler Engineering (CWE) produced their *Report of Preliminary Geologic Hazards Evaluation* (CWE, 2012) and found, through exploratory borings, groundwater was encountered at depths between approximately 5 ½ feet and 11 feet below Site grades. Due to the depth of the observed groundwater, the proposed basin would not provide the minimum 10-foot separation required by BMPDM Appendix C.3.2. Furthermore, the 10-foot depth to groundwater requirement may be reduced based upon further information not yet known at the podium-level design. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
8	**Can infiltration be allowed without violating downstream water rights?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: N/A (see Form 6, Criteria 7) Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
Part 2 Result *	If all answers from row 1-4 are yes then partial infiltration design is potentially feasible. The feasibility screening category is **Partial Infiltration.** If any answer from row 5-8 is no, then infiltration of any volume is considered to be **infeasible** within the drainage area. The feasibility screening category is **No Infiltration.**		No

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by

Agency/Jurisdictions to substantiate findings

Factor of Safety and Design Infiltration Rate Worksheet				Form 7 (PDPs) City of Del Mar BMP Design Manual	
Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25		
		Predominant soil texture	0.25		
		Site soil variability	0.25		
		Depth to groundwater / impervious layer	0.25		
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			
B	Design	Level of pretreatment/ expected sediment loads	0.5		
		Redundancy/resiliency	0.25		
		Compaction during construction	0.25		
		Design Safety Factor, $S_B = \Sigma p$			
Combined Safety Factor, $S_{total} = S_A \times S_B$					
Observed Infiltration Rate, inch/hr, $K_{observed}$ (corrected for test-specific bias)					
Design Infiltration Rate, in/hr, $K_{design} = K_{observed} / S_{total}$					
Supporting Data					
Briefly describe infiltration test and provide reference to test forms: N/A					

Downstream Systems Requirements for Preservation of Coarse Sediment Supply			Form 8 (PDPs) City of Del Mar BMP Design Manual
When it has been determined that potential critical coarse sediment yield areas exist within the project site, the next step is to determine whether downstream systems would be sensitive to reduction of coarse sediment yield from the project site. Use this form to document the evaluation of downstream systems requirements for preservation of coarse sediment supply.			
Project Name: Watermark Del Mar			
Project Tracking Number / Permit Application Number: TBD			
1	Will the project discharge runoff to a hardened MS4 system (pipe or lined channel) or an un-lined channel?	☐ Hardened MS4 system	Go to 2
		☐ Un-lined channel	Go to 4
2	Will the hardened MS4 system convey sediment (e.g., a concrete-lined channel with steep slope and cleansing velocity) or sink sediment (e.g., flat slopes, constrictions, treatment BMPs, or ponds with restricted outlets within the system will trap sediment and not allow conveyance of coarse sediment from the project site to an un-lined system).	☐ Convey	Go to 3
		☐ Sink	Go to 7
3	What kind of receiving water will the hardened MS4 system convey the sediment to?	☐ Un-lined channel	Go to 4
		☐ Lake ☐ Reservoir ☐ Bay	Go to 7
		☐ Lagoon ☐ Ocean	Go to 6
4	Is the un-lined channel impacted by deposition of sediment? This condition must be documented by the local agency.	☐ Yes	Go to 7
		☐ No	Go to 5
5	End – Preserve coarse sediment supply to protect un-lined channels from accelerated erosion due to reduction of coarse sediment yield from the project site unless further investigation determines the sediment is not critical to the receiving stream. Sediment that is critical to receiving streams is the sediment that is a significant source of bed material to the receiving stream (bed sediment supply) (see Section 6.2.3 and Appendix H.2 of the manual).		
6	End – Provide management measures for preservation of coarse sediment supply (protect beach sand supply).		
7	End – Downstream system does not warrant preservation of coarse sediment supply, no measures for protection of critical coarse sediment yield areas onsite are necessary. Use the space below to describe the basis for this finding for the project.		

ATTACHMENT 1
BACKUP FOR PDP POLLUTANT CONTROL BMPS

This is the cover sheet for Attachment 1.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 1a	DMA Exhibit (Required) See DMA Exhibit Checklist on the back of this Attachment cover sheet.	✓ Included
Attachment 1b	Tabular Summary of DMAs Showing DMA ID matching DMA Exhibit, DMA Area, and DMA Type (Required)* *Provide table in this Attachment OR on DMA Exhibit in Attachment 1.a	✓ Included on DMA Exhibit in Attachment 1.a ☐ Included as Attachment 1.b, separate from DMA Exhibit
Attachment 1c	Form 5, Harvest and Use Feasibility Screening Checklist (Required unless the entire project will use infiltration BMPs) Refer to Appendix B.3-1 of the BMP Design Manual to complete Form 5.	✓ Included (Form 5)* ☐ Not included because the entire project will use infiltration BMPs
Attachment 1d	Form 6, Categorization of Infiltration Feasibility Condition (Required unless the project will use harvest and use BMPs) Refer to Appendices C and D of the BMP Design Manual to complete Form 6.	✓ Included (Form 6)* ☐ Not included because the entire project will use harvest and use BMPs
Attachment 1e	Pollutant Control BMP Design Worksheets / Calculations (Required) Refer to Appendices B and E of the BMP Design Manual for structural pollutant control BMP design guidelines	✓ Included

***Included in body of report**

Use this checklist to ensure the required information has been included on the DMA Exhibit:

The DMA Exhibit must identify:

- ✓ Underlying hydrologic soil group
- ✓ Approximate depth to groundwater
- ✓ Existing natural hydrologic features (watercourses, seeps, springs, wetlands) (N/A)
- □ Critical coarse sediment yield areas to be protected (N/A)
- ✓ Existing topography and impervious areas
- ✓ Existing and proposed site drainage network and connections to drainage offsite
- □ Proposed demolition (N/A)
- ✓ Proposed grading
- ✓ Proposed impervious features
- ✓ Proposed design features and surface treatments used to minimize imperviousness
- ✓ Drainage management area (DMA) boundaries, DMA ID numbers, and DMA areas (square footage or acreage), and DMA type (i.e., drains to BMP, self-retaining, or self-mitigating)
- □ Potential pollutant source areas and corresponding required source controls (see Chapter 4, Appendix E.1, and Form 1) (N/A)
- ✓ Structural BMPs (identify location, type of BMP, and size/detail)

SECTION 1 – Redevelopment Determination Part I

REDEVELOPMENT – PART I	YES	NO
1. Is your project a **Redevelopment Project**? ***Redevelopment*** *is defined as the creation, addition or replacement of at least 5,000 square feet of impervious surface on an already developed site which falls under the project categories listed in Table 1 in Section 4 below* ***Examples of Redevelopment*** *include, but are not limited to: the expansion of a building footprint; road widening; addition to or replacement of a structure and creation or addition of impervious surfaces; Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction.* *Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair.*		**X**
If you answered **YES**, your project is considered redevelopment. Please proceed to Section 2. If you answer **NO**, then your project is not considered redevelopment. Please proceed to Section 4.		

SECTION 2 – Maintenance Projects Determination

MAINTENANCE PROJECTS	YES	NO
1. Is your project a **Maintenance Project**? *Maintenance Projects are defined as those projects where impervious surfaces may be removed as part of a routine maintenance activity, such as:* • Replacing roof material on an existing building • Rebuilding a structure to original design after damage from earthquake, fire or similar disasters • Restoring pavement or other surface materials affected by trenches from utility work • Resurfacing existing roads and parking lots, including slurry, overlay and restriping • Routine replacement of damaged pavement, including full depth replacement, if the sole purpose is to repair the damage • Constructing new sidewalk, pedestrian ramps or bike lanes on existing roads (within existing street right-of-way) • Restoring a historic building to its original historic design *Repair or improvements to an existing building or structure that do not alter the size:* • Plumbing, electrical and HVAC work • Interior alterations including major interior remodels and tenant build-out within an existing commercial building • Exterior alterations that do not change the general dimensions and structural framing of the building (does not include building additions or projects where the existing building is demolished)		
If you answered **YES**, your project is considered a Maintenance Project, and it is considered a Non-Development Project, and post construction requirements do not apply. Please proceed to Section 5 and check the **Non-Development Project** box. If you answered **NO,** please proceed to Section 3.		

SECTION 3 – Redevelopment Determination Part II

REDEVELOPMENT – PART II	YES	NO
1. Is your project an addition to an existing priority project type? *Priority projects are defined in Table 1, Section 4.*		
If you answered YES, please proceed to Question 2 of this section. If you answered NO, then your project is not considered redevelopment and is not subject to priority project requirements, only standard requirements. Please proceed to Section 5 and check the Standard Project box.		
2. Does your project consist wholly of one or more of the following:		
a. Trenching and resurfacing associated with utility work?		
b. Resurfacing and reconfiguring surface parking lots?		
c. New sidewalk construction, pedestrian ramps, or bike lanes on public and/or private existing roads?		
d. Replacement of damaged pavement?		
If you answered **NO** to **ALL** of the questions, please proceed to Question 3. If you answered **YES** to **ONE OR MORE** of the questions then your project is not a redevelopment project and is not subject to priority or standard project requirements. Please proceed to Section 5 and check the **Non-Development Project** box.		
3. Will the development create, add or replace at least 5,000 ft^2 of impervious surfaces on an existing development?		
If you answered **YES**, your project is considered a Priority Redevelopment Project and you are subject to priority project requirements. Please proceed to Section 5 and check the **Priority Development or Redevelopment Project** box. If you answered **NO,** then your project is **NOT** considered a Priority Redevelopment Project and is **NOT** subject to priority project requirements, only standard requirements. Please proceed to Section 5 and check the **Standard Project** box.		

SECTION 4 – New Development Projects

NEW DEVELOPMENT	YES	NO
1. Is your project a **New Development Project**? *Development projects are defined by the MS4 Permit as "construction, rehabilitation, redevelopment, or reconstruction of any public or private projects." Projects are classified as PDPs if they are in one or more of the PDP categories presented in the MS4 Permit, which are defined in (a) through (f), below.*	**X**	

Table 1 Is the project in any of these categories?

Yes ☒	No ❑	**A**	New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes ❑	No ❑	**B**	Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes ❑	No ❑	**C**	New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses: (i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (Standard Industrial Classification (SIC) code 5812). Information and an SIC search function are available at https://www.osha.gov/pls/imis/sicsearch.html. (ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent or greater. (iii) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. (iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

Yes ❑	No ❑	**D**	New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharging directly to an Environmentally Sensitive Area (ESA). "Discharging directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands). **Note:** ESAs are areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and San Diego Water Board; and any other equivalent environmentally sensitive areas which have been identified by the City. For projects adjacent to an ESA, but not discharging to an ESA, the 2,500 sq-ft threshold does not apply as long as the project does not physically disturb the ESA and the ESA is upstream of the project.
Yes ❑	No ❑	**E**	New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses: (i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. Information and an SIC search function are available at https://www.osha.gov/pls/imis/sicsearch.html. (ii) Retail gasoline outlets. This category includes Retail gasoline outlets that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic of 100 or more vehicles per day.
Yes ❑	No ❑	**F**	New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction. This means any activity that moves soils or substantially alters the pre-existing vegetated or man-made cover of any land. This includes, but is not limited to the following: i. Grading, digging, cutting, scraping, stockpiling, pavement removal, and exterior construction; ii. Substantial removal of vegetation where soils are disturbed including but not limited to removal by clearing or grubbing; or iii. Any activity which bares soil or rock or involves streambed alterations or the diversion or piping of any watercourse. **Exclusions that apply to this category only**: Projects creating less than 5,000 sf of impervious surface and where any added landscaping does not require regular use of pesticides and fertilizers, such as a slope stabilization project using native plants, are excluded from this category. Calculation of the square footage of impervious surface need not include linear pathways that are for infrequent vehicle use, such as for emergency or maintenance access or for bicycle or pedestrian use, if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces.

If you checked **YES** for **ANY** of the categories above, the proposed project is a priority project and priority project requirements apply. Please proceed with Section 5 and check the **Priority Development** box.

If you checked **NO** for **ALL** of the categories above, then the project is a non-priority project and standard project requirements apply. Please proceed with Section 5 and check the **Standard Project** box.

If your project is **NOT** new development but may be considered redevelopment, then please return to Section 3 if you have not already done so.

SECTION 5 – Final Determination

Based on the information provided in Sections 1-4, this project is determined to be a:

☒ **PRIORITY DEVELOPMENT OR REDEVELOPMENT PROJECT.** PRIORITY REQUIREMENTS APPLY AND A STORM WATER MANAGEMENT PLAN (SWMP) MUST BE SUBMITTED AT THE TIME OF APPLICATION.

☐ **STANDARD PROJECT.** STANDARD REQUIREMENTS APPLY AND APPLICABLE SECTIONS OF A STORM WATER MANAGEMENT PLAN (SWMP) MUST BE SUBMITTED AT THE TIME OF APPLICATION.

☐ **NON DEVELOPMENT PROJECT.**

Applicant Information and Signature Box

Address:	APN(s)
Applicant Name:	Applicant Title:
Applicant Signature:	Date:

WATERMARK DEL MAR
48–UNIT
DMA EXHIBIT

LEGEND

- DMA BOUNDARY
- ROOFTOPS
- PAVED
- LANDSCAPE/PERVIOUS
- BIOFILTRATION

Existing Wetlands Boundary

Existing Wetlands Boundary

0 20 40 Feet

SCALE: 1" = 20'

Automated Worksheet B.2-1: Calculation of Design Capture Volume (V1.0)

Category	#	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*viii*	*ix*	*x*	Units
Standard Drainage Basin Inputs	0	Drainage Basin ID or Name	1										unitless
	1	Basin Drains to the Following BMP Type	Biofiltration										unitless
	2	85th Percentile 24-hr Storm Depth	0.40										inches
	3	Impervious Surfaces Not Directed to Dispersion Area (C=0.90)	66,493										sq-ft
	4	Semi-Pervious Surfaces Not Serving as Dispersion Area (C=0.30)	0										sq-ft
	5	Engineered Pervious Surfaces Not Serving as Dispersion Area (C=0.10)	27,849										sq-ft
	6	Natural Type A Soil Not Serving as Dispersion Area (C=0.10)	0										sq-ft
	7	Natural Type B Soil Not Serving as Dispersion Area (C=0.14)	0										sq-ft
	8	Natural Type C Soil Not Serving as Dispersion Area (C=0.23)	0										sq-ft
	9	Natural Type D Soil Not Serving as Dispersion Area (C=0.30)	0										sq-ft
Dispersion, Tree Well, & Rain Barrel Inputs (Optional)	10	Does Tributary Incorporate Dispersion, Tree Wells, and/or Rain Barrels?	No	No	No	No	No	No	No	No	No	No	yes/no
	11	Impervious Surfaces **Directed to Dispersion Area** per SD-B ($C_{initial}$=0.90)											sq-ft
	12	Semi-Pervious Surfaces **Serving as Dispersion Area** per SD-B (C=0.30)											sq-ft
	13	Engineered Pervious Surfaces **Serving as Dispersion Area** per SD-B (C=0.10)											sq-ft
	14	Natural Type A Soil **Serving as Dispersion Area** per SD-B (C=0.10)											sq-ft
	15	Natural Type B Soil **Serving as Dispersion Area** per SD-B (C=0.14)											sq-ft
	16	Natural Type C Soil **Serving as Dispersion Area** per SD-B (C=0.23)											sq-ft
	17	Natural Type D Soil **Serving as Dispersion Area** per SD-B (C=0.30)											sq-ft
	18	Number of Tree Wells Proposed per SD-A											#
	19	Average Mature Tree Canopy Diameter											ft
	20	Number of Rain Barrels Proposed per SD-E											#
	21	Average Rain Barrel Size											gal
Final Adjusted Runoff Factor Calculations	22	Total Area Tributary to BMP	94,342	0	0	0	0	0	0	0	0	0	sq-ft
	23	Initial Runoff Factor	0.66	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	unitless
	24	Total Impervious Area Dispersed to Pervious Surface	0	0	0	0	0	0	0	0	0	0	sq-ft
	25	Total Pervious Dispersion Area	0	0	0	0	0	0	0	0	0	0	sq-ft
	26	Dispersed Impervious Area / Pervious Dispersion Area	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ratio
	27	Adjustment Factor for Impervious Areas	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	ratio
	28	Final Adjusted Tributary Runoff Factor	0.66	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	unitless
Volume Reduction Calculations	29	Final Effective Tributary Area	62,266	0	0	0	0	0	0	0	0	0	sq-ft
	30	Initial Design Capture Volume	2,076	0	0	0	0	0	0	0	0	0	cubic-feet
	31	Volume Reduction per Tree Well	0	0	0	0	0	0	0	0	0	0	cubic-feet
	32	Total Tree Well Volume Reduction	0	0	0	0	0	0	0	0	0	0	cubic-feet
	33	Total Rain Barrel Volume Reduction	0	0	0	0	0	0	0	0	0	0	cubic-feet
Result	34	Design Capture Volume Tributary to BMP	2,076	0	0	0	0	0	0	0	0	0	cubic-feet

Worksheet B.2-1 General Notes:

A. Applicants may use this worksheet to calculate design capture volumes for up to 10 drainage areas User input must be provided for yellow shaded cells, values for all other cells will be automatically generated, errors/notifications will be highlighted in red and summarized below. Upon completion of this worksheet, proceed to the appropriate BMP Sizing worksheet(s).

B. Impervious surfaces include roofs, concrete, asphalt, or pervious pavements with an impervious liner. Semi-pervious surfaces include decomposed granite, cobbles, crushed aggregate, or compacted soils such as unpaved parking. Engineered pervious surfaces include pervious pavements providing full retention of the 85th percentile rainfall depth, or areas with soils that have been amended and mulched per Section 86.709 of the Landscape Ordinance. Dispersion areas are pervious or semi-pervious surfaces that receive runoff from impervious surfaces (C=0.90) and reduce stormwater runoff as outlined in Fact Sheet SD-B.

Automated Worksheet B.5-1: Sizing Biofiltration BMPs (V1.0)

Category	#	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*vii*	*ix*	*x*	Units
BMP Inputs	0	Drainage Basin ID or Name	1	-	-	-	-	-	-	-	-	-	unitless
	1	Effective Tributary Area	59,365	-	-	-	-	-	-	-	-	-	sq-ft
	2	Minimum Biofiltration Footprint Sizing Factor	0.030	-	-	-	-	-	-	-	-	-	ratio
	3	Design Capture Volume Tributary to BMP	1,979	-	-	-	-	-	-	-	-	-	cubic-feet
	4	Provided Biofiltration Surface Area	2,625										sq-ft
	5	Provided Surface Ponding Depth	6										inches
	6	Provided Soil Media Thickness	18										inches
	7	Provided Gravel Storage Thickness	12										inches
	8	Hydromodification Orifice Diameter of Underdrain	n/a										inches
Biofiltration Calculations	9	Max Hydromod Flow Rate through Underdrain	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	CFS
	10	Max Soil Filtration Rate Allowed by Underdrain Orifice	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	in/hr
	11	Soil Media Filtration Rate	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	in/hr
	12	Soil Media Filtration Rate to be used for Sizing	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	in/hr
	13	Depth Biofiltered Over 6 Hour Storm	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	inches
	14	Soil Media Pore Space	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	unitless
	15	Gravel Pore Space	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	unitless
	16	Effective Depth of Biofiltration Storage	16.2	0	0	0	0	0	0	0	0	0	inches
	17	Drawdown Time for Surface Ponding	1	0	0	0	0	0	0	0	0	0	hours
	18	Drawdown Time for Entire Biofiltration Basin	3	0	0	0	0	0	0	0	0	0	hours
	19	Total Depth Biofiltered	46.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	inches
	20	Option 1 - Biofilter 1.50 DCV: Target Volume	2,968	0	0	0	0	0	0	0	0	0	cubic-feet
	21	Option 1 - Provided Biofiltration Volume	2,968	0	0	0	0	0	0	0	0	0	cubic-feet
	22	Option 2 - Store 0.75 DCV: Target Volume	1,484	0	0	0	0	0	0	0	0	0	cubic-feet
	23	Option 2 - Provided Storage Volume	1,484	0	0	0	0	0	0	0	0	0	cubic-feet
	24	Percentage of Performance Requirement Satisfied	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	ratio
Result	25	**Deficit of Effectively Treated Stormwater**	0	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	cubic-feet

Worksheet B.5-1 General Notes:

A. Applicants may use this worksheet to size Lined Biofiltration BMPs (BF-1) for up to 10 basins. User input must be provided for yellow shaded cells, values for blue cells are automatically populated based on user inputs from previous worksheets, values for all other cells will be automatically generated, errors/notifications will be highlighted in red and summarized below. BMPs fully satisfying the pollutant control performance standards will have a deficit treated volume of zero and be highlighted in green.

Summary of Stormwater Pollutant Control Calculations (V1.0)

Category	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*vii*	*ix*	*x*	Units
Drainage Basin Inputs	Drainage Basin ID or Name	1	-	-	-	-	-	-	-	-	-	unitless
	Total Area Tributary to BMP	102,354	-	-	-	-	-	-	-	-	-	sq-ft
	Initial Runoff Factor	0.58	-	-	-	-	-	-	-	-	-	unitless
	85th Percentile 24-hr Storm Depth	0.4	-	-	-	-	-	-	-	-	-	inches
	Initial Design Capture Volume	1,979	-	-	-	-	-	-	-	-	-	cubic-feet
Volume Reductions	Final Adjusted Tributary Runoff Factor	0.58	-	-	-	-	-	-	-	-	-	unitless
	Final Effective Tributary Area	59,365	-	-	-	-	-	-	-	-	-	sq-ft
	Tree Well and Rain Barrel Reductions	0	-	-	-	-	-	-	-	-	-	cubic-feet
	Design Capture Volume Tributary to BMP	1,979	-	-	-	-	-	-	-	-	-	cubic-feet
BMP Sizing	Basin Drains to the Following BMP Type	Biofiltration	-	-	-	-	-	-	-	-	-	unitless
	Deficit of Effectively Treated Stormwater	0	-	-	-	-	-	-	-	-	-	cubic-feet

Summary Notes:

All fields in this summary worksheet are populated based on previous user inputs. Drainage basins achieving full compliance with performance requirements for onsite pollutant control are highlighted in green. Drainage basins not achieving full compliance are highlighted in red and summarized below. Please note that drainage areas using De Minimis, Self-Mitigating, and/or Self-Retaining classifications may be required to provide additional supporting information.

-Congratulations, all specified drainage basins and BMPs are in compliance with stormwater pollutant control requirements. Include 11x17 color prints of this summary sheet and supporting worksheet calculations as part of the SWQMP submittal package.

ATTACHMENT 2
BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES

This is the cover sheet for Attachment 2.

✓ Mark this box if this attachment is empty because the project is exempt from PDP hydromodification management requirements.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 2a	Hydromodification Management Exhibit (Required)	☐ Included See Hydromodification Management Exhibit Checklist on the back of this Attachment cover sheet.
Attachment 2b	Management of Critical Coarse Sediment Yield Areas (WMAA Exhibit is required, additional analyses are optional) See Section 6.2 of the BMP Design Manual.	☐ Exhibit showing project drainage boundaries marked on WMAA Critical Coarse Sediment Yield Area Map (Required) Optional analyses for Critical Coarse Sediment Yield Area Determination ☐ 6.2.1 Verification of Geomorphic Landscape Units Onsite ☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment ☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
Attachment 2c	Geomorphic Assessment of Receiving Channels (Optional) See Section 6.3.4 of the BMP Design Manual.	☐ Not performed ☐ Included ☐ Submitted as separate stand-alone document
Attachment 2d	Flow Control Facility Design, including Structural BMP Drawdown Calculations and Overflow Design Summary (Required) See Chapter 6 and Appendix G of the BMP Design Manual	☐ Included ☐ Submitted as separate stand-alone document
Attachment 2e	Vector Control Plan (Required when structural BMPs will not drain in 96 hours)	☐ Included ☐ Not required because BMPs will drain in less than 96 hours

Use this checklist to ensure the required information has been included on the Hydromodification Management Exhibit:

The Hydromodification Management Exhibit must identify:

- ☐ Underlying hydrologic soil group
- ☐ Approximate depth to groundwater
- ☐ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- ☐ Critical coarse sediment yield areas to be protected
- ☐ Existing topography
- ☐ Existing and proposed site drainage network and connections to drainage offsite
- ☐ Proposed grading
- ☐ Proposed impervious features
- ☐ Proposed design features and surface treatments used to minimize imperviousness
- ☐ Point(s) of Compliance (POC) for Hydromodification Management
- ☐ Existing and proposed drainage boundary and drainage area to each POC (when necessary, create separate exhibits for pre-development and post-project conditions)
- ☐ Structural BMPs for hydromodification management (identify location, type of BMP, and size/detail)

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES

TECHNICAL MEMORANDUM

TO: Marne Bouillon
Watermark DM, L.P.

FROM: Tory Walker, PE, CFM, LEED GA
Alex Smith, MS, EIT, QISP

DATE: September 22, 2016

RE: Watermark Del Mar Hydromodification Management Exemption

INTRODUCTION

The San Diego Regional Water Quality Control Board (San Diego Water Board) Order No. R9-2013-0001 (MS4 Permit) requires a hydromodification management plan (HMP) be developed for all Priority Development Projects (PDPs). However, the MS4 Permit states that a project may be *exempt* from hydromodification management requirements if the project meets certain conditions. The conditions for the hydromodification exemption are presented in the San Diego Water Board MS4 Permit, the City of Del Mar BMP Design Manual (BMPDM) Sections 1.6 and 6.1, and the San Dieguito River Watershed Management Area (WMA) Water Quality Improvement Plan (WQIP).

The purpose of this memo is to demonstrate that the Watermark Del Mar project, located in the City of Del Mar, CA, meets the conditions necessary for a hydromodification management exemption.

This memo also provides additional discussion regarding the project's 100-year peak flow drainage and demonstrates the project's ability to safely discharge peak runoff without impacting flooding downstream.

HYDROMODIFICATION MANAGEMENT REQUIREMENTS

To determine the applicability of hydromodification management requirements, the BMPDM refers to Figure 1-2 and the associated criteria describing nodes in Figure 1-2. This section assesses each of the five nodes of Figure 1-2:

Node 1: Is the project a PDP?

Yes—the project meets the definition of a PDP as presented in BMPDM Section 1.4.

Node 2: Direct discharge to Pacific Ocean?

No—the project discharges directly into the San Dieguito River.

Node 3: Direct discharge to enclosed embayment, not within protected area?

No—the project discharges directly into the San Dieguito River, which is not within a protected area. The directly discharging outfall is not within the San Dieguito Lagoon State Marine Conservation Area boundary.

Node4: Direct discharge to water storage reservoir or lake, below spillway or normal operating level?

No—the project discharges directly into the San Dieguito River.

Node5: Direct discharge to an area identified in the San Dieguito River WMAA?

Yes—the project discharges directly into the San Dieguito River through an uninterrupted hardened conveyance system, as identified in the San Dieguito WMA WQIP Attachment N-1 (San Dieguito River Watershed Management Area Analysis (WMAA)), Section 4.1.1.4. The San Dieguito WMAA recommends hydromodification management exemptions be granted to projects directly discharging to the San Dieguito River through any "directly discharging" outfall between the upstream and downstream limits. The upstream and downstream limits are provided in the following table:

Table 1: Hydromodification Management Exemptions Recommended by the San Dieguito River WMAA

River	Downstream Limit	Upstream Limit
San Dieguito River	Upstream edge of the railroad crossing	Lake Hodges Dam

The project's direct discharge conveyance system (at the point of discharge to the exempt river reach) is located just south of the Jimmy Durante Boulevard Bridge, which lies within the limits presented in Table 1. The project site and associated direct discharge conveyance system is presented in the Hydromodification Management Exemption Map presented in Appendix 2.

The project also meets the following conditions of "direct discharge", as defined by the City of Del Mar in BMPDM Section 1.6:

a) A properly sized energy dissipation system, in the form of a Type 1 Rip Rap Energy Dissipator (designed in conformance with San Diego Regional Standard Drawing D-40) is provided to mitigate outlet discharge velocity from the direct discharge to the exempt river reach for the ultimate condition peak design flow of the direct discharge (ultimate design velocity estimated at 8 feet per second based upon City of Del Mar engineering drawing E-91-004-6, Profile "B"). The as-built storm drain improvement plan and RSD D-40 is provided in Appendix 3.

b) The invert elevation of the direct discharge conveyance system (at the point of discharge to the exempt river reach) is 5.0 feet (18" RCP, City of Del Mar engineering drawing E-91-004-6). The San Dieguito River Flood Profile published within the Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) for San Diego County defines the 10-year floodplain elevation at 10.6 feet (NAVD 88) at the river station corresponding to the project's point of discharge to the exempt river reach (FEMA, 2012). Therefore, the invert elevation of the direct discharge conveyance system is below the 10-year floodplain elevation. The FIS Flood Profile is provided in Appendix 4.

c) The San Dieguito River Flood Profile published within the San Diego County FIS defines the 100-year floodplain elevation at 20.2 feet (NAVD 88) at the river station corresponding to the project's point of discharge to the exempt river reach (FEMA, 2012). Therefore, the conveyance system outlet invert elevation is not located above the 100-year floodplain elevation.

Therefore, the Watermark Del Mar project area is appropriate for a hydromodification management exemption based upon the criteria presented by the San Diego Water Board, the City of Del Mar, the

San Dieguito River WMA WQIP, and the professional judgement of TRWE. A completed flow chart is provided in Appendix 1.

PEAK 100-YEAR FLOW DETENTION

The existing project site drains east via overland flow into San Dieguito Drive, where it concentrates along the western curb and gutter. Flows travel northwest until intercepted by an existing curb inlet (DIB 412) located just southeast of the intersection of San Dieguito Drive and Jimmy Durante Boulevard. The curb inlet intercepts and then conveys flow through an 18" RCP until directly discharging to the San Dieguito River via the aforementioned directly discharging outfall (DHB 410).

The Watermark Del Mar project proposes to ultimately discharge stormwater runoff directly into the San Dieguito River via the aforementioned directly discharging outfall. The entire project site proposes to drain stormwater into a biofiltration basin (see SWQMP), where an overflow structure will be sized to accommodate the post developed condition peak 100-year flow. The overflow structure will connect to a pipe that joins into the existing storm drain system at the aforementioned curb inlet (DIB 412). From that point, flows will be safely conveyed through the existing infrastructure and directly discharge into the San Dieguito River.

The project site is located near the mouth of the San Dieguito River. In order to reduce potential flooding impacts, it is recommended that the peak flows occurring at or near the mouth of the watershed be conveyed without attenuation in order to prevent the project's peak flows from compounding with the watershed-wide peak flow conveyed by the San Dieguito River. Our professional engineering judgment dictates that, in this case, peak 100-year flow detention would very likely *increase* flood impacts. Furthermore, the increase in runoff due to the project will not pose a flooding impact to downstream properties or existing conveyance systems. Therefore, peak 100-year flow detention is not necessary.

SUMMARY

This technical memorandum has demonstrated that exemption from hydromodification management requirements is appropriate for the Watermark Del Mark project because stormwater discharges pose no potential for erosion within the range of flows considered to be geomorphically significant. This memo has also demonstrated that exemption from peak 100-year flow detention requirements is also appropriate because the undetained peak 100-year flows pose no flood risk to upstream or downstream properties. While exempt from these two requirements, the project will treat the required design capture volume (DCV) via post-developed best management practices in accordance with the San Diego Water Board MS4 Permit and the City of Del Mar BMPDM.

REFERENCES

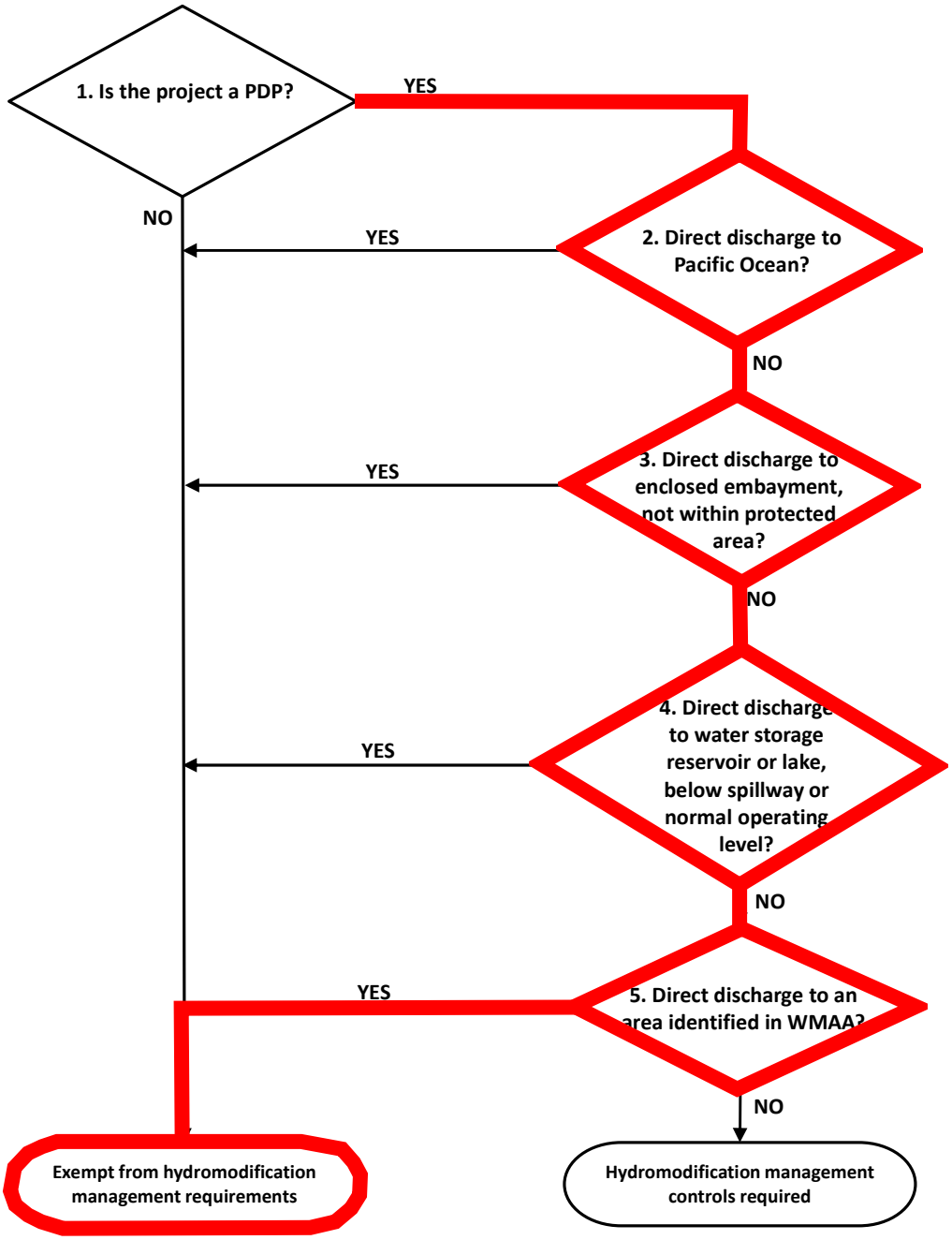
City of Del Mar (2016), "*City of Del Mar BMP Design Manual for Permanent Site Design, Storm Water Treatment and Hydromodification*".

Federal Emergency Management Agency (2012), "*Flood Insurance Study: San Diego County, California and Incorporated Areas, Volume 9 of 11 (Flood Insurance Study Number 06073CV009C)*"

San Diego County Copermittees (2014), "*San Dieguito River Watershed Management Area Analysis*".

Appendix 1

Hydromodification Management Exemption Flow Chart



*Direct discharge refers to an uninterrupted hardened conveyance system; Note to be used in conjunction with Node Descriptions.

FIGURE 1-2. Applicability of Hydromodification Management BMP Requirements

Appendix 2

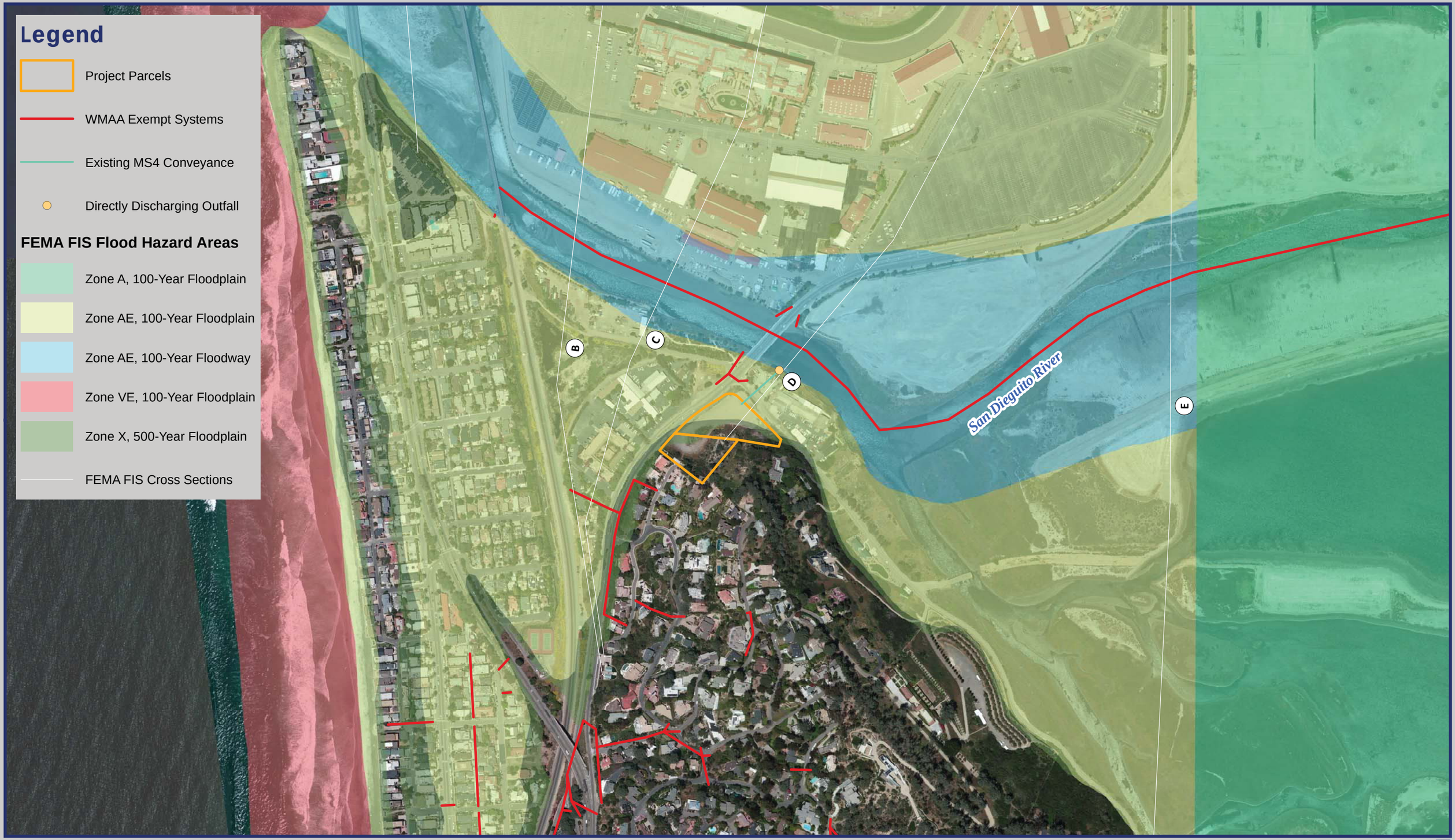
Hydromodification Management Exemption Map

Legend

- Project Parcels
- WMAA Exempt Systems
- Existing MS4 Conveyance
- Directly Discharging Outfall

FEMA FIS Flood Hazard Areas

- Zone A, 100-Year Floodplain
- Zone AE, 100-Year Floodplain
- Zone AE, 100-Year Floodway
- Zone VE, 100-Year Floodplain
- Zone X, 500-Year Floodplain
- FEMA FIS Cross Sections



Regional WMAA Hydromodification Management Exemption Map

0 250 500 Feet 1,000

NORTH

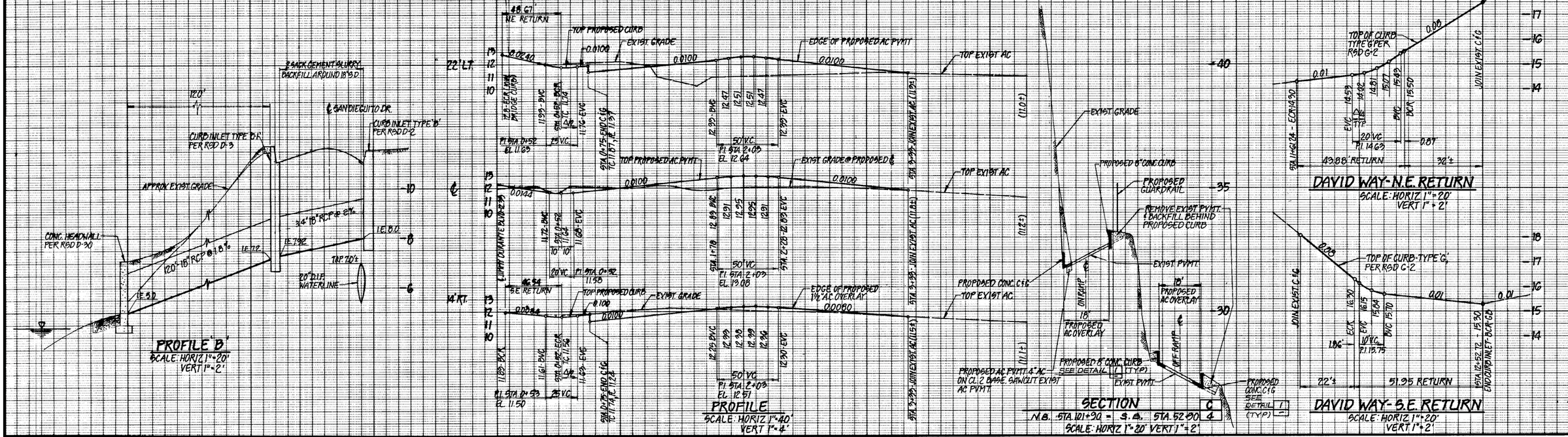
Aerial Imagery Source: DigitalGlobe, 06/2012
WMAA Exempt Systems: Project Clean Water, 09/2014
Directly Discharging Outfall: City of Del Mar, 2016
Existing MS4 Conveyance, City of Del Mar, 2016
FEMA FIS Flood Hazard Areas: FEMA, 08/2015
FEMA FIS Cross Sections: FEMA, 08/2015

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES
122 CIVIC CENTER DR, STE 206, VISTA, CA 92084 · 760-414-9212

X:\Projects\1366 (Kitchell Development)\01 (Watermark Del Mar)\Report\Revised\Watermark WMAA HMP Exemption Map.mxd
Exhibit Date: 8/9/2016

Appendix 3

As-Built Improvement Plan



CONC HEADWALL, PER RSD D-30
RIP RAP W/SILL PER RSD D-40, TYPE 1. 12" MIN THICKNESS OF 8" ø MIN CRUSHED ROCK RIP-RAP ON 2" MIN OF ½" MAX CRUSHED ROCK FILTER BLANKET ON FILTER FABRIC.

STORM DRAIN DATA

№	DELTA OR BEARING	RADIUS	LENGTH	REMARKS
⚠	N 45°44'22"E.		34'	18" RCP
⚠	N 42°20'00.E.		120'	18" RCP

℄ DATA

№	DELTA OR BEARING	RADIUS	LENGTH	REMARKS
①	S 44°15'38"E.		75.00'	0+00 TO BC
②	12°57'29"	600'	135.70'	BC TO PRC
③	12°07'23"	402'	85.06'	PRC TO EC
④	S 43°25'32"W.		37.24'	EC TO 3+93

CURB DATA

№	DELTA OR BEARING	RADIUS	LENGTH	REMARKS
①	88°53'21"	30.00'	46.54'	S.E. RETURN
②	S 44°15'38"E.		23.00'	
③	S 44°15'38"E.		23.00'	
④	92°56'50"	30.00'	48.67'	N.E. RETURN

RECORD DRAWING
THIS RECORD DRAWING HAS BEEN PREPARED IN PART, BASED ON INFORMATION FURNISHED BY OTHERS. JOHN POWELL & ASSOCIATES, INC. DID NOT PROVIDE CONTINUOUS CONSTRUCTION OBSERVATION AND WILL NOT BE RESPONSIBLE FOR ANY INACCURACIES OR OMISSIONS WHICH MAY BE CONTAINED HEREIN

REGISTERED PROFESSIONAL ENGINEER — ANN GUNNING — NO. 045198 EXP 9-30-94 — CIVIL — STATE OF CALIFORNIA

UNAUTHORIZED CHANGES & USES: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

California Council of Civil Engineers & Land Surveyors

REVISION	DESCRIPTION	APPROVED	DATE
⚠	RECORD DRAWING KN		10/92

SCALE: 1"=40'
PROJECT NO. 2.310

DESIGNED:	DRAWN:	CHECKED:
KN	KN/LB	AG

Ann Gunning — ENGINEER OF WORK — 45198 R.C.E. NO. — 4-12-91 DATE

POWELL
John Powell & Associates, Inc.
Consulting Civil Engineers
175 Calle Magdalena, Suite 101
Encinitas, CA 92024
(619) 753-1120

APPROVED Steve E. Cross 4/12/91 CITY MANAGER DATE
APPROVED Richard E. Thorn 4/12/91 PUBLIC WORKS DIRECTOR DATE

CITY OF DEL MAR
JIMMY DURANTE BLVD. STREET IMPROVEMENTS PROJECT SAN DIEGUITO DRIVE INTERSECTION IMPROVEMENT PLAN

SHEET 6 OF 9 SHEETS

D-4058-6

E-91-004-6

Appendix 4

FEMA FIS Flood Profile

PROFILE BASELINE

JIMMY DURANTE BLVD.

ELEVATION IN FEET (NAVD)

30
20
10
0
−10

2800 3000 3200 3400 3600 3800 4000 4200 4400 4600 4800

STREAM DISTANCE IN FEET ABOVE MOUTH

100-Year Elevation
10-Year Elevation

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- CROSS SECTION LOCATION

FLOOD PROFILES

SAN DIEGUITO RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

380P

ATTACHMENT 3
Structural BMP Maintenance Information

This is the cover sheet for Attachment 3.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	**Contents**	**Checklist**
Attachment 3a	Structural BMP Maintenance Thresholds and Actions (Required)	✓ Included See Structural BMP Maintenance Information Checklist on the back of this Attachment cover sheet.
Attachment 3b	Draft Maintenance Agreement (when applicable)	☐ Included ☐ Not Applicable

E.12 BF-1 Biofiltration

Location: 43rd Street and Logan Avenue, San Diego, California

MS4 Permit Category
Biofiltration

Manual Category
Biofiltration

Applicable Performance Standard
Pollutant Control
Flow Control

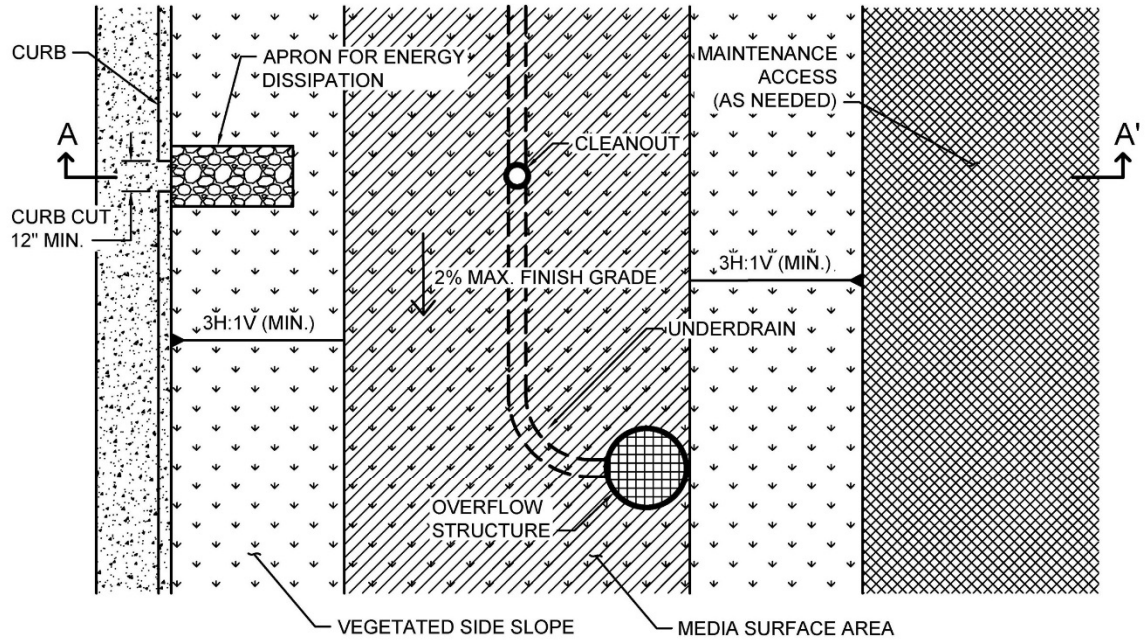
Primary Benefits
Treatment
Volume Reduction (Incidental)
Peak Flow Attenuation (Optional)

Description

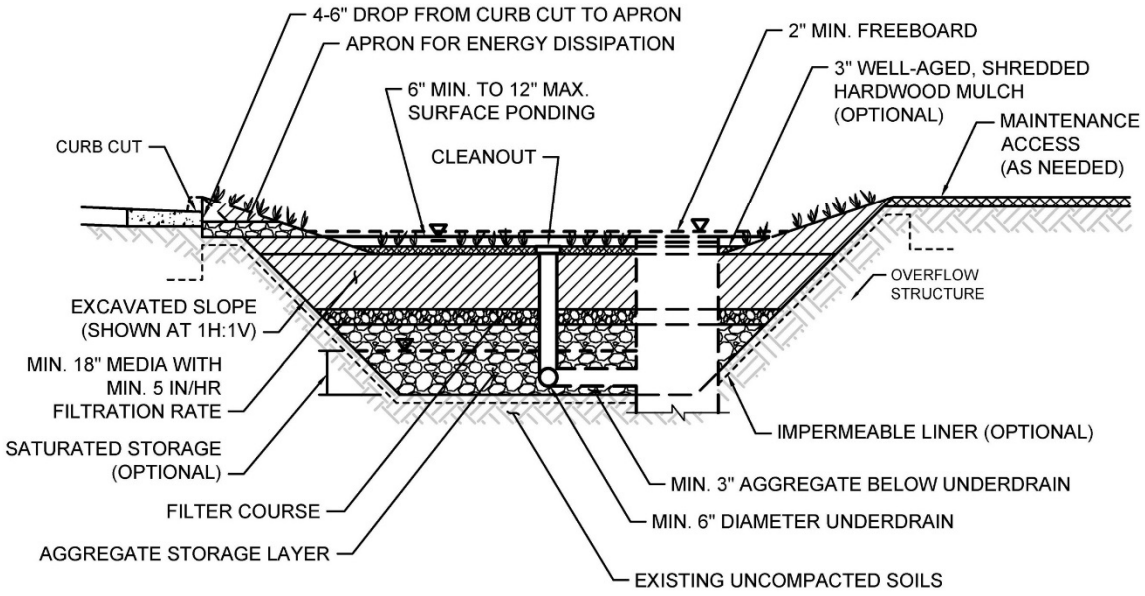
Biofiltration (Bioretention with underdrain) facilities are vegetated surface water systems that filter water through vegetation, and soil or engineered media prior to discharge via underdrain or overflow to the downstream conveyance system. Bioretention with underdrain facilities are commonly incorporated into the site within parking lot landscaping, along roadsides, and in open spaces. Because these types of facilities have limited or no infiltration, they are typically designed to provide enough hydraulic head to move flows through the underdrain connection to the storm drain system. Treatment is achieved through filtration, sedimentation, sorption, biochemical processes and plant uptake.

Typical bioretention with underdrain components include:

- Inflow distribution mechanisms (e.g., perimeter flow spreader or filter strips)
- Energy dissipation mechanism for concentrated inflows (e.g., splash blocks or riprap)
- Shallow surface ponding for captured flows
- Side slope and basin bottom vegetation selected based on expected climate and ponding depth
- Non-floating mulch layer (Optional)
- Media layer (planting mix or engineered media) capable of supporting vegetation growth
- Filter course layer consisting of aggregate to prevent the migration of fines into uncompacted native soils or the aggregate storage layer
- Aggregate storage layer with underdrain(s)
- Impermeable liner or uncompacted native soils at the bottom of the facility
- Overflow structure



PLAN
NOT TO SCALE



SECTION A-A'
NOT TO SCALE

Typical plan and Section view of a Biofiltration BMP

Design Adaptations for Project Goals

Biofiltration Treatment BMP for storm water pollutant control. The system is lined or un-lined to provide incidental infiltration, and an underdrain is provided at the bottom to carry away filtered runoff. This configuration is considered to provide biofiltration treatment via flow through the media layer. Storage provided above the underdrain within surface ponding, media, and aggregate storage is considered included in the biofiltration treatment volume. Saturated storage within the aggregate storage layer can be added to this design by raising the underdrain above the bottom of the aggregate storage layer or via an internal weir structure designed to maintain a specific water level elevation.

Integrated storm water flow control and pollutant control configuration. The system can be designed to provide flow rate and duration control by primarily providing increased surface ponding and/or having a deeper aggregate storage layer above the underdrain. This will allow for significant detention storage, which can be controlled via inclusion of an outlet structure at the downstream end of the underdrain.

Design Criteria and Considerations

Bioretention with underdrain must meet the following design criteria. Deviations from the below criteria may be approved at the discretion of the City Engineer if it is determined to be appropriate:

	Siting and Design	***Intent/Rationale***
☐	Placement observes geotechnical recommendations regarding potential hazards (e.g., slope stability, landslides, and liquefaction zones) and setbacks (e.g., slopes, foundations, utilities).	Must not negatively impact existing site geotechnical concerns.
☐	An impermeable liner or other hydraulic restriction layer is included if site constraints indicate that infiltration or lateral flows should not be allowed.	Lining prevents storm water from impacting groundwater and/or sensitive environmental or geotechnical features. Incidental infiltration, when allowable, can aid in pollutant removal and groundwater recharge.
☐	Contributing tributary area shall be ≤ 5 acres (≤ 1 acre preferred).	Bigger BMPs require additional design features for proper performance. Contributing tributary area greater than 5 acres may be allowed at the discretion of the City Engineer if the following conditions are met: 1) incorporate design features (e.g. flow spreaders) to minimizing short circuiting of flows in

Siting and Design		*Intent/Rationale*
		the BMP and 2) incorporate additional design features requested by the City Engineer for proper performance of the regional BMP.
☐	Finish grade of the facility is ≤ 2%.	Flatter surfaces reduce erosion and channelization within the facility.
Surface Ponding		
☐	Surface ponding is limited to a 24-hour drawdown time.	Surface ponding limited to 24 hour for plant health. Surface ponding drawdown time greater than 24-hours but less than 96 hours may be allowed at the discretion of the City Engineer if certified by a landscape architect or agronomist.
☐	Surface ponding depth is ≥ 6 and ≤ 12 inches.	Surface ponding capacity lowers subsurface storage requirements. Deep surface ponding raises safety concerns. Surface ponding depth greater than 12 inches (for additional pollutant control or surface outlet structures or flow-control orifices) may be allowed at the discretion of the City Engineer if the following conditions are met: 1) surface ponding depth drawdown time is less than 24 hours; and 2) safety issues and fencing requirements are considered (typically ponding greater than 18" will require a fence and/or flatter side slopes) and 3) potential for elevated clogging risk is considered.
☐	A minimum of 2 inches of freeboard is provided.	Freeboard provides room for head over overflow structures and minimizes risk of uncontrolled surface discharge.
☐	Side slopes are stabilized with vegetation and are = 3H:1V or shallower.	Gentler side slopes are safer, less prone to erosion, able to establish vegetation more quickly and easier to maintain.
Vegetation		

	Siting and Design	***Intent/Rationale***
☐	Plantings are suitable for the climate and expected ponding depth. A plant list to aid in selection can be found in Appendix E.20.	Plants suited to the climate and ponding depth are more likely to survive.
☐	An irrigation system with a connection to water supply should be provided as needed.	Seasonal irrigation might be needed to keep plants healthy.
	Mulch	
☐	A minimum of 3 inches of well-aged, shredded hardwood mulch that has been stockpiled or stored for at least 12 months is provided.	Mulch will suppress weeds and maintain moisture for plant growth. Aging mulch kills pathogens and weed seeds and allows the beneficial microbes to multiply.
	Media Layer	
☐	Media maintains a minimum filtration rate of 5 in/hr over lifetime of facility. An initial filtration rate of 8 to 12 in/hr is recommended to allow for clogging over time; the initial filtration rate should not exceed 12 inches per hour.	A filtration rate of at least 5 inches per hour allows soil to drain between events. The initial rate should be higher than long term target rate to account for clogging over time. However an excessively high initial rate can have a negative impact on treatment performance, therefore an upper limit is needed.
☐	Media is a minimum 18 inches deep, meeting either of these two media specifications: City of San Diego Low Impact Development Design Manual (page B-18) (July 2011, unless superseded by more recent edition) **or** County of San Diego Low Impact Development Handbook: Appendix G -Bioretention Soil Specification (June 2014, unless superseded by more recent edition). Alternatively, for proprietary designs and custom media mixes not meeting the media specifications contained in the City or County LID Manual, the media meets the pollutant treatment performance criteria in Section F.1.	A deep media layer provides additional filtration and supports plants with deeper roots. Standard specifications shall be followed. For non-standard or proprietary designs, compliance with F.1 ensures that adequate treatment performance will be provided.

Siting and Design		*Intent/Rationale*
☐	Media surface area is 3% of contributing area times adjusted runoff factor or greater. Unless demonstrated that the BMP surface area can be smaller than 3%.	Greater surface area to tributary area ratios: a) maximizes volume retention as required by the MS4 Permit and b) decrease loading rates per square foot and therefore increase longevity. Adjusted runoff factor is to account for site design BMPs implemented upstream of the BMP (such as rain barrels, impervious area dispersion, etc.). Refer to Appendix B.2 guidance. Use Worksheet B.5-1 Line 26 to estimate the minimum surface area required per this criteria.
☐	Where receiving waters are impaired or have a TMDL for nutrients, the system is designed with nutrient sensitive media design (see fact sheet BF-2).	Potential for pollutant export is partly a function of media composition; media design must minimize potential for export of nutrients, particularly where receiving waters are impaired for nutrients.
Filter Course Layer		
☐	A filter course is used to prevent migration of fines through layers of the facility. Filter fabric is not used.	Migration of media can cause clogging of the aggregate storage layer void spaces or subgrade. Filter fabric is more likely to clog.
☐	Filter course is washed and free of fines.	Washing aggregate will help eliminate fines that could clog the facility and impede infiltration.
☐	Filter course calculations assessing suitability for particle migration prevention have been completed.	Gradation relationship between layers can evaluate factors (e.g., bridging, permeability, and uniformity) to determine if particle sizing is appropriate or if an intermediate layer is needed.
Aggregate Storage Layer		
☐	Class 2 Permeable per Caltrans specification 68-1.025 is recommended for the storage layer. Washed, open-graded crushed rock may be used, however a 4-6 inch washed pea gravel	Washing aggregate will help eliminate fines that could clog the aggregate storage layer void spaces or subgrade.

	Siting and Design	*Intent/Rationale*
	filter course layer at the top of the crushed rock is required.	
☐	The depth of aggregate provided (12-inch typical) and storage layer configuration is adequate for providing conveyance for underdrain flows to the outlet structure.	Proper storage layer configuration and underdrain placement will minimize facility drawdown time.
	Inflow, Underdrain, and Outflow Structures	
☐	Inflow, underdrains and outflow structures are accessible for inspection and maintenance.	Maintenance will prevent clogging and ensure proper operation of the flow control structures.
☐	Inflow velocities are limited to 3 ft./s or less or use energy dissipation methods. (e.g., riprap, level spreader) for concentrated inflows.	High inflow velocities can cause erosion, scour and/or channeling.
☐	Curb cut inlets are at least 12 inches wide, have a 4-6 inch reveal (drop) and an apron and energy dissipation as needed.	Inlets must not restrict flow and apron prevents blockage from vegetation as it grows in. Energy dissipation prevents erosion.
☐	Underdrain outlet elevation should be a minimum of 3 inches above the bottom elevation of the aggregate storage layer.	A minimal separation from subgrade or the liner lessens the risk of fines entering the underdrain and can improve hydraulic performance by allowing perforations to remain unblocked.
☐	Minimum underdrain diameter is 6 inches.	Smaller diameter underdrains are prone to clogging.
☐	Underdrains are made of slotted, PVC pipe conforming to ASTM D 3034 or equivalent or corrugated, HDPE pipe conforming to AASHTO 252M or equivalent.	Slotted underdrains provide greater intake capacity, clog resistant drainage, and reduced entrance velocity into the pipe, thereby reducing the chances of solids migration.
☐	An underdrain cleanout with a minimum 6-inch diameter and lockable cap is placed every 250 to 300 feet as required based on underdrain length.	Properly spaced cleanouts will facilitate underdrain maintenance.
☐	Overflow is safely conveyed to a downstream storm drain system or discharge point Size overflow structure to pass 100-year peak flow	Planning for overflow lessens the risk of property damage due to flooding.

Siting and Design	*Intent/Rationale*
for on-line infiltration basins and water quality peak flow for off-line basins.	

Conceptual Design and Sizing Approach for Storm Water Pollutant Control Only

To design bioretention with underdrain for storm water pollutant control only (no flow control required), the following steps should be taken:

1. Verify that siting and design criteria have been met, including placement requirements, contributing tributary area, maximum side and finish grade slopes, and the recommended media surface area tributary ratio.
2. Calculate the DCV per Appendix B based on expected site design runoff for tributary areas.
3. Use the sizing worksheet presented in Appendix B.5 to size biofiltration BMPs.

Conceptual Design and Sizing Approach when Storm Water Flow Control is Applicable

Control of flow rates and/or durations will typically require significant surface ponding and/or aggregate storage volumes, and therefore the following steps should be taken prior to determination of storm water pollutant control design. Pre-development and allowable post-project flow rates and durations should be determined as discussed in Chapter 6 of the manual.

1. Verify that siting and design criteria have been met, including placement requirements, contributing tributary area, maximum side and finish grade slopes, and the recommended media surface area tributary ratio.
2. Iteratively determine the facility footprint area, surface ponding and/or aggregate storage layer depth required to provide detention storage to reduce flow rates and durations to allowable limits. Flow rates and durations can be controlled from detention storage by altering outlet structure orifice size(s) and/or water control levels. Multi-level orifices can be used within an outlet structure to control the full range of flows.
3. If bioretention with underdrain cannot fully provide the flow rate and duration control required by this manual, an upstream or downstream structure with significant storage volume such as an underground vault can be used to provide remaining controls.
4. After bioretention with underdrain has been designed to meet flow control requirements, calculations must be completed to verify if storm water pollutant control requirements to treat the DCV have been met.

Use this checklist to ensure the required information has been included in the Structural BMP Maintenance Information Attachment:

✓ **Preliminary Design / Planning / CEQA level submittal:**

Attachment 3a must identify:

✓ Typical maintenance indicators and actions for proposed structural BMP(s) based on Section 7.7 of the BMP Design Manual

Attachment 3b is not required for preliminary design / planning / CEQA level submittal.

☐ **Final Design level submittal:**

Attachment 3a must identify:

☐ Specific maintenance indicators and actions for proposed structural BMP(s). This shall be based on Section 7.7 of the BMP Design Manual and enhanced to reflect actual proposed components of the structural BMP(s)
☐ How to access the structural BMP(s) to inspect and perform maintenance
☐ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
☐ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
☐ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
☐ Recommended equipment to perform maintenance
☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management

Attachment 3b: For private entity operation and maintenance, Attachment 3b shall include a draft maintenance agreement in the local jurisdiction's standard format (PDP applicant to contact the City Engineer to obtain the current maintenance agreement forms).

Typical Maintenance Indicator(s) for Filtration BMPs	Maintenance Actions
Accumulation of sediment, litter, or debris	Remove and properly dispose of accumulated materials, without damage to the vegetation.
Poor vegetation establishment	Re-seed, re-plant, or re-establish vegetation per original plans.
Overgrown vegetation	Mow or trim as appropriate, but not less than the design height of the vegetation per original plans when applicable (e.g. a vegetated swale may require a minimum vegetation height).
Erosion due to concentrated irrigation flow	Repair/re-seed/re-plant eroded areas and adjust the irrigation system
Erosion due to concentrated storm water runoff flow	Repair/re-seed/re-plant eroded areas, and make appropriate corrective measures such as adding erosion control blankets, adding stone at flow entry points, or minor re-grading to restore proper drainage according to the original plan. If the issue is not corrected by restoring the BMP to the original plan and grade, the current City Engineer shall be contacted prior to any additional repairs or reconstruction.
Standing water in vegetated swales	Make appropriate corrective measures such as adjusting irrigation system, removing obstructions of debris or invasive vegetation, loosening or replacing top soil to allow for better infiltration, or minor re-grading for proper drainage. If the issue is not corrected by restoring the BMP to the original plan and grade, the current City Engineer shall be contacted prior to any additional repairs or reconstruction.
Standing water in bioretention, biofiltration with partial retention, or biofiltration areas, or flow-through planter boxes for longer than 96 hours following a storm event*	Make appropriate corrective measures such as adjusting irrigation system, removing obstructions of debris or invasive vegetation, clearing underdrains (where applicable), or repairing/replacing clogged or compacted soils.
Obstructed inlet or outlet structure	Clear obstructions.
Damage to structural components such as weirs, inlet or outlet structures	Repair or replace as applicable.
*These BMPs typically include a surface ponding layer as part of their function which may take 96 hours to drain following a storm event.	

ATTACHMENT 4
Copy of Plan Sheets Showing Permanent Storm Water BMPs

This is the cover sheet for Attachment 4.

Use this checklist to ensure the required information has been included on the plans:

The plans must identify:

- ☐ Structural BMP(s) with ID numbers matching Form 4 Summary of PDP Structural BMPs
- ☐ The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit
- ☐ Details and specifications for construction of structural BMP(s)
- ☐ Signage indicating the location and boundary of structural BMP(s) as required by the City Engineer
- ☐ How to access the structural BMP(s) to inspect and perform maintenance
- ☐ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- ☐ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- ☐ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- ☐ Recommended equipment to perform maintenance
- ☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management
- ☐ Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)
- ☐ All BMPs must be fully dimensioned on the plans
- ☐ When proprietary BMPs are used, site-specific cross section with outflow, inflow, and model number shall be provided. Photocopies of general brochures are not acceptable.
- ☐ A single plan BMP sheet for each construction drawing highlighting only those BMPs included in the referenced construction drawing. (See Section 5.5.2 of the City's JRMP for further detail.)

To be provided with Final SWQMP

PRIORITY DEVELOPMENT PROJECT (PDP)
STORM WATER MANAGEMENT PLAN (SWMP)
FOR
Watermark Del Mar
(38 units)

Southwest corner of Jimmy Durante Blvd. and San Dieguito Drive
Del Mar, California 92014

ASSESSOR'S PARCEL NUMBER(S):
299-100-4700
299-100-4800

ENGINEER OF WORK:

_____

Tory R. Walker, RCE #45005

PREPARED FOR:
Watermark DM, L.P.
1555 Camino Del Mar, Suite 307
Del Mar, CA 92014

PDP SWMP PREPARED BY:
Tory R. Walker Engineering
122 Civic Center Drive
Vista, California 92084
(760) 414-9212

DATE OF SWMP:
July 13, 2017

PLANS PREPARED BY:
Sowards & Brown Engineering
2187 Newcastle Avenue, Suite 103
Cardiff by the Sea, California 92007
(760) 436-8500

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FORM 3 Site Design/LID BMP Checklist for All Development Projects
FORM 4 Summary of PDP Structural BMPs
FORM 5 Harvest and Use Feasibility Checklist
FORM 6 Categorization of Infiltration Feasibility Condition
FORM 7 Factor of Safety and Design Infiltration Rate Worksheet
FORM 8 Downstream Systems Requirements for Preservation of Coarse Sediment Supply

Attachment 1: Backup for PDP Pollutant Control BMPs
- Attachment 1a: DMA Exhibit
- Attachment 1b: Tabular Summary of DMAs and Design Capture Volume Calculations (Worksheet 1.b)
- Attachment 1c: Harvest and Use Feasibility Screening (when applicable)
- Attachment 1d: Categorization of Infiltration Feasibility Condition (when applicable)
- Attachment 1e: Pollutant Control BMP Design Worksheets / Calculations

Attachment 2: Backup for PDP Hydromodification Control Measures
- Attachment 2a: Hydromodification Management Exhibit
- Attachment 2b: Management of Critical Coarse Sediment Yield Areas
- Attachment 2c: Geomorphic Assessment of Receiving Channels
- Attachment 2d: Flow Control Facility Design

Attachment 3: Structural BMP Maintenance Plan
- Attachment 3a: B Structural BMP Maintenance Thresholds and Actions
- Attachment 3b: Draft Maintenance Agreement (when applicable)

Attachment 4: Copy of Plan Sheets Showing Permanent Storm Water BMPs

ACRONYMS

APN	Assessor's Parcel Number
BMP	Best Management Practice
HMP	Hydromodification Management Plan
HSG	Hydrologic Soil Group
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
NRCS	Natural Resources Conservation Service
PDP	Priority Development Project
PE	Professional Engineer
SC	Source Control
SD	Site Design
SDRWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SWMP	Storm Water Management Plan

PDP SWMP PREPARER'S CERTIFICATION PAGE

Project Name: Watermark Del Mar
Permit Application Number: TBD

PREPARER'S CERTIFICATION

I hereby declare that I am the Engineer in Responsible Charge of design of storm water best management practices (BMPs) for this project, and that I have exercised responsible charge over the design of the BMPs as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with the PDP requirements of the City of Del Mar BMP Design Manual, which is a design manual for compliance with the City of Del Mar and the MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

I have read and understand that the City Engineer has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the BMP Design Manual. I certify that this PDP SWMP has been completed to the best of my ability and accurately reflects the project being proposed and the applicable BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this PDP SWMP by the City Engineer is confined to a review and does not relieve me, as the Engineer in Responsible Charge of design of storm water BMPs for this project, of my responsibilities for project design.

RCE# 45005, Exp. 3/31/2018
Engineer of Work's Signature, PE Number & Expiration Date

Tory R. Walker
Print Name

Tory R. Walker Engineering, Inc.
Company

July 13, 2017
Date

Engineer's Seal:

PDP SWMP PROJECT OWNER'S CERTIFICATION PAGE

Project Name: Watermark Del Mar
Permit Application Number: TBD

PROJECT OWNER'S CERTIFICATION

This PDP SWMP has been prepared for Watermark DM, L.P.by Tory R. Walker Engineering. The PDP SWMP is intended to comply with the PDP requirements of the City of Del Mar BMP Design Manual, which is a design manual for compliance with the City of Del Mar and the MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan. Once the undersigned transfers its interests in the property, its successor-in-interest shall bear the aforementioned responsibility to implement the best management practices (BMPs) described within this plan, including ensuring on-going operation and maintenance of structural BMPs. A signed copy of this document shall be available on the subject property into perpetuity.

_____
Project Owner's Signature

Marne Bouillon
Print Name

Watermark DM, L.P.
Company

_____
Date

PROJECT VICINITY MAP

Project Name: Watermark Del Mar
Permit Application Number: TBD

Site Information Checklist For PDPs	Form 1 (PDPs) City of Del Mar BMP Design Manual

Project Summary Information:	
Project Name:	Watermark Del Mar
Permit Application Number:	TBD
Project Hydrologic Unit	Select One: ✓ San Dieguito (HA Solana Beach, HAS Rancho Santa Fe) 905.11 ☐ Los Peñasquitos (HA Miramar Reservoir) 906.1
Project Watershed (Complete Hydrologic Unit, Area, and Subarea Name with Numeric Identifier)	San Dieguito HU, Solana Beach HA, Rancho Santa Fe HSA (905.11)
Parcel Area (total area of Assessor's Parcel(s) associated with the project)	2.37 Acres (103,282 Square Feet)
Area to be Disturbed by the Project (Project Area)	2.36 Acres (94,342 Square Feet)
Project Proposed Impervious Area (subset of Project Area)	1.38 Acres (60,502 Square Feet)
Project Proposed Pervious Area (subset of Project Area)	0.97 Acres (42,381 Square Feet)
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project. This may be less than the Parcel Area.	

Description of Existing Site Condition
Current Status of the Site (select all that apply): ☐ Existing development ✓ Previously graded but not built out ☐ Demolition completed without new construction ☐ Agricultural or other non-impervious use ☐ Vacant, undeveloped/natural Description / Additional Information:

Form 1
Existing Land Cover Includes (select all that apply): ☐ Vegetative Cover ✓ Non-Vegetated Pervious Areas ☐ Impervious Areas Description / Additional Information: Site is barren, compacted soil overlain by gravel in some areas.
Underlying Soil belongs to Hydrologic Soil Group (select all that apply): ✓ NRCS Type A ☐ NRCS Type B ☐ NRCS Type C ☐ NRCS Type D
Approximate Depth to Groundwater (GW): ☐ GW Depth < 5 feet ✓ 5 feet < GW Depth < 10 feet ☐ 10 feet < GW Depth < 20 feet ☐ GW Depth > 20 feet
Existing Natural Hydrologic Features (select all that apply): ☐ Watercourses ☐ Seeps ☐ Springs ✓ Wetlands ☐ None Description / Additional Information:

Form 1
Description of Existing Site Drainage Patterns

How is storm water runoff conveyed from the site? At a minimum, this description should answer:

(1) whether existing drainage conveyance is natural or urban;

(2) Is runoff from offsite conveyed through the site? if yes, quantify all offsite drainage areas, design flows, and locations where offsite flows enter the project site, and summarize how such flows are conveyed through the site;

(3)Provide details regarding existing project site drainage conveyance network, including any existing storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels; and

(4) Identify all discharge locations from the existing project site along with a summary of conveyance system size and capacity for each of the discharge locations. Provide summary of the pre-project drainage areas and design flows to each of the existing runoff discharge locations.

Describe existing site drainage patterns:

The existing project site is a graded, unpaved, urban lot, sloping east. Runoff is conveyed via overland flow offsite into San Dieguito Drive, where it concentrates along the western curb and gutter. Flows travel northwest until intercepted by an existing curb inlet (City of Del Mar Storm Drain DIB 412) located just southeast of the intersection of San Dieguito Drive and Jimmy Durante Boulevard. The curb inlet intercepts and then conveys flow through an 18" RCP until directly discharging to the San Dieguito River via outfall (City of Del Mar Storm Drain DHB 410). Some off-site runoff from the adjacent hillside to the south likely passes through the site. Based upon United States Geological Survey (USGS) regression hydrology, the estimated pre-development design flow is one cubic foot per second.

Form 1

Description of Proposed Site Development

Project Description / Proposed Land Use and/or Activities:

The proposed project would be a multifamily residential development consisting of 15 structures that would feature 38 residential units, with a proposed density of 16.1 units per acre. The residential units proposed would consist of a mix of studio, one-bedroom, two-bedroom, and three-bedroom units. The proposed project would also include a recreation room, a pool and a spa area for the use of residents and associated maintenance and administrative amenities. The proposed project would provide a secured 105 stall parking structure on the 2.37 acre site. The proposed project includes a vehicular access point from San Dieguito Road to the secured parking structure.

List/describe proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features):

The proposed impervious features include multifamily residential buildings, roadways, a recreation room, and a pool/spa area.

List/describe proposed pervious features of the project (e.g., landscape areas):

The proposed pervious features include landscaped areas complete with planters, trees, shrubs, succulents, marsh, and bluff planting.

Does the project include grading and changes to site topography?

☐ Yes
✓ No

Description / Additional Information:

Project site topography will remain generally unchanged from existing conditions.

Form 1

Description of Proposed Site Drainage Patterns

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

✓ Yes
☐ No

If yes, provide details regarding the proposed project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels, and the method for conveying offsite flows through or around the proposed project site. Identify all discharge locations from the proposed project site along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide a summary of pre- and post-project drainage areas and design flows to each of the runoff discharge locations. Reference the drainage study for detailed calculations.

Describe proposed site drainage patterns:

The Watermark Del Mar project proposes to ultimately discharge stormwater runoff directly into the San Dieguito River via the aforementioned directly discharging outfall. The entire project site proposes to drain stormwater into a biofiltration basin, where an overflow structure will be sized to accommodate the post developed condition peak 100-year flow. The overflow structure will connect to a pipe that joins into the existing storm drain system at the aforementioned curb inlet (DIB 412). From that point, flows will be safely conveyed through the existing infrastructure and directly discharge into the San Dieguito River.

A private storm drain system will be incorporated into the project design to provide storm water treatment for the project including a proposed bioretention basin prior to connecting to the existing storm drain inlet on San Dieguito Drive. The site will drain east through a 6-inch PVC pipe network until pumped into the proposed bioretention basin located at the eastern project corner. The bioretention basin will include a 24-inch corrugated metal pipe (CMP) riser draining to a 24-inch HDPE pipe that drains northwest along San Dieguito Drive until it joins the existing storm drain inlet and discharges to the San Dieguito River through an 18" reinforced concrete pipe (RCP). Based upon United States Geological Survey (USGS) regression hydrology, the estimated post-development design flow is one cubic foot per second. Assuming a 1.2% slope for the 24-inch-diameter HDPE, the Hazen-Williams formula calculates the proposed system capacity as approximately 37 cubic feet per second. Final design flows will be determined when a drainage study is completed during the project engineering phase.

Form 1
Identify whether any of the following features, activities, and/or pollutant source areas will be present (select all that apply): ✓ On-site storm drain inlets ✓ Interior floor drains and elevator shaft sump pumps ✓ Interior parking garages ☐ Need for future indoor & structural pest control ✓ Landscape/Outdoor Pesticide Use ✓ Pools, spas, ponds, decorative fountains, and other water features ☐ Food service ✓ Refuse areas ☐ Industrial processes ☐ Outdoor storage of equipment or materials ☐ Vehicle and Equipment Cleaning ☐ Vehicle/Equipment Repair and Maintenance ☐ Fuel Dispensing Areas ☐ Loading Docks ✓ Fire Sprinkler Test Water ☐ Miscellaneous Drain or Wash Water ✓ Plazas, sidewalks, and parking lots
Description / Additional Information:

Form 1
Identification and Narrative of Receiving Water and Pollutants of Concern
Describe flow path of storm water from the project site discharge location(s), through urban storm conveyance systems as applicable, to receiving creeks, rivers, and lagoons as applicable, and ultimate discharge to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable): The project discharges directly into the San Dieguito River as follows: from the proposed biofiltration basin to the proposed 24" CMP riser, then to the 24" HDPE, then to the existing 18" RCP, then to the 18" outfall directly discharging to the San Dieguito River just south of Jimmy Duarte Boulevard Bridge.
List any 303(d) impaired water bodies within the path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable), identify the pollutant(s)/stressor(s) causing impairment, and identify any TMDLs and/or Highest Priority Pollutants from the WQIP for the impaired water bodies:

303(d) Impaired Water Body	**Pollutant(s)/Stressor(s)**	**TMDLs / WQIP Highest Priority Pollutant**
San Dieguito River	Enterococcus	Indicator Bacteria (Total Coliform, Fecal Coliform, Enterococcus)
	Fecal Coliform	
	Nitrogen	
	Phosphorus	
	Total Dissolved Solids	
	Toxicity	
Pacific Ocean Shoreline at San Dieguito Lagoon Mouth	Enterococcus	
	Total Coliform	
	Fecal Coliform	

Identification of Project Site Pollutants*

***Identification of project site pollutants is only required if flow-through treatment BMPs are implemented onsite in lieu of retention or biofiltration BMPs (note the project must also participate in an alternative compliance program unless prior lawful approval to meet earlier PDP requirements is demonstrated)**

Identify pollutants expected from the project site based on all proposed use(s) of the site (see BMP Design Manual Appendix B.6):

- Sediment
- Nutrients
- Trash & Debris
- Oxygen Demanding Substances
- Bacteria & Viruses
- Pesticides

Form 1			
Pollutant	**Not Applicable to the Project Site**	**Expected from the Project Site**	**Also a Receiving Water Pollutant of Concern**
Sediment		X	
Nutrients		X	X
Heavy Metals	X		
Organic Compounds	X		
Trash & Debris		X	
Oxygen Demanding Substances		X	
Oil & Grease	X		
Bacteria & Viruses		X	X
Pesticides		X	

Form 1
Hydromodification Management Requirements
Do hydromodification management requirements apply (see Section 1.6 of the BMP Design Manual)? ☐ Yes, hydromodification management flow control structural BMPs required. ☐ No, the project will discharge runoff directly to existing underground storm drains discharging directly to an exempt receiving water such as the Pacific Ocean, and exempt river reach, or a tidally-influenced area. ☐ No, the project will discharge runoff directly to conveyance channels whose bed and bank are concrete-lined all the way from the point of discharge to the Pacific Ocean, a tidally-influenced area, or an exempt river reach. ✓ No, the project will discharge runoff directly to an area identified as appropriate for an exemption by the WMAA for the watershed in which the project resides.
Description / Additional Information (to be provided if a 'No' answer has been selected above): Please refer to the hydromodification management exemption memo provided in Attachment 2.

Form 1

Critical Coarse Sediment Yield Areas*

***This Section only required if hydromodification management requirements apply**

Based on the maps provided within the WMAA, do potential critical coarse sediment yield areas exist within the project drainage boundaries?

☐ Yes
☐ No, No critical coarse sediment yield areas to be protected based on WMAA maps

If yes, have any of the optional analyses presented in Section 6.2 of the BMP Design Manual been performed?

☐ 6.2.1 Verification of Geomorphic Landscape Units (GLUs) Onsite
☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment
☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
☐ No optional analyses performed, the project will avoid critical coarse sediment yield areas identified based on WMAA maps

If optional analyses were performed, what is the final result?

☐ No critical coarse sediment yield areas to be protected based on verification of GLUs onsite
☐ Critical coarse sediment yield areas exist but additional analysis has determined that protection is not required. Documentation attached in Attachment 2.b of the SWMP.
☐ Critical coarse sediment yield areas exist and require protection. The project will implement management measures described in Sections 6.2.4 and 6.2.5 as applicable, and the areas are identified on the SWMP Exhibit.

Discussion / Additional Information:

Not applicable due to exemption from hydromodification management requirements.

Form 1
Flow Control for Post-Project Runoff*   ***This Section only required if hydromodification management requirements apply**
List and describe point(s) of compliance (POCs) for flow control for hydromodification management (see Section 6.3.1). For each POC, provide a POC identification name or number correlating to the project's HMP Exhibit and a receiving channel identification name or number correlating to the project's HMP Exhibit.   Not applicable due to exemption from hydromodification management requirements.
Has a geomorphic assessment been performed for the receiving channel(s)?   ☐ No, the low flow threshold is 0.1Q2 (default low flow threshold)   ☐ Yes, the result is the low flow threshold is 0.1Q2   ☐ Yes, the result is the low flow threshold is 0.3Q2   ☐ Yes, the result is the low flow threshold is 0.5Q2   If a geomorphic assessment has been performed, provide title, date, and preparer: Not applicable due to exemption from hydromodification management requirements.
Discussion / Additional Information: (optional)   Not applicable due to exemption from hydromodification management requirements.

Form 1
Other Site Requirements and Constraints
When applicable, list other site requirements or constraints that will influence storm water management design, such as zoning requirements including setbacks and open space, or local codes governing minimum street width, sidewalk construction, allowable pavement types, and drainage requirements.
The driveway entry along San Dieguito Drive will be sloped in order to act as a flood control barrier to protect the subterranean parking from the 100-year flood inundation.

Form 1
Optional Additional Information or Continuation of Previous Sections As Needed
This space provided for additional information or continuation of information from previous sections as needed.

Source Control BMP Checklist for All Development Projects	Form 2 (PDPs) City of Del Mar BMP Design Manual

Project Identification

Project Name: Watermark Del Mar

Permit Application Number: TBD

Source Control BMPs

All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the BMP Design Manual for information to implement source control BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the City of Del Mar BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided.

Source Control Requirement	Applied?		
SC-1 Prevention of Illicit Discharges into the MS4	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-1 not implemented:			
SC-2 Storm Drain Stenciling or Signage	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-2 not implemented:			

Form 2			
Source Control Requirement	**Applied?**		
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	✓ N/A
Discussion / justification if SC-3 not implemented:			
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	✓ N/A
Discussion / justification if SC-4 not implemented:			
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-5 not implemented:			

Form 2			
Source Control Requirement **SC-6** Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)	**Applied?**		
☐ On-site storm drain inlets	✓ Yes	☐ No	☐ N/A
☐ Interior floor drains and elevator shaft sump pumps	✓ Yes	☐ No	☐ N/A
☐ Interior parking garages	✓ Yes	☐ No	☐ N/A
☐ Need for future indoor & structural pest control	✓ Yes	☐ No	☐ N/A
☐ Landscape/Outdoor Pesticide Use	✓ Yes	☐ No	☐ N/A
☐ Pools, spas, ponds, decorative fountains, and other water features	✓ Yes	☐ No	☐ N/A
☐ Food service	☐ Yes	☐ No	✓ N/A
☐ Refuse areas	✓ Yes	☐ No	☐ N/A
☐ Industrial processes	☐ Yes	☐ No	✓ N/A
☐ Outdoor storage of equipment or materials	☐ Yes	☐ No	✓ N/A
☐ Vehicle and Equipment Cleaning	☐ Yes	☐ No	✓ N/A
☐ Vehicle/Equipment Repair and Maintenance	☐ Yes	☐ No	✓ N/A
☐ Fuel Dispensing Areas	☐ Yes	☐ No	✓ N/A
☐ Loading Docks	☐ Yes	☐ No	✓ N/A
☐ Fire Sprinkler Test Water	✓ Yes	☐ No	☐ N/A
☐ Miscellaneous Drain or Wash Water	☐ Yes	☐ No	✓ N/A
☐ Plazas, sidewalks, and parking lots	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for all "No" answers shown above.			

Site Design/LID BMP Checklist for All Development Projects	Form 3 (PDPs) City of Del Mar BMP Design Manual

Project Identification

Project Name: Watermark Del Mar

Permit Application Number: TBD

Site Design/LID BMPs

All development projects must implement site design/LID BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the BMP Design Manual for information to implement site design BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the site design/LID BMP as described in Chapter 4 and/or Appendix E of the City of Del Mar BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.

Site Design Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-1 not implemented:			
SD-2 Conserve Natural Areas, Soils, and Vegetation	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-2 not implemented:			

Form 3			
Source Control Requirement	**Applied?**		
SD-3 Minimize Impervious Area	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-3 not implemented:			
SD-4 Minimize Soil Compaction	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-4 not implemented:			
SD-5 Impervious Area Dispersion	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-5 not implemented:			
SD-6 Runoff Collection	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-6 not implemented:			
SD-7 Landscaping with Native or Drought Tolerant Species	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-7 not implemented:			
SD-8 Harvesting and Using Precipitation	☐ Yes	✓ No	☐ N/A
Discussion / justification if SD-8 not implemented: Harvest and Use not feasible (see Form 5).			

Summary of PDP Structural BMPs	Form 4 (PDPs) City of Del Mar BMP Design Manual
Project Identification	
Project Name: Watermark Del Mar	
Permit Application Number: TBD	
PDP Structural BMPs	
All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the BMP Design Manual). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the BMP Design Manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s). PDP structural BMPs must be verified by the local jurisdiction at the completion of construction. This may include requiring the project owner or project owner's representative and engineer of record to certify construction of the structural BMPs (see Section 1.12 of the BMP Design Manual). PDP structural BMPs must be maintained into perpetuity, and the local jurisdiction must confirm the maintenance (see Section 7 of the BMP Design Manual). Use this form to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (page 3 of this form) for each structural BMP within the project (copy the BMP summary information page as many times as needed to provide summary information for each individual structural BMP).	

Form 4
Describe the general strategy for structural BMP implementation at the site. This information must describe how the steps for selecting and designing storm water pollutant control BMPs presented in Section 5.1 of the BMP Design Manual were followed, and the results (type of BMPs selected). For projects requiring hydromodification flow control BMPs, indicate whether pollutant control and flow control BMPs are integrated or separate. (Continue on additional pages as necessary)
The strategy for structural BMP implementation follows and implements flow chart provided in the BMPDM Figure 5-1. The project is not considered self-mitigating at the project scale; therefore a DCV was calculated based upon the guidance in BMPDM Appendix B. Harvest and Use was determined to be infeasible based upon the guidance in BMPDM Section 5.4.1 and SWQMP Form 5. The site was classified as a "No Infiltration" condition based upon BMPDM Section 5.5.3 and SWQMP Form 6. Since Harvest and Use had already been determined to be infeasible, Biofiltration was selected for structural BMP implementation. The proposed biofiltration basin has been designed for full treatment of the water quality DCV. Since the project is exempt from hydromodification management requirements, the basin is designed solely for pollutant control.

Form 4 (Copy as many as needed)	
Structural BMP Summary Information **(Copy this page as needed for each individual proposed structural BMP)**	
Structural BMP ID No.	
Construction Plan Sheet No.	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ✓ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-through treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-through treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ✓ Pollutant control only ☐ Hydromodification control only ☐ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the City Engineer (See Section 1.12 of the BMP Design Manual).	Randy Brown, PE Sowards & Brown Engineering 2187 Newcastle Avenue, Suite 100 Cardiff by the Sea, CA, 92007 760-436-8500
Who will be the final owner of this BMP?	HOA
Who will maintain this BMP into perpetuity?	HOA
What is the funding mechanism for maintenance?	HOA

Form 4 (Copy as many as needed)
Structural BMP ID No.
Construction Plan Sheet No.
Discussion (as needed):

Harvest and Use Feasibility Checklist	Form 5 (PDPs) City of Del Mar BMP Design Manual

1. Is there a demand for harvested water (check all that apply) at the project site that is reliably present during the wet season?

☑ Toilet and urinal flushing
☑ Landscape irrigation
☐ Other:_____

2. If there is a demand; estimate the anticipated average wet season demand over a period of 36 hours. Guidance for planning level demand calculations for toilet/urinal flushing and landscape irrigation is provided in Section B.3.2.

Toilet and Urinal Flushing Demand Calculations:

$$18.5\ \frac{\text{gal/cap}}{\text{day}} \times \frac{1.5\ \text{days}}{36\ \text{hours}} \times \frac{1\ \text{cf}}{7.48\ \text{gal}} \times \frac{2.58\ \text{cap}}{\text{household}} \times 48\ \text{households} = \mathbf{459}\ \frac{\mathbf{cf}}{\mathbf{36\ hrs}}$$

Modified ETWU (Low Plant Water Use):

$$390\ \frac{\text{gal/ac}}{36\ \text{hrs}} \times \frac{1\ \text{cf}}{7.48\ \text{gal}} \times 27660\ \text{sf} \times \frac{1\ \text{ac}}{43560\ \text{sf}} = \mathbf{33}\ \frac{\mathbf{cf}}{\mathbf{36\ hrs}}$$

Total Demand:

493 cf

3. Calculate the DCV using worksheet B-2.1.

DCV = 2076 cf

3a. Is the 36 hour demand greater than or equal to the DCV?	3b. Is the 36 hour demand greater than 0.25DCV but less than the full DCV?	3c. Is the 36 hour demand less than 0.25DCV?
☐ Yes / ✓ No ⇨ ⇩	☐ Yes / ✓ No ⇨ ⇩	✓ Yes ⇩
Harvest and use appears to be feasible. Conduct more detailed evaluation and sizing calculations to confirm that DCV can be used at an adequate rate to meet drawdown criteria.	Harvest and use may be feasible. Conduct more detailed evaluation and sizing calculations to determine feasibility. Harvest and use may only be able to be used for a portion of the site, or (optionally) the storage may need to be upsized to meet long term capture targets while draining in longer than 36 hours.	**Harvest and use is considered to be infeasible.**

Is harvest and use feasible based on further evaluation?

☐ Yes, refer to Appendix E to select and size harvest and use BMPs.

✓ No, select alternate BMPs.

Categorization of Infiltration Feasibility Condition	Form 6 (PDPs) City of Del Mar BMP Design Manual

Part 1 - Full Infiltration Feasibility Screening Criteria

Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
1	**Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		

Provide basis:

N/A (see Form 6, Criteria 7)

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.

2	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		✓

Provide basis:

See Form 6, Criteria 7

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.

Form 6			
Criteria	Screening Question	Yes	No
3	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, storm water pollutants or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: N/A (see Form 6, Criteria 7) Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
4	**Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: N/A (see Form 6, Criteria 7) Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
Part 1 Result *	If all answers to rows 1 - 4 are "**Yes**" a full infiltration design is potentially feasible. The feasibility screening category is **Full Infiltration** If any answer from row 1-4 is "**No**", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2		**No**

***To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by Agency/Jurisdictions to substantiate findings

Form 6			
Part 2 – Partial Infiltration vs. No Infiltration Feasibility Screening Criteria **Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?**			
Criteria	Screening Question	Yes	No
5	**Do soil and geologic conditions allow for infiltration in any appreciable rate or volume?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		
Provide basis: N/A (see Form 6, Criteria 7) Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
6	**Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		
Provide basis: N/A (see Form 6, Criteria 7) Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			

Form 6			
Criteria	Screening Question	Yes	No
7	**Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, storm water pollutants or other factors)?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		✓
Provide basis: The Phase 1 Environmental Site Assessment (Kleinfelder, 2014) discusses the regional geologic and hydrogeologic conditions. Christian Wheeler Engineering (CWE) produced their *Report of Preliminary Geologic Hazards Evaluation* (CWE, 2012) and found, through exploratory borings, groundwater was encountered at depths between approximately 5 ½ feet and 11 feet below Site grades. Due to the depth of the observed groundwater, the proposed basin would not provide the minimum 10-foot separation required by BMPDM Appendix C.3.2. Furthermore, the 10-foot depth to groundwater requirement may be reduced based upon further information not yet known at the podium-level design. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
8	**Can infiltration be allowed without violating downstream water rights?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: N/A (see Form 6, Criteria 7) Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
Part 2 Result *	If all answers from row 1-4 are yes then partial infiltration design is potentially feasible. The feasibility screening category is **Partial Infiltration.** If any answer from row 5-8 is no, then infiltration of any volume is considered to be **infeasible** within the drainage area. The feasibility screening category is **No Infiltration.**		**No**

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by

Agency/Jurisdictions to substantiate findings

Factor of Safety and Design Infiltration Rate Worksheet				Form 7 (PDPs) City of Del Mar BMP Design Manual	
Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25		
		Predominant soil texture	0.25		
		Site soil variability	0.25		
		Depth to groundwater / impervious layer	0.25		
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			
B	Design	Level of pretreatment/ expected sediment loads	0.5		
		Redundancy/resiliency	0.25		
		Compaction during construction	0.25		
		Design Safety Factor, $S_B = \Sigma p$			
Combined Safety Factor, $S_{total} = S_A \times S_B$					
Observed Infiltration Rate, inch/hr, $K_{observed}$ (corrected for test-specific bias)					
Design Infiltration Rate, in/hr, $K_{design} = K_{observed} / S_{total}$					
Supporting Data					
Briefly describe infiltration test and provide reference to test forms: N/A					

Downstream Systems Requirements for Preservation of Coarse Sediment Supply			Form 8 (PDPs) City of Del Mar BMP Design Manual
When it has been determined that potential critical coarse sediment yield areas exist within the project site, the next step is to determine whether downstream systems would be sensitive to reduction of coarse sediment yield from the project site. Use this form to document the evaluation of downstream systems requirements for preservation of coarse sediment supply.			
Project Name: Watermark Del Mar			
Project Tracking Number / Permit Application Number: TBD			
1	Will the project discharge runoff to a hardened MS4 system (pipe or lined channel) or an un-lined channel?	☐ Hardened MS4 system	Go to 2
		☐ Un-lined channel	Go to 4
2	Will the hardened MS4 system convey sediment (e.g., a concrete-lined channel with steep slope and cleansing velocity) or sink sediment (e.g., flat slopes, constrictions, treatment BMPs, or ponds with restricted outlets within the system will trap sediment and not allow conveyance of coarse sediment from the project site to an un-lined system).	☐ Convey	Go to 3
		☐ Sink	Go to 7
3	What kind of receiving water will the hardened MS4 system convey the sediment to?	☐ Un-lined channel	Go to 4
		☐ Lake ☐ Reservoir ☐ Bay	Go to 7
		☐ Lagoon ☐ Ocean	Go to 6
4	Is the un-lined channel impacted by deposition of sediment? This condition must be documented by the local agency.	☐ Yes	Go to 7
		☐ No	Go to 5
5	End – Preserve coarse sediment supply to protect un-lined channels from accelerated erosion due to reduction of coarse sediment yield from the project site unless further investigation determines the sediment is not critical to the receiving stream. Sediment that is critical to receiving streams is the sediment that is a significant source of bed material to the receiving stream (bed sediment supply) (see Section 6.2.3 and Appendix H.2 of the manual).		
6	End – Provide management measures for preservation of coarse sediment supply (protect beach sand supply).		
7	End – Downstream system does not warrant preservation of coarse sediment supply, no measures for protection of critical coarse sediment yield areas onsite are necessary. Use the space below to describe the basis for this finding for the project.		

ATTACHMENT 1
BACKUP FOR PDP POLLUTANT CONTROL BMPS

This is the cover sheet for Attachment 1.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 1a	DMA Exhibit (Required) See DMA Exhibit Checklist on the back of this Attachment cover sheet.	✓ Included
Attachment 1b	Tabular Summary of DMAs Showing DMA ID matching DMA Exhibit, DMA Area, and DMA Type (Required)* *Provide table in this Attachment OR on DMA Exhibit in Attachment 1.a	✓ Included on DMA Exhibit in Attachment 1.a ☐ Included as Attachment 1.b, separate from DMA Exhibit
Attachment 1c	Form 5, Harvest and Use Feasibility Screening Checklist (Required unless the entire project will use infiltration BMPs) Refer to Appendix B.3-1 of the BMP Design Manual to complete Form 5.	✓ Included (Form 5)* ☐ Not included because the entire project will use infiltration BMPs
Attachment 1d	Form 6, Categorization of Infiltration Feasibility Condition (Required unless the project will use harvest and use BMPs) Refer to Appendices C and D of the BMP Design Manual to complete Form 6.	✓ Included (Form 6)* ☐ Not included because the entire project will use harvest and use BMPs
Attachment 1e	Pollutant Control BMP Design Worksheets / Calculations (Required) Refer to Appendices B and E of the BMP Design Manual for structural pollutant control BMP design guidelines	✓ Included

***Included in body of report**

Use this checklist to ensure the required information has been included on the DMA Exhibit:

The DMA Exhibit must identify:

- ✓ Underlying hydrologic soil group
- ✓ Approximate depth to groundwater
- ✓ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- ✓ Critical coarse sediment yield areas to be protected
- ✓ Existing topography and impervious areas
- ✓ Existing and proposed site drainage network and connections to drainage offsite
- □ Proposed demolition (N/A)
- ✓ Proposed grading
- ✓ Proposed impervious features
- □ Proposed design features and surface treatments used to minimize imperviousness
- ✓ Drainage management area (DMA) boundaries, DMA ID numbers, and DMA areas (square footage or acreage), and DMA type (i.e., drains to BMP, self-retaining, or self-mitigating)
- □ Potential pollutant source areas and corresponding required source controls (see Chapter 4, Appendix E.1, and Form 1)
- ✓ Structural BMPs (identify location, type of BMP, and size/detail)

SECTION 1 – Redevelopment Determination Part I

REDEVELOPMENT – PART I	YES	NO
1. Is your project a **Redevelopment Project**? ***Redevelopment*** *is defined as the creation, addition or replacement of at least 5,000 square feet of impervious surface on an already developed site which falls under the project categories listed in Table 1 in Section 4 below* ***Examples of Redevelopment*** *include, but are not limited to: the expansion of a building footprint; road widening; addition to or replacement of a structure and creation or addition of impervious surfaces; Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction.* *Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair.*		**X**
If you answered **YES**, your project is considered redevelopment. Please proceed to Section 2. If you answer **NO**, then your project is not considered redevelopment. Please proceed to Section 4.		

SECTION 2 – Maintenance Projects Determination

MAINTENANCE PROJECTS	YES	NO
1. Is your project a **Maintenance Project**? *Maintenance Projects are defined as those projects where impervious surfaces may be removed as part of a routine maintenance activity, such as:* • Replacing roof material on an existing building • Rebuilding a structure to original design after damage from earthquake, fire or similar disasters • Restoring pavement or other surface materials affected by trenches from utility work • Resurfacing existing roads and parking lots, including slurry, overlay and restriping • Routine replacement of damaged pavement, including full depth replacement, if the sole purpose is to repair the damage • Constructing new sidewalk, pedestrian ramps or bike lanes on existing roads (within existing street right-of-way) • Restoring a historic building to its original historic design *Repair or improvements to an existing building or structure that do not alter the size:* • Plumbing, electrical and HVAC work • Interior alterations including major interior remodels and tenant build-out within an existing commercial building • Exterior alterations that do not change the general dimensions and structural framing of the building (does not include building additions or projects where the existing building is demolished)		
If you answered **YES**, your project is considered a Maintenance Project, and it is considered a Non-Development Project, and post construction requirements do not apply. Please proceed to Section 5 and check the **Non-Development Project** box. If you answered **NO,** please proceed to Section 3.		

SECTION 3 – Redevelopment Determination Part II

REDEVELOPMENT – PART II	YES	NO
1. Is your project an addition to an existing priority project type? *Priority projects are defined in Table 1, Section 4.*		
If you answered YES, please proceed to Question 2 of this section. If you answered NO, then your project is not considered redevelopment and is not subject to priority project requirements, only standard requirements. Please proceed to Section 5 and check the Standard Project box.		
2. Does your project consist wholly of one or more of the following:		
a. Trenching and resurfacing associated with utility work?		
b. Resurfacing and reconfiguring surface parking lots?		
c. New sidewalk construction, pedestrian ramps, or bike lanes on public and/or private existing roads?		
d. Replacement of damaged pavement?		
If you answered **NO** to **ALL** of the questions, please proceed to Question 3. If you answered **YES** to **ONE OR MORE** of the questions then your project is not a redevelopment project and is not subject to priority or standard project requirements. Please proceed to Section 5 and check the **Non-Development Project** box.		
3. Will the development create, add or replace at least 5,000 ft^2 of impervious surfaces on an existing development?		
If you answered **YES**, your project is considered a Priority Redevelopment Project and you are subject to priority project requirements. Please proceed to Section 5 and check the **Priority Development or Redevelopment Project** box. If you answered **NO,** then your project is **NOT** considered a Priority Redevelopment Project and is **NOT** subject to priority project requirements, only standard requirements. Please proceed to Section 5 and check the **Standard Project** box.		

SECTION 4 – New Development Projects

NEW DEVELOPMENT	YES	NO
1. Is your project a **New Development Project**? *Development projects are defined by the MS4 Permit as "construction, rehabilitation, redevelopment, or reconstruction of any public or private projects." Projects are classified as PDPs if they are in one or more of the PDP categories presented in the MS4 Permit, which are defined in (a) through (f), below.*	**X**	

Table 1 Is the project in any of these categories?

Yes ☒	No ❑	**A**	New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes ❑	No ❑	**B**	Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes ❑	No ❑	**C**	New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses: (i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (Standard Industrial Classification (SIC) code 5812). Information and an SIC search function are available at https://www.osha.gov/pls/imis/sicsearch.html. (ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent or greater. (iii) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. (iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

Yes ❑	No ❑	**D**	New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharging directly to an Environmentally Sensitive Area (ESA). "Discharging directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands). **Note:** ESAs are areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and San Diego Water Board; and any other equivalent environmentally sensitive areas which have been identified by the City. For projects adjacent to an ESA, but not discharging to an ESA, the 2,500 sq-ft threshold does not apply as long as the project does not physically disturb the ESA and the ESA is upstream of the project.
Yes ❑	No ❑	**E**	New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses: (i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. Information and an SIC search function are available at https://www.osha.gov/pls/imis/sicsearch.html. (ii) Retail gasoline outlets. This category includes Retail gasoline outlets that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic of 100 or more vehicles per day.
Yes ❑	No ❑	**F**	New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction. This means any activity that moves soils or substantially alters the pre-existing vegetated or man-made cover of any land. This includes, but is not limited to the following: i. Grading, digging, cutting, scraping, stockpiling, pavement removal, and exterior construction; ii. Substantial removal of vegetation where soils are disturbed including but not limited to removal by clearing or grubbing; or iii. Any activity which bares soil or rock or involves streambed alterations or the diversion or piping of any watercourse. **Exclusions that apply to this category only**: Projects creating less than 5,000 sf of impervious surface and where any added landscaping does not require regular use of pesticides and fertilizers, such as a slope stabilization project using native plants, are excluded from this category. Calculation of the square footage of impervious surface need not include linear pathways that are for infrequent vehicle use, such as for emergency or maintenance access or for bicycle or pedestrian use, if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces.

If you checked **YES** for **ANY** of the categories above, the proposed project is a priority project and priority project requirements apply. Please proceed with Section 5 and check the **Priority Development** box.

If you checked **NO** for **ALL** of the categories above, then the project is a non-priority project and standard project requirements apply. Please proceed with Section 5 and check the **Standard Project** box.

If your project is **NOT** new development but may be considered redevelopment, then please return to Section 3 if you have not already done so.

SECTION 5 – Final Determination

Based on the information provided in Sections 1-4, this project is determined to be a:

☒ **PRIORITY DEVELOPMENT OR REDEVELOPMENT PROJECT.** PRIORITY REQUIREMENTS APPLY AND A STORM WATER MANAGEMENT PLAN (SWMP) MUST BE SUBMITTED AT THE TIME OF APPLICATION.

☐ **STANDARD PROJECT.** STANDARD REQUIREMENTS APPLY AND APPLICABLE SECTIONS OF A STORM WATER MANAGEMENT PLAN (SWMP) MUST BE SUBMITTED AT THE TIME OF APPLICATION.

☐ **NON DEVELOPMENT PROJECT.**

Applicant Information and Signature Box

Address:	APN(s)
Applicant Name:	Applicant Title:
Applicant Signature:	Date:

WATERMARK DEL MAR
38–UNIT
DMA EXHIBIT

LEGEND

- DMA BOUNDARY
- ROOFTOPS
- PAVED
- LANDSCAPE/PERVIOUS
- BIOFILTRATION

Existing Wetlands Boundary

STORM DRAIN FORCED MAIN

JIMMY DURANTE BLVD

SAN DIEGUITO DRIVE

HEATHER LANE

Solar Panels

Tank

OBSCURED

0 20 40 Feet

SCALE: 1" = 20'

Automated Worksheet B.2-1: Calculation of Design Capture Volume (V1.0)

Category	#	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*vii*	*ix*	*x*	Units
Standard Drainage Basin Inputs	0	Drainage Basin ID or Name	1										unitless
	1	Basin Drains to the Following BMP Type	Biofiltration										unitless
	2	85th Percentile 24-hr Storm Depth	0.40										inches
	3	Impervious Surfaces Not Directed to Dispersion Area (C=0.90)	60,502										sq-ft
	4	Semi-Pervious Surfaces Not Serving as Dispersion Area (C=0.30)	0										sq-ft
	5	Engineered Pervious Surfaces Not Serving as Dispersion Area (C=0.10)	42,381										sq-ft
	6	Natural Type A Soil Not Serving as Dispersion Area (C=0.10)	0										sq-ft
	7	Natural Type B Soil Not Serving as Dispersion Area (C=0.14)	0										sq-ft
	8	Natural Type C Soil Not Serving as Dispersion Area (C=0.23)	0										sq-ft
	9	Natural Type D Soil Not Serving as Dispersion Area (C=0.30)	0										sq-ft
Dispersion, Tree Well, & Rain Barrel Inputs (Optional)	10	Does Tributary Incorporate Dispersion, Tree Wells, and/or Rain Barrels?	No	No	No	No	No	No	No	No	No	No	yes/no
	11	Impervious Surfaces **Directed to Dispersion Area** per SD-B ($C_{initial}$=0.90)											sq-ft
	12	Semi-Pervious Surfaces **Serving as Dispersion Area** per SD-B (C=0.30)											sq-ft
	13	Engineered Pervious Surfaces **Serving as Dispersion Area** per SD-B (C=0.10)											sq-ft
	14	Natural Type A Soil **Serving as Dispersion Area** per SD-B (C=0.10)											sq-ft
	15	Natural Type B Soil **Serving as Dispersion Area** per SD-B (C=0.14)											sq-ft
	16	Natural Type C Soil **Serving as Dispersion Area** per SD-B (C=0.23)											sq-ft
	17	Natural Type D Soil **Serving as Dispersion Area** per SD-B (C=0.30)											sq-ft
	18	Number of Tree Wells Proposed per SD-A											#
	19	Average Mature Tree Canopy Diameter											ft
	20	Number of Rain Barrels Proposed per SD-E											#
	21	Average Rain Barrel Size											gal
Final Adjusted Runoff Factor Calculations	22	Total Area Tributary to BMP	102,883	0	0	0	0	0	0	0	0	0	sq-ft
	23	Initial Runoff Factor	0.57	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	unitless
	24	Total Impervious Area Dispersed to Pervious Surface	0	0	0	0	0	0	0	0	0	0	sq-ft
	25	Total Pervious Dispersion Area	0	0	0	0	0	0	0	0	0	0	sq-ft
	26	Dispersed Impervious Area / Pervious Dispersion Area	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ratio
	27	Adjustment Factor for Impervious Areas	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	ratio
	28	Final Adjusted Tributary Runoff Factor	0.57	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	unitless
Volume Reduction Calculations	29	Final Effective Tributary Area	58,643	0	0	0	0	0	0	0	0	0	sq-ft
	30	Initial Design Capture Volume	1,955	0	0	0	0	0	0	0	0	0	cubic-feet
	31	Volume Reduction per Tree Well	0	0	0	0	0	0	0	0	0	0	cubic-feet
	32	Total Tree Well Volume Reduction	0	0	0	0	0	0	0	0	0	0	cubic-feet
	33	Total Rain Barrel Volume Reduction	0	0	0	0	0	0	0	0	0	0	cubic-feet
Result	34	Design Capture Volume Tributary to BMP	1,955	0	0	0	0	0	0	0	0	0	cubic-feet

Worksheet B.2-1 General Notes:

A. Applicants may use this worksheet to calculate design capture volumes for up to 10 drainage areas User input must be provided for yellow shaded cells, values for all other cells will be automatically generated, errors/notifications will be highlighted in red and summarized below. Upon completion of this worksheet, proceed to the appropriate BMP Sizing worksheet(s).

B. Impervious surfaces include roofs, concrete, asphalt, or pervious pavements with an impervious liner. Semi-pervious surfaces include decomposed granite, cobbles, crushed aggregate, or compacted soils such as unpaved parking. Engineered pervious surfaces include pervious pavements providing full retention of the 85th percentile rainfall depth, or areas with soils that have been amended and mulched per Section 86.709 of the Landscape Ordinance. Dispersion areas are pervious or semi-pervious surfaces that receive runoff from impervious surfaces (C=0.90) and reduce stormwater runoff as outlined in Fact Sheet SD-B.

Automated Worksheet B.5-1: Sizing Biofiltration BMPs (V1.0)

Category	#	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*vii*	*ix*	*x*	Units
BMP Inputs	0	Drainage Basin ID or Name	1	-	-	-	-	-	-	-	-	-	unitless
	1	Effective Tributary Area	58,643	-	-	-	-	-	-	-	-	-	sq-ft
	2	Minimum Biofiltration Footprint Sizing Factor	0.030	-	-	-	-	-	-	-	-	-	ratio
	3	Design Capture Volume Tributary to BMP	1,955	-	-	-	-	-	-	-	-	-	cubic-feet
	4	Provided Biofiltration Surface Area	2,625										sq-ft
	5	Provided Surface Ponding Depth	6										inches
	6	Provided Soil Media Thickness	18										inches
	7	Provided Gravel Storage Thickness	12										inches
	8	Hydromodification Orifice Diameter of Underdrain	n/a										inches
Biofiltration Calculations	9	Max Hydromod Flow Rate through Underdrain	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	CFS
	10	Max Soil Filtration Rate Allowed by Underdrain Orifice	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	in/hr
	11	Soil Media Filtration Rate	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	in/hr
	12	Soil Media Filtration Rate to be used for Sizing	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	in/hr
	13	Depth Biofiltered Over 6 Hour Storm	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	inches
	14	Soil Media Pore Space	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	unitless
	15	Gravel Pore Space	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	unitless
	16	Effective Depth of Biofiltration Storage	16.2	0	0	0	0	0	0	0	0	0	inches
	17	Drawdown Time for Surface Ponding	1	0	0	0	0	0	0	0	0	0	hours
	18	Drawdown Time for Entire Biofiltration Basin	3	0	0	0	0	0	0	0	0	0	hours
	19	Total Depth Biofiltered	46.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	inches
	20	Option 1 - Biofilter 1.50 DCV: Target Volume	2,932	0	0	0	0	0	0	0	0	0	cubic-feet
	21	Option 1 - Provided Biofiltration Volume	2,932	0	0	0	0	0	0	0	0	0	cubic-feet
	22	Option 2 - Store 0.75 DCV: Target Volume	1,466	0	0	0	0	0	0	0	0	0	cubic-feet
	23	Option 2 - Provided Storage Volume	1,466	0	0	0	0	0	0	0	0	0	cubic-feet
	24	Percentage of Performance Requirement Satisfied	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	ratio
Result	25	**Deficit of Effectively Treated Stormwater**	0	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	cubic-feet

Worksheet B.5-1 General Notes:

A. Applicants may use this worksheet to size Lined Biofiltration BMPs (BF-1) for up to 10 basins. User input must be provided for yellow shaded cells, values for blue cells are automatically populated based on user inputs from previous worksheets, values for all other cells will be automatically generated, errors/notifications will be highlighted in red and summarized below. BMPs fully satisfying the pollutant control performance standards will have a deficit treated volume of zero and be highlighted in green.

Summary of Stormwater Pollutant Control Calculations (V1.0)

Category	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*vii*	*ix*	*x*	Units
Drainage Basin Inputs	Drainage Basin ID or Name	1	-	-	-	-	-	-	-	-	-	unitless
	Total Area Tributary to BMP	102,883	-	-	-	-	-	-	-	-	-	sq-ft
	Initial Runoff Factor	0.57	-	-	-	-	-	-	-	-	-	unitless
	85th Percentile 24-hr Storm Depth	0.4	-	-	-	-	-	-	-	-	-	inches
	Initial Design Capture Volume	1,955	-	-	-	-	-	-	-	-	-	cubic-feet
Volume Reductions	Final Adjusted Tributary Runoff Factor	0.57	-	-	-	-	-	-	-	-	-	unitless
	Final Effective Tributary Area	58,643	-	-	-	-	-	-	-	-	-	sq-ft
	Tree Well and Rain Barrel Reductions	0	-	-	-	-	-	-	-	-	-	cubic-feet
	Design Capture Volume Tributary to BMP	1,955	-	-	-	-	-	-	-	-	-	cubic-feet
BMP Sizing	Basin Drains to the Following BMP Type	Biofiltration	-	-	-	-	-	-	-	-	-	unitless
	Deficit of Effectively Treated Stormwater	0	-	-	-	-	-	-	-	-	-	cubic-feet

Summary Notes:

All fields in this summary worksheet are populated based on previous user inputs. Drainage basins achieving full compliance with performance requirements for onsite pollutant control are highlighted in green. Drainage basins not achieving full compliance are highlighted in red and summarized below. Please note that drainage areas using De Minimis, Self-Mitigating, and/or Self-Retaining classifications may be required to provide additional supporting information.

-Congratulations, all specified drainage basins and BMPs are in compliance with stormwater pollutant control requirements. Include 11x17 color prints of this summary sheet and supporting worksheet calculations as part of the SWQMP submittal package.

ATTACHMENT 2
BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES

This is the cover sheet for Attachment 2.

✓ Mark this box if this attachment is empty because the project is exempt from PDP hydromodification management requirements.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 2a	Hydromodification Management Exhibit (Required)	☐ Included See Hydromodification Management Exhibit Checklist on the back of this Attachment cover sheet.
Attachment 2b	Management of Critical Coarse Sediment Yield Areas (WMAA Exhibit is required, additional analyses are optional) See Section 6.2 of the BMP Design Manual.	☐ Exhibit showing project drainage boundaries marked on WMAA Critical Coarse Sediment Yield Area Map (Required) Optional analyses for Critical Coarse Sediment Yield Area Determination ☐ 6.2.1 Verification of Geomorphic Landscape Units Onsite ☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment ☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
Attachment 2c	Geomorphic Assessment of Receiving Channels (Optional) See Section 6.3.4 of the BMP Design Manual.	☐ Not performed ☐ Included ☐ Submitted as separate stand-alone document
Attachment 2d	Flow Control Facility Design, including Structural BMP Drawdown Calculations and Overflow Design Summary (Required) See Chapter 6 and Appendix G of the BMP Design Manual	☐ Included ☐ Submitted as separate stand-alone document
Attachment 2e	Vector Control Plan (Required when structural BMPs will not drain in 96 hours)	☐ Included ☐ Not required because BMPs will drain in less than 96 hours

Use this checklist to ensure the required information has been included on the Hydromodification Management Exhibit:

The Hydromodification Management Exhibit must identify:

- ☐ Underlying hydrologic soil group
- ☐ Approximate depth to groundwater
- ☐ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- ☐ Critical coarse sediment yield areas to be protected
- ☐ Existing topography
- ☐ Existing and proposed site drainage network and connections to drainage offsite
- ☐ Proposed grading
- ☐ Proposed impervious features
- ☐ Proposed design features and surface treatments used to minimize imperviousness
- ☐ Point(s) of Compliance (POC) for Hydromodification Management
- ☐ Existing and proposed drainage boundary and drainage area to each POC (when necessary, create separate exhibits for pre-development and post-project conditions)
- ☐ Structural BMPs for hydromodification management (identify location, type of BMP, and size/detail)

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES

TECHNICAL MEMORANDUM

TO: Marne Bouillon
Watermark DM, L.P.

FROM: Tory Walker, PE, CFM, LEED GA
Alex Smith, MS, EIT, QISP

DATE: September 22, 2016

RE: Watermark Del Mar Hydromodification Management Exemption

INTRODUCTION

The San Diego Regional Water Quality Control Board (San Diego Water Board) Order No. R9-2013-0001 (MS4 Permit) requires a hydromodification management plan (HMP) be developed for all Priority Development Projects (PDPs). However, the MS4 Permit states that a project may be *exempt* from hydromodification management requirements if the project meets certain conditions. The conditions for the hydromodification exemption are presented in the San Diego Water Board MS4 Permit, the City of Del Mar BMP Design Manual (BMPDM) Sections 1.6 and 6.1, and the San Dieguito River Watershed Management Area (WMA) Water Quality Improvement Plan (WQIP).

The purpose of this memo is to demonstrate that the Watermark Del Mar project, located in the City of Del Mar, CA, meets the conditions necessary for a hydromodification management exemption.

This memo also provides additional discussion regarding the project's 100-year peak flow drainage and demonstrates the project's ability to safely discharge peak runoff without impacting flooding downstream.

HYDROMODIFICATION MANAGEMENT REQUIREMENTS

To determine the applicability of hydromodification management requirements, the BMPDM refers to Figure 1-2 and the associated criteria describing nodes in Figure 1-2. This section assesses each of the five nodes of Figure 1-2:

Node 1: Is the project a PDP?

Yes—the project meets the definition of a PDP as presented in BMPDM Section 1.4.

Node 2: Direct discharge to Pacific Ocean?

No—the project discharges directly into the San Dieguito River.

Node 3: Direct discharge to enclosed embayment, not within protected area?

No—the project discharges directly into the San Dieguito River, which is not within a protected area. The directly discharging outfall is not within the San Dieguito Lagoon State Marine Conservation Area boundary.

Node4: Direct discharge to water storage reservoir or lake, below spillway or normal operating level?

No—the project discharges directly into the San Dieguito River.

Node5: Direct discharge to an area identified in the San Dieguito River WMAA?

Yes—the project discharges directly into the San Dieguito River through an uninterrupted hardened conveyance system, as identified in the San Dieguito WMA WQIP Attachment N-1 (San Dieguito River Watershed Management Area Analysis (WMAA)), Section 4.1.1.4. The San Dieguito WMAA recommends hydromodification management exemptions be granted to projects directly discharging to the San Dieguito River through any "directly discharging" outfall between the upstream and downstream limits. The upstream and downstream limits are provided in the following table:

Table 1: Hydromodification Management Exemptions Recommended by the San Dieguito River WMAA

River	Downstream Limit	Upstream Limit
San Dieguito River	Upstream edge of the railroad crossing	Lake Hodges Dam

The project's direct discharge conveyance system (at the point of discharge to the exempt river reach) is located just south of the Jimmy Durante Boulevard Bridge, which lies within the limits presented in Table 1. The project site and associated direct discharge conveyance system is presented in the Hydromodification Management Exemption Map presented in Appendix 2.

The project also meets the following conditions of "direct discharge", as defined by the City of Del Mar in BMPDM Section 1.6:

a) A properly sized energy dissipation system, in the form of a Type 1 Rip Rap Energy Dissipator (designed in conformance with San Diego Regional Standard Drawing D-40) is provided to mitigate outlet discharge velocity from the direct discharge to the exempt river reach for the ultimate condition peak design flow of the direct discharge (ultimate design velocity estimated at 8 feet per second based upon City of Del Mar engineering drawing E-91-004-6, Profile "B"). The as-built storm drain improvement plan and RSD D-40 is provided in Appendix 3.

b) The invert elevation of the direct discharge conveyance system (at the point of discharge to the exempt river reach) is 5.0 feet (18" RCP, City of Del Mar engineering drawing E-91-004-6). The San Dieguito River Flood Profile published within the Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) for San Diego County defines the 10-year floodplain elevation at 10.6 feet (NAVD 88) at the river station corresponding to the project's point of discharge to the exempt river reach (FEMA, 2012). Therefore, the invert elevation of the direct discharge conveyance system is below the 10-year floodplain elevation. The FIS Flood Profile is provided in Appendix 4.

c) The San Dieguito River Flood Profile published within the San Diego County FIS defines the 100-year floodplain elevation at 20.2 feet (NAVD 88) at the river station corresponding to the project's point of discharge to the exempt river reach (FEMA, 2012). Therefore, the conveyance system outlet invert elevation is not located above the 100-year floodplain elevation.

Therefore, the Watermark Del Mar project area is appropriate for a hydromodification management exemption based upon the criteria presented by the San Diego Water Board, the City of Del Mar, the

San Dieguito River WMA WQIP, and the professional judgement of TRWE. A completed flow chart is provided in Appendix 1.

PEAK 100-YEAR FLOW DETENTION

The existing project site drains east via overland flow into San Dieguito Drive, where it concentrates along the western curb and gutter. Flows travel northwest until intercepted by an existing curb inlet (DIB 412) located just southeast of the intersection of San Dieguito Drive and Jimmy Durante Boulevard. The curb inlet intercepts and then conveys flow through an 18" RCP until directly discharging to the San Dieguito River via the aforementioned directly discharging outfall (DHB 410).

The Watermark Del Mar project proposes to ultimately discharge stormwater runoff directly into the San Dieguito River via the aforementioned directly discharging outfall. The entire project site proposes to drain stormwater into a biofiltration basin (see SWQMP), where an overflow structure will be sized to accommodate the post developed condition peak 100-year flow. The overflow structure will connect to a pipe that joins into the existing storm drain system at the aforementioned curb inlet (DIB 412). From that point, flows will be safely conveyed through the existing infrastructure and directly discharge into the San Dieguito River.

The project site is located near the mouth of the San Dieguito River. In order to reduce potential flooding impacts, it is recommended that the peak flows occurring at or near the mouth of the watershed be conveyed without attenuation in order to prevent the project's peak flows from compounding with the watershed-wide peak flow conveyed by the San Dieguito River. Our professional engineering judgment dictates that, in this case, peak 100-year flow detention would very likely *increase* flood impacts. Furthermore, the increase in runoff due to the project will not pose a flooding impact to downstream properties or existing conveyance systems. Therefore, peak 100-year flow detention is not necessary.

SUMMARY

This technical memorandum has demonstrated that exemption from hydromodification management requirements is appropriate for the Watermark Del Mark project because stormwater discharges pose no potential for erosion within the range of flows considered to be geomorphically significant. This memo has also demonstrated that exemption from peak 100-year flow detention requirements is also appropriate because the undetained peak 100-year flows pose no flood risk to upstream or downstream properties. While exempt from these two requirements, the project will treat the required design capture volume (DCV) via post-developed best management practices in accordance with the San Diego Water Board MS4 Permit and the City of Del Mar BMPDM.

REFERENCES

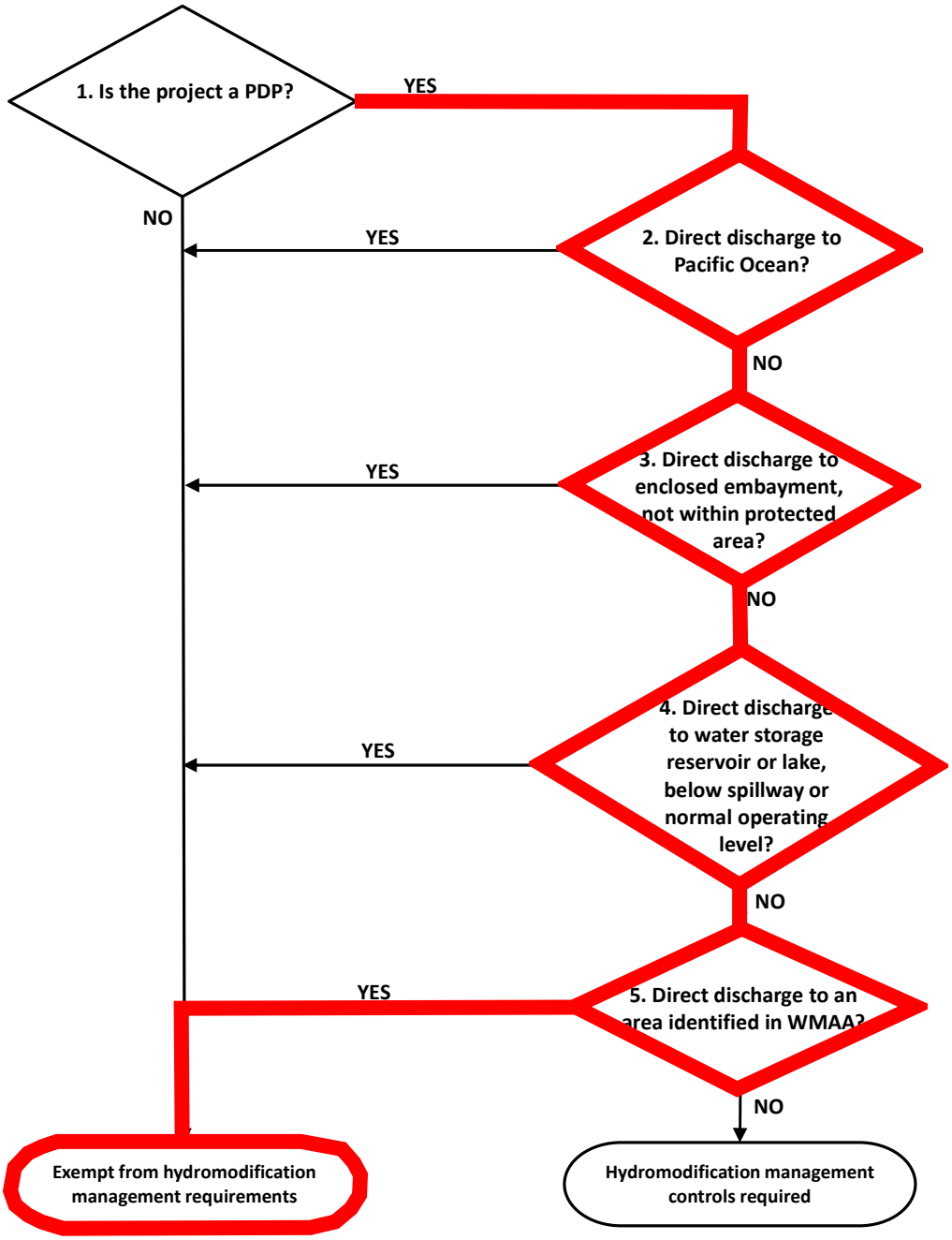
City of Del Mar (2016), "*City of Del Mar BMP Design Manual for Permanent Site Design, Storm Water Treatment and Hydromodification*".

Federal Emergency Management Agency (2012), "*Flood Insurance Study: San Diego County, California and Incorporated Areas, Volume 9 of 11 (Flood Insurance Study Number 06073CV009C)*"

San Diego County Copermittees (2014), "*San Dieguito River Watershed Management Area Analysis*".

Appendix 1

Hydromodification Management Exemption Flow Chart



*Direct discharge refers to an uninterrupted hardened conveyance system; Note to be used in conjunction with Node Descriptions.

FIGURE 1-2. Applicability of Hydromodification Management BMP Requirements

Appendix 2

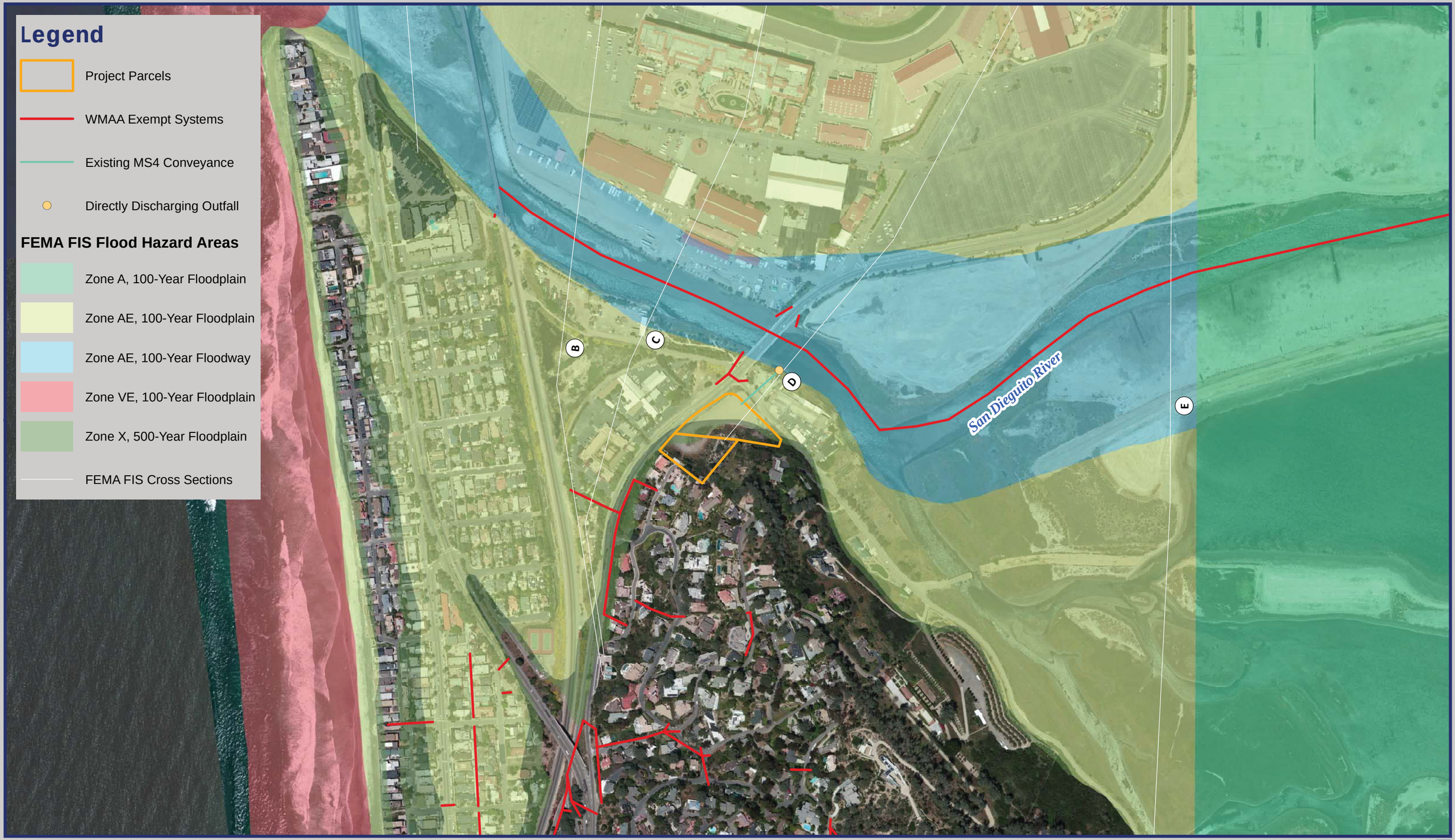
Hydromodification Management Exemption Map

Legend

- Project Parcels
- WMAA Exempt Systems
- Existing MS4 Conveyance
- Directly Discharging Outfall

FEMA FIS Flood Hazard Areas

- Zone A, 100-Year Floodplain
- Zone AE, 100-Year Floodplain
- Zone AE, 100-Year Floodway
- Zone VE, 100-Year Floodplain
- Zone X, 500-Year Floodplain
- FEMA FIS Cross Sections



Regional WMAA Hydromodification Management Exemption Map

0 250 500 Feet 1,000

NORTH

Aerial Imagery Source: DigitalGlobe, 06/2012
WMAA Exempt Systems: Project Clean Water, 09/2014
Directly Discharging Outfall: City of Del Mar, 2016
Existing MS4 Conveyance, City of Del Mar, 2016
FEMA FIS Flood Hazard Areas: FEMA, 08/2015
FEMA FIS Cross Sections: FEMA, 08/2015

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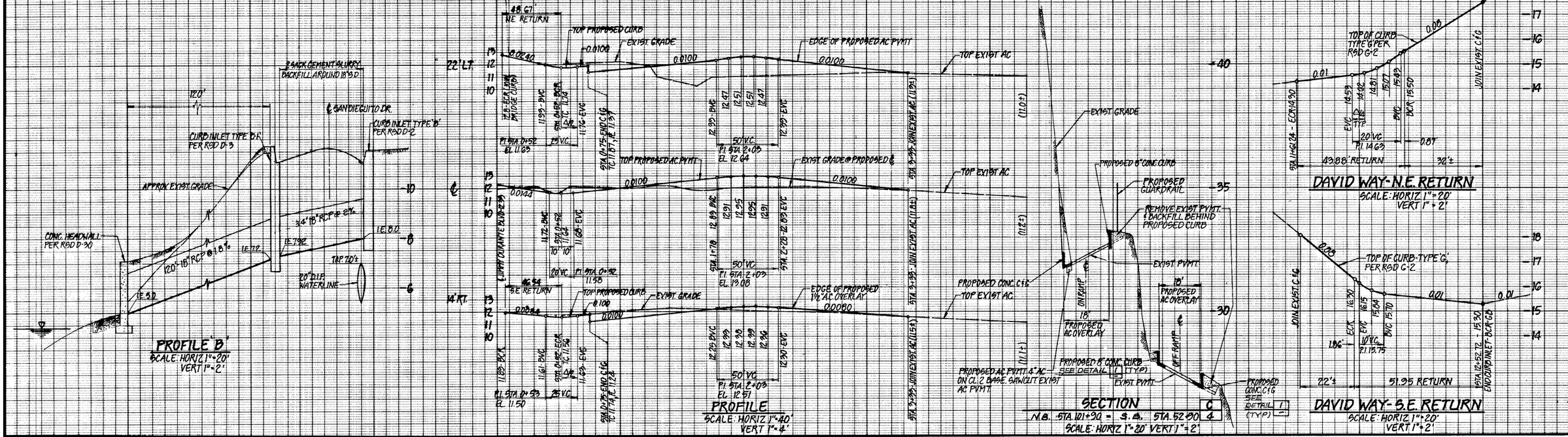
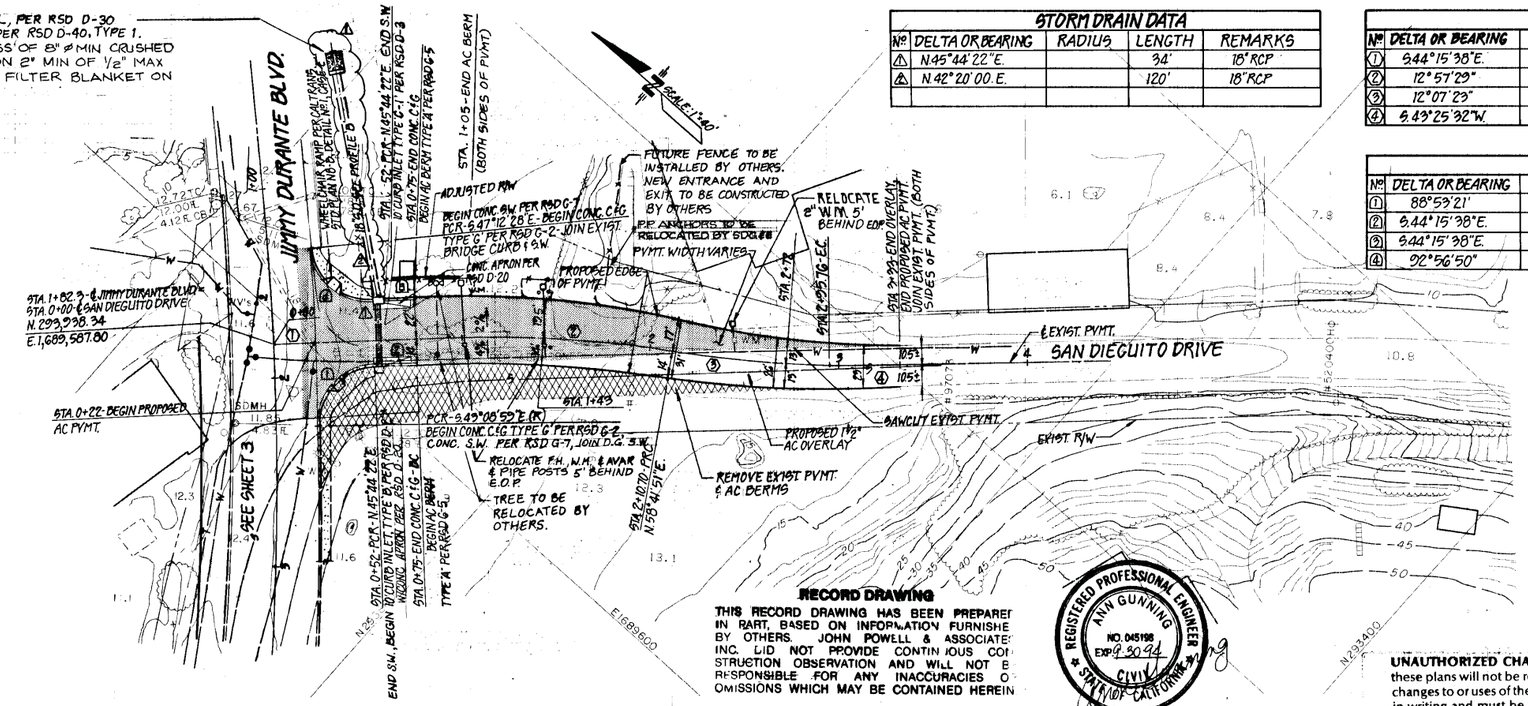
X:\Projects\1366 (Kitchell Development)\01 (Watermark Del Mar)\Report\Revised\Watermark WMAA HMP Exemption Map.mxd
Exhibit Date: 8/9/2016

Appendix 3

As-Built Improvement Plan

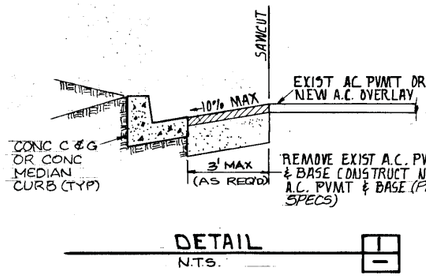




STORM DRAIN DATA				
№	DELTA OR BEARING	RADIUS	LENGTH	REMARKS
⚠	N 45°44'22"E.		34'	18" RCP
⚠	N 42°20'00.E.		120'	18" RCP

℄ DATA				
№	DELTA OR BEARING	RADIUS	LENGTH	REMARKS
①	S 44°15'38"E.		75.00'	0+00 TO BC
②	12°57'29"	600'	135.70'	BC TO PRC
③	12°07'23"	402'	85.06'	PRC TO EC
④	S 43°25'32"W.		37.24'	EC TO 3+93

CURB DATA				
№	DELTA OR BEARING	RADIUS	LENGTH	REMARKS
①	88°53'21"	30.00'	46.54'	S.E. RETURN
②	S 44°15'38"E.		23.00'	
③	S 44°15'38"E.		23.00'	
④	92°56'50"	30.00'	48.67'	N.E. RETURN



DETAIL 1 — N.T.S.

UNAUTHORIZED CHANGES & USES: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

California Council of Civil Engineers & Land Surveyors

REVISION	DESCRIPTION	APPROVED	DATE
⚠	RECORD DRAWING KN		10/92

SCALE: 1"=40'

PROJECT NO. 2.310

DESIGNED: KN | DRAWN: KN/LB | CHECKED: AG

Ann Gunning — ENGINEER OF WORK — 45198 R.C.E. NO. — 4-12-91 DATE

POWELL

John Powell & Associates, Inc.
Consulting Civil Engineers
175 Calle Magdalena, Suite 101
Encinitas, CA 92024
(619) 753-1120

APPROVED Steve E. Crump 4/12/91 CITY MANAGER DATE

APPROVED Richard E. Nelson 4/12/91 PUBLIC WORKS DIRECTOR DATE

CITY OF DEL MAR

JIMMY DURANTE BLVD. STREET IMPROVEMENTS PROJECT SAN DIEGUITO DRIVE INTERSECTION IMPROVEMENT PLAN

SHEET 6 OF 9 SHEETS

D-4058-6

E-91-004-6

Appendix 4

FEMA FIS Flood Profile

PROFILE BASELINE

JIMMY DURANTE BLVD.

ELEVATION IN FEET (NAVD)

30
20
10
0
−10

2800 3000 3200 3400 3600 3800 4000 4200 4400 4600 4800

STREAM DISTANCE IN FEET ABOVE MOUTH

100-Year Elevation
10-Year Elevation

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- CROSS SECTION LOCATION

FLOOD PROFILES

SAN DIEGUITO RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

380P

ATTACHMENT 3
Structural BMP Maintenance Information

This is the cover sheet for Attachment 3.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	**Contents**	**Checklist**
Attachment 3a	Structural BMP Maintenance Thresholds and Actions (Required)	✓ Included See Structural BMP Maintenance Information Checklist on the back of this Attachment cover sheet.
Attachment 3b	Draft Maintenance Agreement (when applicable)	☐ Included ☐ Not Applicable

E.12 BF-1 Biofiltration

Location: 43rd Street and Logan Avenue, San Diego, California

MS4 Permit Category
Biofiltration

Manual Category
Biofiltration

Applicable Performance Standard
Pollutant Control
Flow Control

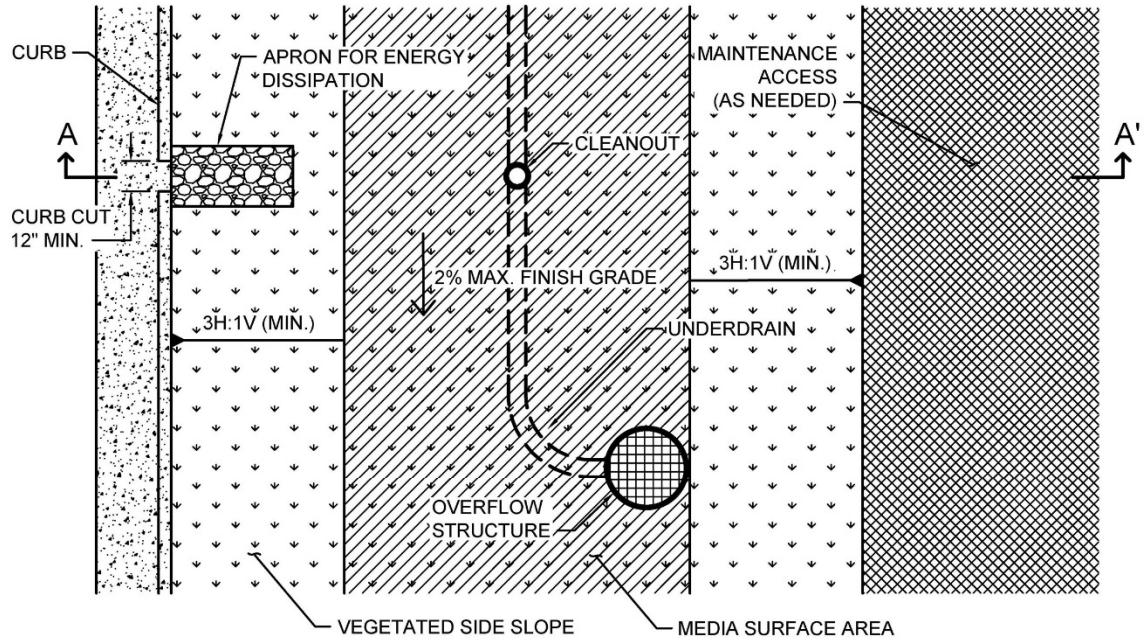
Primary Benefits
Treatment
Volume Reduction (Incidental)
Peak Flow Attenuation (Optional)

Description

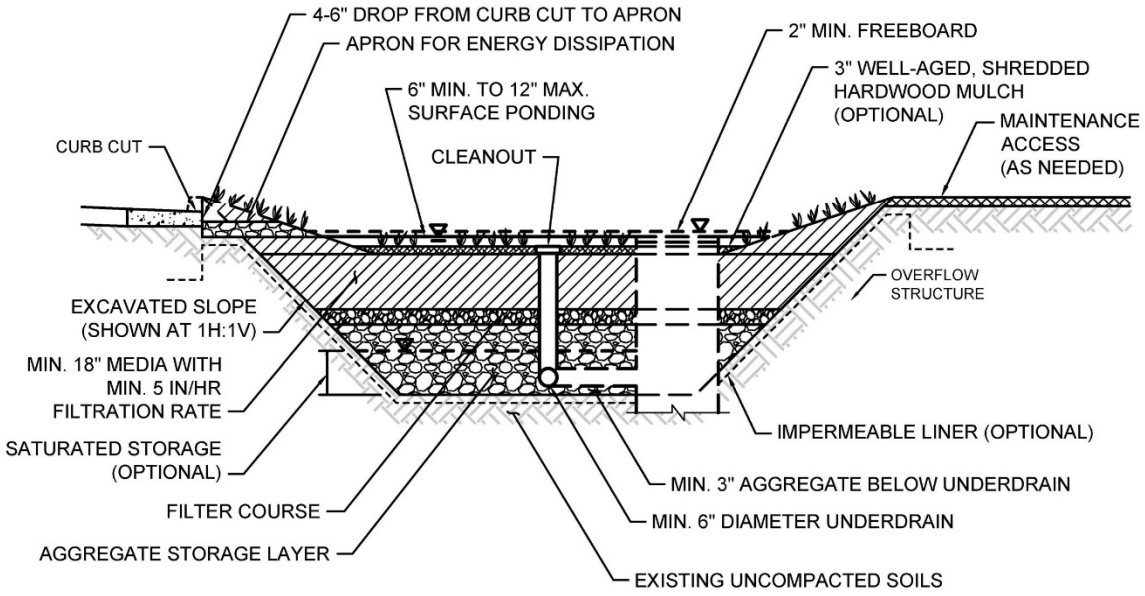
Biofiltration (Bioretention with underdrain) facilities are vegetated surface water systems that filter water through vegetation, and soil or engineered media prior to discharge via underdrain or overflow to the downstream conveyance system. Bioretention with underdrain facilities are commonly incorporated into the site within parking lot landscaping, along roadsides, and in open spaces. Because these types of facilities have limited or no infiltration, they are typically designed to provide enough hydraulic head to move flows through the underdrain connection to the storm drain system. Treatment is achieved through filtration, sedimentation, sorption, biochemical processes and plant uptake.

Typical bioretention with underdrain components include:

- Inflow distribution mechanisms (e.g., perimeter flow spreader or filter strips)
- Energy dissipation mechanism for concentrated inflows (e.g., splash blocks or riprap)
- Shallow surface ponding for captured flows
- Side slope and basin bottom vegetation selected based on expected climate and ponding depth
- Non-floating mulch layer (Optional)
- Media layer (planting mix or engineered media) capable of supporting vegetation growth
- Filter course layer consisting of aggregate to prevent the migration of fines into uncompacted native soils or the aggregate storage layer
- Aggregate storage layer with underdrain(s)
- Impermeable liner or uncompacted native soils at the bottom of the facility
- Overflow structure



PLAN
NOT TO SCALE



SECTION A-A'
NOT TO SCALE

Typical plan and Section view of a Biofiltration BMP

Design Adaptations for Project Goals

Biofiltration Treatment BMP for storm water pollutant control. The system is lined or un-lined to provide incidental infiltration, and an underdrain is provided at the bottom to carry away filtered runoff. This configuration is considered to provide biofiltration treatment via flow through the media layer. Storage provided above the underdrain within surface ponding, media, and aggregate storage is considered included in the biofiltration treatment volume. Saturated storage within the aggregate storage layer can be added to this design by raising the underdrain above the bottom of the aggregate storage layer or via an internal weir structure designed to maintain a specific water level elevation.

Integrated storm water flow control and pollutant control configuration. The system can be designed to provide flow rate and duration control by primarily providing increased surface ponding and/or having a deeper aggregate storage layer above the underdrain. This will allow for significant detention storage, which can be controlled via inclusion of an outlet structure at the downstream end of the underdrain.

Design Criteria and Considerations

Bioretention with underdrain must meet the following design criteria. Deviations from the below criteria may be approved at the discretion of the City Engineer if it is determined to be appropriate:

	Siting and Design	***Intent/Rationale***
☐	Placement observes geotechnical recommendations regarding potential hazards (e.g., slope stability, landslides, and liquefaction zones) and setbacks (e.g., slopes, foundations, utilities).	Must not negatively impact existing site geotechnical concerns.
☐	An impermeable liner or other hydraulic restriction layer is included if site constraints indicate that infiltration or lateral flows should not be allowed.	Lining prevents storm water from impacting groundwater and/or sensitive environmental or geotechnical features. Incidental infiltration, when allowable, can aid in pollutant removal and groundwater recharge.
☐	Contributing tributary area shall be ≤ 5 acres (≤ 1 acre preferred).	Bigger BMPs require additional design features for proper performance. Contributing tributary area greater than 5 acres may be allowed at the discretion of the City Engineer if the following conditions are met: 1) incorporate design features (e.g. flow spreaders) to minimizing short circuiting of flows in

Siting and Design		*Intent/Rationale*
		the BMP and 2) incorporate additional design features requested by the City Engineer for proper performance of the regional BMP.
☐	Finish grade of the facility is ≤ 2%.	Flatter surfaces reduce erosion and channelization within the facility.
Surface Ponding		
☐	Surface ponding is limited to a 24-hour drawdown time.	Surface ponding limited to 24 hour for plant health. Surface ponding drawdown time greater than 24-hours but less than 96 hours may be allowed at the discretion of the City Engineer if certified by a landscape architect or agronomist.
☐	Surface ponding depth is ≥ 6 and ≤ 12 inches.	Surface ponding capacity lowers subsurface storage requirements. Deep surface ponding raises safety concerns. Surface ponding depth greater than 12 inches (for additional pollutant control or surface outlet structures or flow-control orifices) may be allowed at the discretion of the City Engineer if the following conditions are met: 1) surface ponding depth drawdown time is less than 24 hours; and 2) safety issues and fencing requirements are considered (typically ponding greater than 18" will require a fence and/or flatter side slopes) and 3) potential for elevated clogging risk is considered.
☐	A minimum of 2 inches of freeboard is provided.	Freeboard provides room for head over overflow structures and minimizes risk of uncontrolled surface discharge.
☐	Side slopes are stabilized with vegetation and are = 3H:1V or shallower.	Gentler side slopes are safer, less prone to erosion, able to establish vegetation more quickly and easier to maintain.
Vegetation		

	Siting and Design	***Intent/Rationale***
☐	Plantings are suitable for the climate and expected ponding depth. A plant list to aid in selection can be found in Appendix E.20.	Plants suited to the climate and ponding depth are more likely to survive.
☐	An irrigation system with a connection to water supply should be provided as needed.	Seasonal irrigation might be needed to keep plants healthy.
	Mulch	
☐	A minimum of 3 inches of well-aged, shredded hardwood mulch that has been stockpiled or stored for at least 12 months is provided.	Mulch will suppress weeds and maintain moisture for plant growth. Aging mulch kills pathogens and weed seeds and allows the beneficial microbes to multiply.
	Media Layer	
☐	Media maintains a minimum filtration rate of 5 in/hr over lifetime of facility. An initial filtration rate of 8 to 12 in/hr is recommended to allow for clogging over time; the initial filtration rate should not exceed 12 inches per hour.	A filtration rate of at least 5 inches per hour allows soil to drain between events. The initial rate should be higher than long term target rate to account for clogging over time. However an excessively high initial rate can have a negative impact on treatment performance, therefore an upper limit is needed.
☐	Media is a minimum 18 inches deep, meeting either of these two media specifications: City of San Diego Low Impact Development Design Manual (page B-18) (July 2011, unless superseded by more recent edition) **or** County of San Diego Low Impact Development Handbook: Appendix G -Bioretention Soil Specification (June 2014, unless superseded by more recent edition). Alternatively, for proprietary designs and custom media mixes not meeting the media specifications contained in the City or County LID Manual, the media meets the pollutant treatment performance criteria in Section F.1.	A deep media layer provides additional filtration and supports plants with deeper roots. Standard specifications shall be followed. For non-standard or proprietary designs, compliance with F.1 ensures that adequate treatment performance will be provided.

Siting and Design		*Intent/Rationale*
☐	Media surface area is 3% of contributing area times adjusted runoff factor or greater. Unless demonstrated that the BMP surface area can be smaller than 3%.	Greater surface area to tributary area ratios: a) maximizes volume retention as required by the MS4 Permit and b) decrease loading rates per square foot and therefore increase longevity. Adjusted runoff factor is to account for site design BMPs implemented upstream of the BMP (such as rain barrels, impervious area dispersion, etc.). Refer to Appendix B.2 guidance. Use Worksheet B.5-1 Line 26 to estimate the minimum surface area required per this criteria.
☐	Where receiving waters are impaired or have a TMDL for nutrients, the system is designed with nutrient sensitive media design (see fact sheet BF-2).	Potential for pollutant export is partly a function of media composition; media design must minimize potential for export of nutrients, particularly where receiving waters are impaired for nutrients.
Filter Course Layer		
☐	A filter course is used to prevent migration of fines through layers of the facility. Filter fabric is not used.	Migration of media can cause clogging of the aggregate storage layer void spaces or subgrade. Filter fabric is more likely to clog.
☐	Filter course is washed and free of fines.	Washing aggregate will help eliminate fines that could clog the facility and impede infiltration.
☐	Filter course calculations assessing suitability for particle migration prevention have been completed.	Gradation relationship between layers can evaluate factors (e.g., bridging, permeability, and uniformity) to determine if particle sizing is appropriate or if an intermediate layer is needed.
Aggregate Storage Layer		
☐	Class 2 Permeable per Caltrans specification 68-1.025 is recommended for the storage layer. Washed, open-graded crushed rock may be used, however a 4-6 inch washed pea gravel	Washing aggregate will help eliminate fines that could clog the aggregate storage layer void spaces or subgrade.

	Siting and Design	*Intent/Rationale*
	filter course layer at the top of the crushed rock is required.	
☐	The depth of aggregate provided (12-inch typical) and storage layer configuration is adequate for providing conveyance for underdrain flows to the outlet structure.	Proper storage layer configuration and underdrain placement will minimize facility drawdown time.
	Inflow, Underdrain, and Outflow Structures	
☐	Inflow, underdrains and outflow structures are accessible for inspection and maintenance.	Maintenance will prevent clogging and ensure proper operation of the flow control structures.
☐	Inflow velocities are limited to 3 ft./s or less or use energy dissipation methods. (e.g., riprap, level spreader) for concentrated inflows.	High inflow velocities can cause erosion, scour and/or channeling.
☐	Curb cut inlets are at least 12 inches wide, have a 4-6 inch reveal (drop) and an apron and energy dissipation as needed.	Inlets must not restrict flow and apron prevents blockage from vegetation as it grows in. Energy dissipation prevents erosion.
☐	Underdrain outlet elevation should be a minimum of 3 inches above the bottom elevation of the aggregate storage layer.	A minimal separation from subgrade or the liner lessens the risk of fines entering the underdrain and can improve hydraulic performance by allowing perforations to remain unblocked.
☐	Minimum underdrain diameter is 6 inches.	Smaller diameter underdrains are prone to clogging.
☐	Underdrains are made of slotted, PVC pipe conforming to ASTM D 3034 or equivalent or corrugated, HDPE pipe conforming to AASHTO 252M or equivalent.	Slotted underdrains provide greater intake capacity, clog resistant drainage, and reduced entrance velocity into the pipe, thereby reducing the chances of solids migration.
☐	An underdrain cleanout with a minimum 6-inch diameter and lockable cap is placed every 250 to 300 feet as required based on underdrain length.	Properly spaced cleanouts will facilitate underdrain maintenance.
☐	Overflow is safely conveyed to a downstream storm drain system or discharge point Size overflow structure to pass 100-year peak flow	Planning for overflow lessens the risk of property damage due to flooding.

Siting and Design	*Intent/Rationale*
for on-line infiltration basins and water quality peak flow for off-line basins.	

Conceptual Design and Sizing Approach for Storm Water Pollutant Control Only

To design bioretention with underdrain for storm water pollutant control only (no flow control required), the following steps should be taken:

1. Verify that siting and design criteria have been met, including placement requirements, contributing tributary area, maximum side and finish grade slopes, and the recommended media surface area tributary ratio.
2. Calculate the DCV per Appendix B based on expected site design runoff for tributary areas.
3. Use the sizing worksheet presented in Appendix B.5 to size biofiltration BMPs.

Conceptual Design and Sizing Approach when Storm Water Flow Control is Applicable

Control of flow rates and/or durations will typically require significant surface ponding and/or aggregate storage volumes, and therefore the following steps should be taken prior to determination of storm water pollutant control design. Pre-development and allowable post-project flow rates and durations should be determined as discussed in Chapter 6 of the manual.

1. Verify that siting and design criteria have been met, including placement requirements, contributing tributary area, maximum side and finish grade slopes, and the recommended media surface area tributary ratio.
2. Iteratively determine the facility footprint area, surface ponding and/or aggregate storage layer depth required to provide detention storage to reduce flow rates and durations to allowable limits. Flow rates and durations can be controlled from detention storage by altering outlet structure orifice size(s) and/or water control levels. Multi-level orifices can be used within an outlet structure to control the full range of flows.
3. If bioretention with underdrain cannot fully provide the flow rate and duration control required by this manual, an upstream or downstream structure with significant storage volume such as an underground vault can be used to provide remaining controls.
4. After bioretention with underdrain has been designed to meet flow control requirements, calculations must be completed to verify if storm water pollutant control requirements to treat the DCV have been met.

Use this checklist to ensure the required information has been included in the Structural BMP Maintenance Information Attachment:

✓ **Preliminary Design / Planning / CEQA level submittal:**

Attachment 3a must identify:

✓ Typical maintenance indicators and actions for proposed structural BMP(s) based on Section 7.7 of the BMP Design Manual

Attachment 3b is not required for preliminary design / planning / CEQA level submittal.

☐ **Final Design level submittal:**

Attachment 3a must identify:

☐ Specific maintenance indicators and actions for proposed structural BMP(s). This shall be based on Section 7.7 of the BMP Design Manual and enhanced to reflect actual proposed components of the structural BMP(s)
☐ How to access the structural BMP(s) to inspect and perform maintenance
☐ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
☐ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
☐ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
☐ Recommended equipment to perform maintenance
☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management

Attachment 3b: For private entity operation and maintenance, Attachment 3b shall include a draft maintenance agreement in the local jurisdiction's standard format (PDP applicant to contact the City Engineer to obtain the current maintenance agreement forms).

Typical Maintenance Indicator(s) for Filtration BMPs	Maintenance Actions
Accumulation of sediment, litter, or debris	Remove and properly dispose of accumulated materials, without damage to the vegetation.
Poor vegetation establishment	Re-seed, re-plant, or re-establish vegetation per original plans.
Overgrown vegetation	Mow or trim as appropriate, but not less than the design height of the vegetation per original plans when applicable (e.g. a vegetated swale may require a minimum vegetation height).
Erosion due to concentrated irrigation flow	Repair/re-seed/re-plant eroded areas and adjust the irrigation system
Erosion due to concentrated storm water runoff flow	Repair/re-seed/re-plant eroded areas, and make appropriate corrective measures such as adding erosion control blankets, adding stone at flow entry points, or minor re-grading to restore proper drainage according to the original plan. If the issue is not corrected by restoring the BMP to the original plan and grade, the current City Engineer shall be contacted prior to any additional repairs or reconstruction.
Standing water in vegetated swales	Make appropriate corrective measures such as adjusting irrigation system, removing obstructions of debris or invasive vegetation, loosening or replacing top soil to allow for better infiltration, or minor re-grading for proper drainage. If the issue is not corrected by restoring the BMP to the original plan and grade, the current City Engineer shall be contacted prior to any additional repairs or reconstruction.
Standing water in bioretention, biofiltration with partial retention, or biofiltration areas, or flow-through planter boxes for longer than 96 hours following a storm event*	Make appropriate corrective measures such as adjusting irrigation system, removing obstructions of debris or invasive vegetation, clearing underdrains (where applicable), or repairing/replacing clogged or compacted soils.
Obstructed inlet or outlet structure	Clear obstructions.
Damage to structural components such as weirs, inlet or outlet structures	Repair or replace as applicable.
*These BMPs typically include a surface ponding layer as part of their function which may take 96 hours to drain following a storm event.	

ATTACHMENT 4
Copy of Plan Sheets Showing Permanent Storm Water BMPs

This is the cover sheet for Attachment 4.

Use this checklist to ensure the required information has been included on the plans:

The plans must identify:

- ☐ Structural BMP(s) with ID numbers matching Form 4 Summary of PDP Structural BMPs
- ☐ The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit
- ☐ Details and specifications for construction of structural BMP(s)
- ☐ Signage indicating the location and boundary of structural BMP(s) as required by the City Engineer
- ☐ How to access the structural BMP(s) to inspect and perform maintenance
- ☐ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- ☐ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- ☐ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- ☐ Recommended equipment to perform maintenance
- ☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management
- ☐ Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)
- ☐ All BMPs must be fully dimensioned on the plans
- ☐ When proprietary BMPs are used, site-specific cross section with outflow, inflow, and model number shall be provided. Photocopies of general brochures are not acceptable.
- ☐ A single plan BMP sheet for each construction drawing highlighting only those BMPs included in the referenced construction drawing. (See Section 5.5.2 of the City's JRMP for further detail.)

To be provided with Final SWQMP

APPENDIX I1 AND I2

Noise Technical Report

NOISE TECHNICAL REPORT
for the
Watermark Del Mar Specific Plan EIR
City of Del Mar, California

Prepared for:

City of Del Mar
1050 Camino Del Mar
Del Mar, California 92014

Prepared by:

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605 Third Street
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SEPTEMBER 2017

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ACRONYMS AND ABBREVIATIONS

CNEL	community noise equivalent level
dB	decibel
dBA	A-weighted decibel
IPS	inches per second
L_{dn}	day-night average sound level
L_{eq}	equivalent sound level
Local NP	local non-profit public benefit corporation
MM	Mitigation Measure
PPV	peak particle velocity

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SUMMARY

The Watermark Del Mar site is approximately 0.76 mile west of Interstate 5 and 0.32 mile east of Camino Del Mar in the city of Del Mar, California. The site is located on the southern corner of the intersection of Jimmy Durante Boulevard and San Dieguito Drive. Watermark Del Mar proposes 48 residential units (proposed project) on 103,282 square feet, or approximately 2.37 acres of gross land area, with a maximum density for residential uses of 20.24 dwelling units per acre of the property's gross land area.

This noise analysis evaluates the potential for significant adverse impacts due to proposed project construction and operation. Implementation of the proposed project would result in two primary types of potential noise impacts: short-term (i.e., temporary) noise during construction and long-term noise during operation.

Noise from construction would exceed the 75-decibel construction noise standard established in the City of Del Mar's Noise Control Ordinance at adjacent noise-sensitive receivers; therefore, impacts would be significant. To avoid construction noise impacts, Mitigation Measure NOI-1 is required to control construction noise to the extent practicable and feasible. The proposed project's traffic-related impacts would not result in a noise level increase along adjacent roadways; therefore, operational impacts would be less than significant. Vibration levels associated with proposed project construction would likely be perceptible at nearby residences, but they would be below the Federal Transit Administration's threshold of potential damage for normal structures (0.20 peak particle velocity in inches per second), and would not be considered excessive. The proposed project site is not located within the vicinity of an airport or private airstrip, and, therefore, would not expose people residing or working in the project area to excessive noise levels associated with an airport or airstrip. Finally, the noise analysis concludes that the project would not result in any significant cumulative impacts.

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1 INTRODUCTION

1.1 Purpose

The purpose of this report is to evaluate the potential noise impacts associated with implementation of the Watermark Del Mar Specific Plan (proposed project).

1.2 Project Location

The Watermark Del Mar Site is approximately 0.76 mile west of Interstate 5 and 0.32 mile east of Camino Del Mar in the city of Del Mar, California (Figure 1). The site is located on the southern corner of the intersection of Jimmy Durante Boulevard and San Dieguito Drive (see Figures 2 and 3). The site consists of two parcels with Assessor's Parcel Numbers 299-100-47 and 299-100-48. The site is vacant and totals approximately 103,282 square feet (2.37 acres). The site is generally bounded to the north by the intersection of Jimmy Durante Boulevard and San Dieguito Drive. San Dieguito Drive adjoins the site to the east-northeast, beyond which is a vacant lot and various facilities, including Co's Traffic Control, Del Mar Blue Print, Rose Towing, Del Mar Automotive, and other businesses. To the south and southwest are residences. To the west and northwest, Jimmy Durante Boulevard adjoins the site with a vacant lot and various businesses beyond.

1.3 Project Description

1.3.1 Residential

Watermark Del Mar proposes 48 residential units on 103,282 square feet, or approximately 2.37 acres of gross land area, with a maximum density for residential uses of 20.24 dwelling units per acre of the property's gross land area (Figure 4). The proposed 20.24 dwelling units per acre density is at the very low end of the City of Del Mar Housing Element's prescribed density range. A density of 20 to 25 dwelling units per acre is defined as an objective for this site in the Housing Element (City of Del Mar 2013).

Watermark Del Mar would provide for an at-grade or podium level building area of 35,168 square feet. The current design includes an additional 6,948 square feet of eaves and second-floor walkways to provide for a lot coverage of approximately 41%. The lot coverage calculation provided by the Specific Plan does not include the parking structure floor area (non-habitable building area), more fully defined below, in the calculation of lot coverage.

Watermark Del Mar's 12 structures would be situated on the site to provide a minimum 10-foot setback from the adjacent residentially zoned properties. The design considers no additional setback required where the structures are adjacent to the public right-of-way along Jimmy

Durante Boulevard and San Dieguito Drive. The residential units provided are a mix of studio, one-bedroom, two-bedroom, and three-bedroom units. The unit mix provides for a variety of options for residents of all demographics.

The total floor area designed for the residential units is 65,358 square feet, with an additional 640-square-foot recreation facility, and elevator and covered hall area of 1,135 square feet, for a total of 67,133 square feet. Watermark Del Mar proposes a floor area ratio of 0.65 based on 67,133 square feet of floor area (habitable building area) on gross land area of 103,282 square feet.

1.3.2 Affordable Housing

As a public benefit, Watermark Del Mar proposes the addition of up to seven affordable dwelling units. The potential addition of seven affordable units represents a significant portion of the 61 new units identified in the Regional Housing Need Assessment of the City of Del Mar's Housing Element (City of Del Mar 2013).

The seven affordable dwelling units proposed by Watermark Del Mar consist of two studio units, one one-bedroom unit, and four two-bedroom units, providing a variety of offerings.

The rental rates or purchase price for the proposed affordable dwelling units is proposed by Watermark Del Mar to be calculated in accordance with affordability levels (rents based on 30% of monthly income limits: one person for the studio, two people for the one-bedroom, and four people for the two-bedroom) for moderate-income households (120% of the area median income as defined by the California Department of Housing and Community Development for San Diego County, and as adjusted and published annually) (State of California 2014).

All seven of the affordable dwelling units would be subject to the recordation of a deed restriction committing the property owner and any successors-in-interest to affordable restrictions on rental rates or purchase prices to families with income levels at 120% of the area median income or less for a period of 30 years from the date of issuance of the Certificate of Occupancy for such residential units.

In addition, Watermark Del Mar proposes that up to four of the affordable dwelling units be sold, deeded, or otherwise transferred at a nominal price to a local non-profit public benefit corporation (Local NP) approved by the City of Del Mar. To date, Watermark Del Mar has engaged in discussions with Del Mar Community Connections, a local non-profit social service and housing provider, to potentially become the Local NP in providing the affordable housing component of the development. As proposed, the transferred units would include one studio unit, one 1-bedroom unit, and two 2-bedroom units. As a condition of the transfer, Watermark Del Mar would receive a charitable contribution from the Local NP for the appraised value of the donated units. Any such proposed transfer would be subject to acceptable contract provisions.

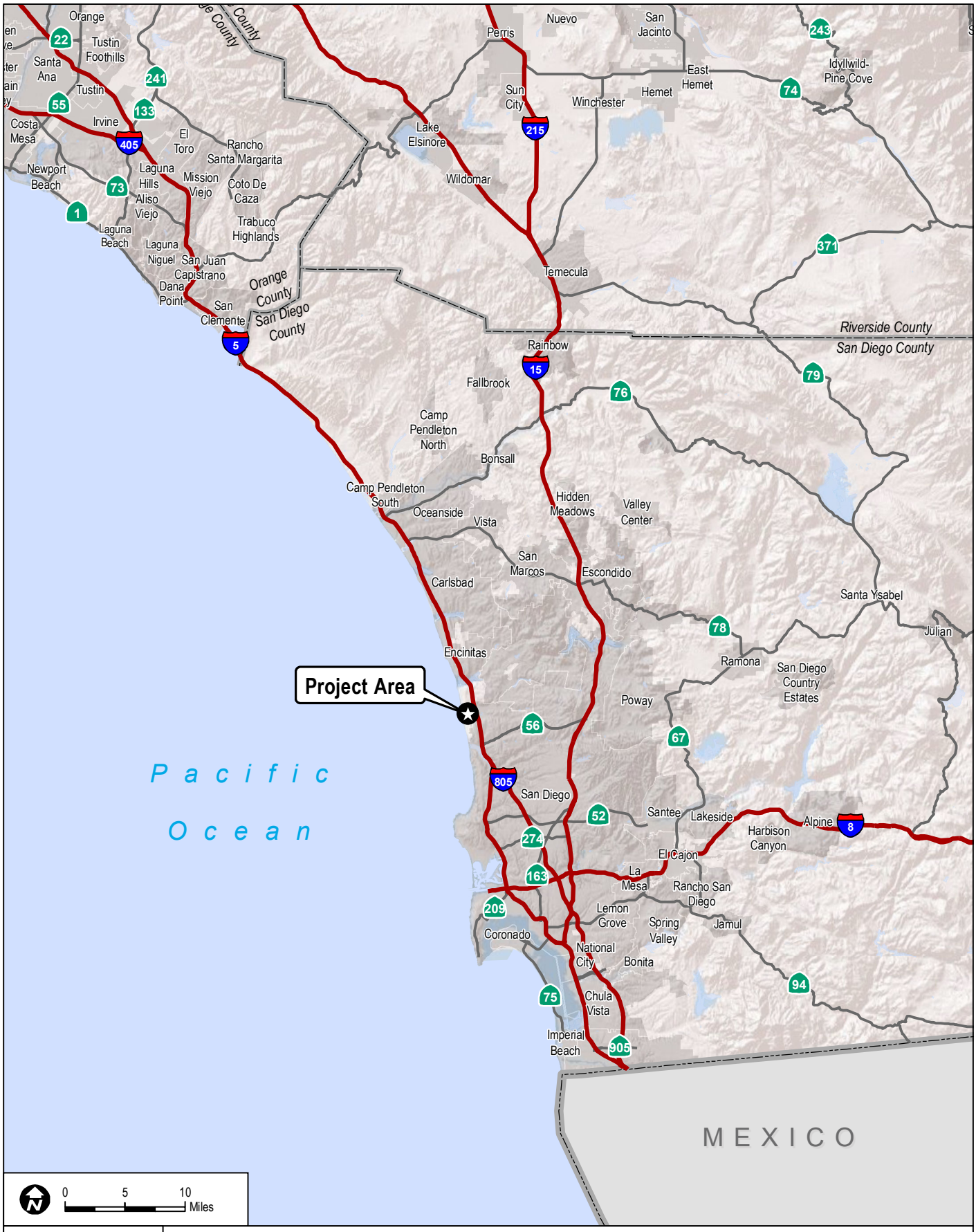

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FIGURE 1

Regional Map

Watermark Del Mar Noise Report

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SOURCE: Bing Maps 2015

FIGURE 2
Vicinity Map

Watermark Del Mar Noise Report

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SOURCE: Google Maps 2015

FIGURE 3

Existing Site Layout

Watermark Del Mar Noise Report

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Watermark Del Mar

Project Summary

Net Site Area 103,282 S.F. (2.37 Acres)

MULTI-FLOOR TOWNHOMES

No.	Unit Type	Sq. Ft.	S.F. (at Grade)	Total Square Footage
4	T1 / 3BD	2,400	4,308	9,600
2	T2 / 3BD	2,400	2,186	4,800
7	A / 3BD	1,950	7,035	13,650
4	A1 / 2BD	1,600	3,200	6,400
3	A2 / 3BD	2,040	3,060	6,120
			19,789 total	40,570 total

1ST FLOOR FLATS

No.	Unit Type	Sq. Ft.		Total Square Footage
3	B / 1BD	800	2,400	2,400
3	B1 / 1 BD	800	2,400	2,400
2	B2 / 2BD	824	1,648	1,648
2	C / 2BD	1,270	2,540	2,540
1	C1 / 3BD	1,500	1,500	1,500
1	C2 / 2BD	1010	1,010	1,010
2	D / 1BR	550	1,100	1,100
1	ST / Studio	520	520	520
1	ST1 / Studio	486	486	486
			13,604 total	13,604 total

2ND FLOOR FLATS

3	B / 1BD	800		2,400
2	B1 / 1 BD	800		1,600
2	B2 / 2BD	824		1,648
2	C / 2BD	1,270		2,540
1	C1 / 3BD	1,500		1,500
1	C2 / 2BD	1010		1,010
1	ST1 / Studio	486		486
				11,184 total
48				65,358
Recreation Room			640	640
Elevators, Covered Hallways, etc..			1135	1135
Total			35,168	67,133
Lot Coverage			42,116*	41%
Garage S.F.			43,700	
F.A.R.			(67,133/103,282)	0.65
Density			20.24du/acre	

UNITS WITH THE SUFFIX '(Af)' ARE AFFORDABLE UNITS (7 total)

*includes eaves & 2nd floor walkways

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SOURCE: Benson & Bohl Architects 2014

FIGURE 4

Conceptual Site Plan

Watermark Del Mar Noise Report

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As provided for in the City of Del Mar Housing Element, Watermark Del Mar proposes that, with the addition of the affordable housing component, the City of Del Mar waive all or a portion of City of Del Mar development review fees and provide priority permit processing for the project. With respect to State Density Bonus Incentives, Watermark Del Mar proposes that, with approval of the Watermark Del Mar Specific Plan, any possible density increase and development incentives specified in the Del Mar Municipal Code not be applicable.

1.3.3 Architectural Design

Watermark Del Mar is designed to be a gateway to Del Mar from the north and east, and to create a welcoming beach-colony-inspired architectural statement that joins and enhances the architectural tradition established in Del Mar. Watermark Del Mar would provide a variation to the number and mix of unit sizes, building facades, and rooflines to provide a variety of architectural elements along Jimmy Durante Boulevard and maintain important vistas along San Dieguito Drive. Brick, cultured stone, architectural siding, a seaside-inspired color palette, and beach colony architectural elements found throughout Del Mar would be incorporated into the design to provide architectural compatibility with the broader Del Mar architectural statement.

Maximum building height for Watermark Del Mar would be 26 feet above either existing or finished grade when habitable space is constructed on grade. To comply with flood hazard provisions of the Del Mar Municipal Code Chapter 30.56 (Flood Overlay Zone), all finish grades would be at or above the 100-year base flood elevation of the San Dieguito River (+18 feet as indicated on maps issued by the Federal Emergency Management Agency). Where habitable structure is built over structured parking, the 26-foot height would be measured from the garage roof/podium deck elevation set at 2 feet above the base flood elevation or elevation +20 feet (City of Del Mar 2000).

Watermark Del Mar would ensure that roof decks, decks, and associated rooftop penetrations (e.g., access stairs, handrails) are architecturally integrated into the design of the residential structures. All Watermark Del Mar roof appurtenances, including air conditioning units and mechanical equipment, would be designed to be shielded and architecturally screened from view from public rights-of-way.

Watermark Del Mar’s design would ensure that trash receptacles, adequate areas for collecting and loading recyclable materials, and/or outdoor storage areas are internalized or are adequately screened from view from surrounding properties or public rights-of way.

1.3.4 Circulation

Vehicular access to the proposed project site would be provided from a single driveway on San Dieguito Drive. The location of the driveway would be in approximately the same location as the existing driveway currently in use for fairground, racetrack, and event parking. The proposed driveway curb cut would access onto a private drive ramp to enter the secured parking facility for residents and guests. The drive ramp was designed to provide additional length to ensure ample space for queuing for residents and guests entering and exiting the facility.

The Watermark Del Mar Specific Plan community was designed to be pedestrian and cyclist friendly, with multiple access points for residents who do not use automobiles. Pedestrians and cyclists would have a variety of access points. In addition to the parking structure ramp, an additional pedestrian/cyclist entry point would occur on San Dieguito Drive. Also, a stepped central pedestrian/cyclist access point would occur at the center of Watermark Del Mar on Jimmy Durante Boulevard. This entry would serve as the main pedestrian entry point to the neighborhood with its centralized positioning and entry surrounded by trellis works and landscaping. Two additional pedestrian/cyclist entry points would be provided at each end of the site along Jimmy Durante Boulevard. The western-most entry point would provide access to the walking route to the Del Mar Plaza and the downtown area. The eastern-most pedestrian/cyclist entry would provide access to San Dieguito Lagoon and riverside strolling opportunities.

1.3.5 Parking

Watermark Del Mar's parking structure was designed to screen parking areas from view of adjacent properties and public rights-of-way by placing the parking structure partially below ground and, through the use of low, decorative walls, earth mounding and landscaping in the public right-of-way, to complement and enhance the pedestrian connection from the Jimmy Durante Boulevard and San Dieguito Drive intersection to the Del Mar Plaza.

Watermark Del Mar's partially underground parking structure would be accessed via a new curbed driveway at San Dieguito Drive that would lead to a private drive ramp. The location of the curbed driveway would be in approximately the same location as the existing driveway currently in use for fairground, race track, and event parking. The existing curb cut driveway at Jimmy Durante Boulevard at the west end of the site would be eliminated. Access to the parking structure was designed to be controlled by a card key access system located on the private drive ramp to enhance security of the parking structure and control vehicular access to the structure.

The Watermark Del Mar Specific Plan provides one stall for each studio and one-bedroom unit, and two stalls for each two-bedroom and three-bedroom unit. Additionally, Watermark Del Mar would provide guest parking stalls at a ratio of one stall per four units. The Watermark Del Mar

Specific Plan allows use of tandem parking (one car parked behind another in the same stall). Compact stalls (7 feet 6 inches wide and 16 feet in depth) are permitted at a 10% ratio. Watermark Del Mar would provide standard parking stalls that are a minimum of 9 feet wide and 18 feet in depth, and drive aisles that are a minimum of 22 feet in width.

The Watermark Del Mar Specific Plan provides that parking provided for off-street parking and non-habitable floor area be exempt from calculation toward a building's maximum allowable floor area ratio and would not be considered a "story."

1.3.6 Recreational Amenities

Watermark Del Mar would provide a pool, spa, lounge, and recreation area for residents. The recreation area is specifically sited to provide for an aesthetically pleasing vista to the site from the intersection of Jimmy Durante Boulevard and San Dieguito Drive. The pool, spa, and lounge area would provide approximately 2,800 square feet of recreational area, in addition to the adjacent 640-square-foot recreation room. The single-story building that would house the recreation room was sized to enhance and support the view to the sand stone bluff farther along San Dieguito Drive, and would serve as a gathering point for the neighborhood with a view over the pool, spa, and lounge area.

1.3.7 Landscaping

Landscape materials and plant palettes were selected to accentuate the coastal craftsman style of the architecture while introducing the natural character of the adjacent wetlands and native landscape. Mediterranean and coastal California plant palette proposed throughout the site would combine drought tolerance with aesthetic impact. The overall landscape palette would feature native plant species to unify the site with the surrounding landscape. The project would offer four landscape typologies: street frontage, podium-level courtyards, wetlands, and slope interface. Each landscape type would be designed to unify the site's coastal character while addressing climatic requirements.

1.3.8 Lighting

Illumination of Watermark Del Mar would be limited to specific areas and hours of activity, with the exception of necessary security lighting. Lighting would be provided throughout the project site on the exterior of structures. Specifically, lighting would be provided around residential buildings, podium-level courtyards and walkways, and other recreational areas. To minimize the potential effects of project lighting and ensure consistency with the lighting policies of the City of Del Mar, lighting fixtures within the project area would be designed and implemented to provide illumination that is appropriate for the level of activity at the site. Lighting inside and

outside the buildings would adhere to minimum lighting standards. Exterior lighting would be of minimum height and intensity, and face downward to minimize spread of the beam. Parking area lighting would be confined and contained within the enclosed parking structure.

1.3.9 Utilities

Sanitary sewer service would be provided by connecting to an existing sanitary sewer main adjacent to the property at the westernmost portion of the site's Jimmy Durante Boulevard frontage.

A private water system would be provided through a point of connection in Jimmy Durante Boulevard, extended to the property to a new on-site water meter assembly, and distributed within the project for domestic, fire, and landscape irrigation purposes. A new fire hydrant would be provided on Jimmy Durante Boulevard and on San Dieguito Drive.

A private storm drain system would be incorporated into the project design that provides stormwater treatment with a proposed bioretention basin prior to connecting to the existing storm drain outlet on San Dieguito Drive.

Electrical lines currently exist along Jimmy Durante Boulevard and San Dieguito Drive, and natural gas lines currently exist to the west and south of the site. Electrical and natural gas service is available to serve the needs of the project. Electricity and natural gas would be provided for energy needs associated with the residential buildings and supporting amenities.

1.3.10 Off-Site Improvements

Watermark Del Mar proposes a loading area at San Dieguito Drive for use by residents for delivery and unloading of furniture and appliances typically associated with the move-in and move-out of residents. The proposed loading area would be located just south of the proposed parking structure access and would include provisions for a pedestrian ramp and associated pedestrian sidewalk. The project proposes a new sidewalk from the intersection of San Dieguito Drive and Jimmy Durante Boulevard south to the southeastern property corner.

Jimmy Durante Boulevard off-site improvements would include new or replaced sidewalk along Jimmy Durante Boulevard from the intersection of Jimmy Durante Boulevard and San Dieguito Drive to the western property corner. Additionally, the street frontage improvements described in Section 1.3.7, Landscaping, would be included as part of the project.

1.3.11 Construction and Phasing

Construction is anticipated to commence following completion of entitlement efforts and completion of building design and associated permits. Construction would last for approximately 2 years, at which point building occupancy would occur. Construction equipment would include rollers, rubber-tired dozers, scrapers, water trucks, pavers, paving equipment, cranes, forklifts, and tractors/loaders/backhoes. Concrete and delivery trucks would also be used. Construction equipment would be used intermittently depending on construction phase.

Construction phasing would consist of parking structure construction, disturbed slope grading, residential structures over parking structure podium construction, and construction of the balance of the residential structures. Construction activities would take place within the limits of the construction hours identified in the City of Del Mar's Noise Regulations (City of Del Mar 1997).

Prior to construction, a Storm Water Pollution Prevention Plan would be prepared to identify best management practices to minimize off-site sediment transport for the duration of the project. In addition, grading plans would be subject to City of Del Mar approval, and would require measures to comply with the City of Del Mar's municipal storm water permit. The City of Del Mar's Municipal Code requires project compliance with the National Pollutant Discharge Elimination System permit for stormwater discharges and general construction activities, regular cleaning or sweeping of parking lots and impervious areas, and implementation of stormwater best management practices. The project would implement erosion and sediment control measures required by the City of Del Mar's Municipal Code, and other pertinent regulations and conditions. A traffic control plan would be prepared and made a standard condition of approval. The plan would include provisions for construction times and control plans for allowance of bicyclists and pedestrians along Jimmy Durante Boulevard and San Dieguito Drive throughout construction. The traffic control plan would also include provisions for allowance of emergency vehicle passage at all times.

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2 EXISTING CONDITIONS

2.1 Noise Concepts

Noise is generally defined as loud, unexpected, or undesired sound typically associated with human activity that interferes with or disrupts normal activities. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. The definition of noise as unwanted sound implies that it has an adverse effect on people and their environment.

Sound is measured in terms of intensity, which describes the sound's loudness and is measured in decibels (dB), frequency or pitch measured in cycles per second or hertz, and duration of sound. Sound is composed of various frequencies; however, the human ear does not respond to all frequencies, being less sensitive to very low and high frequencies than to medium frequencies that correspond with human speech. Sound-level meters adjust for the weight the human ear gives to certain frequencies, applying a correction to each frequency range to approximate the human ear's sensitivity within each range. This is called "A-weighting" and is commonly used in measurements of community environmental noise. The A-weighted sound level, abbreviated dBA, is determined to be the most appropriate unit of measure for community noise.

The unit of measure for the cumulative effect of community noise is the community noise equivalent level (CNEL), which is the average noise level for a 24-hour period. The CNEL is often used to describe the relationship of a continuous noise source, such as traffic, to the desirable ambient noise level (normal and existing noise level). The CNEL is adjusted to reflect greater sensitivity to noise during evening and nighttime hours, with a 5 dBA penalty assigned to noise between 7 p.m. and 10 p.m., and a 10 dBA penalty assigned to noise between 10 p.m. and 7 a.m. Due to fluctuations in community noise over time, a single measurement called the equivalent sound level (L_{eq}) is often used to describe the time-varying character of community noise. The L_{eq} is the energy-averaged A-weighted sound level during a measured time interval, and it is equal to the level of a continuous, steady sound containing the same total acoustical energy over the averaging time period as the actual time-varying sound.

To respond to the human ear's sensitivity to sound, the range of audible sounds exists on a logarithmic scale that takes into account the large differences in audible sound intensities. On this scale, for example, a 10 dBA increase is typically perceived as a doubling of sound. A sound level of 0 dB is approximately the threshold of human hearing. Normal speech has a sound level of approximately 60 dB. Sound levels louder than approximately 120 dB

begin to be felt inside the human ear as discomfort and eventually as pain at slightly higher levels. The minimum change in the sound level of individual events that an average human ear can detect in the community environment (i.e., outside of a controlled listening room) is approximately 3 dB.

There are three conceptual components to noise: the source, the transmission path, and the receiver. Noise can be reduced by reducing noise at its source; by lengthening or interrupting the transmission path through diversion, absorption, or dissipation; or by protecting the receiver through noise insulation. The most efficient and effective means of abating noise is to reduce noise at its source. Source noise can be controlled through regulation, such as following restrictions outlined in noise ordinances; muffling techniques; or sound proofing. The transmission path can be interrupted through creation of a buffer between the source and the receiver, such as a noise wall, earth embankment, or a building. The receiver can be protected from noise impacts through insulation, building orientation, or shielded areas.

Noise sources can be classified in two forms: point sources, such as individual pieces of stationary or mobile equipment (pumps, heavy construction equipment), and line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6 dBA for each doubling of distance from the source to the receptor. For example, a 60 dBA noise level measured at 50 feet from a point source would be 54 dBA at 100 feet from the source and 48 dBA at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling of distance from the source to the receptor for hard and soft sites, respectively. Typical sound levels generated by various activities are listed in Table 1.

Table 1
Typical Sound Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1,000 feet		
	— 100 —	
Gas lawnmower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 miles per hour		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	— 70 —	Vacuum cleaner at 10 feet

Table 1
Typical Sound Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2009

Sound levels can also be attenuated by built or natural barriers. Intervening noise barriers, such as a solid wall or berm, typically reduce noise levels by 5 to 10 dBA. Structures can also provide noise reduction by insulating interior spaces from outdoor noise. The exterior-to-interior noise attenuation provided by typical California building structures ranges from 15 to 25 dBA for windows open and closed, respectively. Acoustically designed enclosures and buildings can provide up to approximately 50 dBA of noise reduction, depending on the noise abatement treatments.

Vibration tolerance typically depends on the type of structures that are affected. Structural response to vibration is typically evaluated in terms of peak particle velocity. Peak particle velocity is often used since it is related to the stresses that are experienced by the buildings. Various general standards are contained in the International Standards Organization's standards 3945, 4866, and 7626-1. Limits set by these standards indicate a low probability of structural damage occurring to common structures at a peak particle velocity of 2 inches per second. Older (and non-reinforced) masonry structures have a limit of 0.75 to 1.0 inch per second (Caltrans 2004). The Federal Transit Administration identifies a vibration damage threshold criterion of 0.20 inch per second for non-engineered timber and masonry buildings (i.e., fragile buildings) and 0.12 inch per second for buildings extremely susceptible to vibration (i.e., fragile historic buildings) (FTA 2006).

2.2 Existing Noise Environment

A sound level survey was conducted on September 22, 2015, to evaluate existing sound levels and assess potential project noise impacts on the surrounding area. Short-term sound levels were measured at existing noise-sensitive receptors adjacent to and within the project area, as shown in Figure 5, Noise Measurement Locations. Noise measurements were taken at nearby residences (M-1, M-2) and on the project site (M-3).

Short-term (1 hour or less), attended sound level measurements were taken with a Rion NL-32 Sound Level Meter. This instrument is categorized as Type 1, Precision Grade. Noise was measured at three representative locations adjacent to and within the project site.

The sound measuring instrument used for the survey was set to the "Slow" time response and the dBA scale for all noise measurements. To ensure accuracy, the laboratory calibration of the instrument was field checked before and after each measurement period using an acoustical calibrator. The accuracy of the acoustical calibrator is maintained through a program established through the manufacturer and traceable to the National Institute of Standards and Technology. The sound measurement instrument meets the requirements of American National Standards Institute Standard S 1.4-1983 and International Electrotechnical Commission Publications 804 and 651. In all cases, the microphone height was 5 feet above the ground and the microphone was equipped with a windscreen.

During the field measurements, physical observations of the predominant noise sources were noted. The major noise source in the project area was vehicle traffic. Other secondary noise sounds included landscaping noise, rustling leaves, birds (from a nearby veterinarian hospital), distant aircraft overflights, and other community noises. The results of the sound level measurements are summarized in Table 2, and measurement data and notes are provided in Appendix A. As shown in Table 2, measured noise levels varied from 54 dBA L_{eq} at M-2 to 62 dBA L_{eq} at M-3 when rounded to whole numbers, as is customary for community noise measurements.

Table 2
Short-Term Sound Level Measurement Results

Site ID	Measurement Location	Measurement Period			Noise Sources	Measurement Results (dBA)					
		Date	*Start Time (a.m.)*	*Duration (minutes)*		L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}
M-1	2148 Heather Lane, Del Mar, CA 92014	9-22-15	9:42	20	Traffic, landscaping noise, birds, rustling leaves	54.5	70.2	41.5	49.0	53.4	57.2

Table 2
Short-Term Sound Level Measurement Results

Site ID	Measurement Location	Measurement Period			Noise Sources	Measurement Results (dBA)					
		Date	*Start Time (a.m.)*	*Duration (minutes)*		L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}
M-2	2147 Heather Lane, Del Mar, CA 92014	9-22-15	10:17	15	Traffic, landscaping noise, birds, rustling leaves, distant aircraft	53.7	69.9	43.4	45.9	48.7	56.1
M-3	Northeast corner of project site	9-22-15	8:41	20	Traffic, birds, train horn, idling truck	61.8	73.1	44.6	51.1	59.2	65.8

L_{eq} = equivalent continuous sound level (energy-averaged sound level); L_{max} = maximum sound level during the measurement interval; L_{min} = minimum sound level during the measurement interval; L_{90} = sound level exceeded for 90% of the measurement period; L_{50} = sound level exceeded for 50% of the measurement period; L_{10} = sound level exceeded for 10% of the measurement period

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Noise Measurement Site ID	Measurement Location
M-1	2148 Heather Lane, Del Mar, CA 92014
M-2	2147 Heather Lane, Del Mar, CA 92014
M-3	Northeast corner of project site

DUDEK

7797

SOURCE: Google Maps 2015

FIGURE 5

Noise Measurement Locations

Watermark Del Mar Noise Report

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3 REGULATORY SETTING

3.1 Federal

Noise Control Act

The Noise Control Act of 1972 recognized the role of the federal government in dealing with major commercial noise sources that require uniform treatment. Since Congress has the authority to regulate interstate and foreign commerce, regulation of noise generated by such commerce also falls under congressional authority. The federal government specifically preempts local control of noise from aircraft, railroads, and interstate highways. The U.S. Environmental Protection Agency has identified acceptable noise levels for various land uses to protect the public, with an adequate margin of safety, and to establish noise emissions standards for interstate commerce.

The Department of Housing and Urban Development's standards define day-night average sound levels (L_{dn}) at below 65 dBA for outdoors as acceptable for residential areas. Outdoor levels up to 75 dBA L_{dn} may be made acceptable through the use of insulation in buildings (HUD 2009).

3.2 State

California Code of Regulations, Title 24, Noise Insulation Standards

The pertinent California noise regulations are contained in the California Code of Regulations. Title 24, Noise Insulation Standards, establishes the acceptable interior environmental noise level for multi-family dwellings at 45 dBA L_{dn}. This may be extended by local legislative action to include single-family dwellings.

California Code of Regulations, Section 65302(f)

California Code of Regulations, Section 65302(f), requires local land use planning jurisdictions to prepare a general plan. The noise element is a mandatory component of the general plan. It may include general community noise guidelines developed by the California Department of Health Services and specific planning guidelines for noise/land use compatibility developed by the local jurisdiction. The state guidelines also recommend that the local jurisdiction consider adopting a local noise control ordinance. The California Department of Health Services developed guidelines (OPR 2003) for community noise acceptability for use by local agencies. Selected relevant levels are as follows (L_{dn} may be considered nearly equal to CNEL):

- CNEL below 60 dBA – normally acceptable for low-density residential use
- CNEL of 55 to 70 dBA – conditionally acceptable for low-density residential use

- CNEL below 65 dBA – normally acceptable for high-density residential use
- CNEL of 60 to 70 dBA – conditionally acceptable for high-density residential use, transient lodging, churches, and educational and medical facilities
- CNEL below 70 dBA – normally acceptable for playgrounds and neighborhood parks

"Normally acceptable" is defined as satisfactory for the specified land use, assuming that normal conventional construction is used in buildings. "Conditionally acceptable" may require some additional noise attenuation or special study. Under most of these land use categories, overlapping ranges of acceptability and unacceptability are presented, leaving some ambiguity in areas where noise levels fall within the overlapping range.

California Occupational Safety and Health Administration Occupational Noise Exposure Regulations

California additionally regulates noise emissions levels of licensed motor vehicles traveling on public thoroughfares, sets noise emissions limits for certain off-road vehicles and watercraft, and sets required sound levels for light-rail-transit vehicle warning signals.

The extensive state regulations pertaining to worker noise exposure are, for the most part, applicable only to the construction phase of any project,[1] or workers in a central plant and/or a maintenance facility or involved in the use of landscape maintenance equipment or heavy machinery.

3.3 Local

City of Del Mar Community Plan

Objective D: Reduce the level of noise created by major transportation routes in the community.

Policy 1: Limit the speed of vehicular traffic along City streets, particularly Camino Del Mar.

Policy 2: Encourage sound reduction techniques in new buildings within the 65 decibel boundaries adjacent to Camino del Mar and the railroad right-of-way (City of Del Mar 1976).

[1] For example, the California Occupational Safety and Health Administration Occupational Noise Exposure Regulations (8 CCR, General Industrial Safety Orders, Article 105, Control of Noise Exposure, Section 5095, et seq.).

City of Del Mar Noise Ordinance

9.20.050 Construction Noise. Any person who operates powered construction or landscape equipment and/or who erects, constructs, demolishes, excavates for, alters or repairs any building or structure within the City of Del Mar in such a manner as to cause noise to be received beyond the boundaries of the property on which the construction work is occurring shall comply with the following:

A. No construction work shall be performed on Sundays or City holidays.

B. No construction work shall be performed before 9:00 a.m. or after 7:00 p.m. on Saturday.

C. No construction work shall be performed before 7:00 a.m. or after 7:00 p.m. on Monday through Friday.

D. Construction activity shall not cause an hourly average sound level greater than 75 decibels on property zoned or used for residential purposes.

E. Exception: A person may perform construction work on the person's own property, provided such construction activity is not carried on for profit or livelihood, between the hours of 10:00 a.m. and 5:00 p.m. on Sundays and City holidays (City of Del Mar 1997).

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4 THRESHOLDS OF SIGNIFICANCE

California has guidelines to address the significance of noise impacts based on Appendix G of the California Environmental Quality Act Guidelines, which provides guidance that a project would have a significant environmental impact if it would do any of the following:

1. Result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
2. Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
3. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
4. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
5. Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and if so, the project would expose people residing or working in the project area to excessive noise levels.
6. Be within the vicinity of a private airstrip, and if so, the project would expose people residing or working in the project area to excessive noise levels.

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5 IMPACTS AND MITIGATION

5.1 Noise Levels in Excess of Standards Established in the Local General Plan or Noise Ordinance

Implementation of the proposed project would result in two primary types of potential noise impacts: short-term (i.e., temporary) noise during construction and long-term noise during operation of the proposed project.

Short-Term Construction Noise

Potential noise effects from construction activities were assessed using a standard reference for construction noise (EPA 1971).

Project construction would generally involve the following sequence for all phases of the proposed project: (1) site preparation, (2) site grading, (3) trenching, (4) building construction, (5) paving, and (6) architectural coating. Although specific project construction details and equipment fleet specifications are not available at this time, the following are typical types of construction equipment that would be expected:

- Crawler tractors
- Tractors/loaders/backhoes
- Excavators
- Forklifts
- Welders
- Cranes
- Water trucks
- Generator sets
- Paving equipment
- Pavers
- Rollers
- Trenchers
- Pneumatic tools
- Graders
- Air compressors

As demonstrated by this list, construction equipment anticipated for the proposed project would include standard equipment that would be employed for any routine construction project of this scale; construction equipment with substantially higher noise-generation characteristics (such as pile drivers, rock drills, blasting equipment) would not be necessary for the proposed project.

Construction noise is difficult to quantify because of the many variables involved, including the specific equipment types, size of equipment used, percentage of time in use, condition of each piece of equipment, and number of pieces of equipment that will actually operate on site at a

time. The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is depicted in Table 3. The noise values represent maximum noise generation, or full-power operation, of the equipment. As an example, a loader and two dozers, all operating at full power and relatively close together, would generate a maximum sound level of approximately 90 dBA at 50 feet from their operations. As distance increases between the equipment and/or distance increases between areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of separate noise sources added together. In addition, typical operating cycles may involve 2 minutes of full-power operation, followed by 3 or 4 minutes at lower levels. The average noise level during construction activities is generally lower, since maximum noise generation may only occur up to 50% of the time.

Table 3
Construction Equipment Noise Emissions Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Backhoe	80
Air compressor	81
Generator	81
Compactor	82
Crane, mobile	83
Compactor	82
Grader	85
Loader	85
Paver	89
Pneumatic tool	85
Truck	88

Source: FTA 2006

The closest off-site existing sensitive receptor to construction of the proposed project is a single-family residence located 30 feet to the west. Other single-family residences border the western and southern edges of the site at a distance of more than 30 feet from the proposed project.

Routine noise levels from conventional construction activities (with a typical number of equipment operating on the site) range from 75 to 86 dBA L_{eq} at a distance of 50 feet. Due to improvements in construction equipment silencing technology, these sound levels are 3 dB lower than the noise levels reported in the 1971 reference study (EPA 1971). Typically, the quietest phase of building site construction for similar projects is that associated with constructing foundations, producing 75 dBA L_{eq} at a distance of 50 feet. Typically, the loudest phases, producing 86 dBA L_{eq} at 50 feet, are those associated with grading and finishing activities. The noise levels from construction operations decrease (or increase) at a rate of approximately 6 dB

per doubling (or halving) of distance from the source. Therefore, at a distance of 30 feet (the approximate distance from the nearest construction area to the nearest residences to the northeast), construction noise levels would range from approximately 79 to 90 dBA L_{eq}.

To comply with the City of Del Mar's Noise Control Ordinance, construction activities would be limited to Monday through Friday, 7 a.m. to 7 p.m., and Saturday 9 a.m. to 7 p.m. (City of Del Mar 1997). No construction activities are expected on Sundays or during federal holidays. Because the proposed project would exceed the 75 dB construction noise standards established in the City of Del Mar's Noise Control Ordinance, impacts would be significant. To avoid construction noise impacts, Mitigation Measure (MM) NOI-1 is required to control construction noise to the extent practicable and feasible (see Section 5.8). With implementation of MM-NOI-1, construction noise would have a less-than-significant impact. No additional mitigation is required for conventional construction activities.

Long-Term Operational Noise Impact

Off-Site Noise Impacts. As a result of regional population growth and growth under the proposed project, traffic on local arterial streets is expected to increase relative to current conditions. Potential noise effects from vehicular traffic were assessed using the Federal Highway Administration's Traffic Noise Model Version 2.5 (FHWA 2004). Data used to model noise from vehicular traffic were derived from the project-specific traffic impact analysis report prepared by Darnell and Associates (Appendix K of the environmental impact report). Information used in the model included the existing, existing-plus-project, and cumulative-with-project traffic volumes. Noise levels were modeled at representative noise-sensitive receivers. The receivers were modeled to be 5 feet above the local ground elevation. Two receptors (M1 and M2) represent existing off-site residences, and one receptor (M3) represents on-site receptors.

The information provided from this modeling, along with the results from ambient noise survey measurements, was compared to the noise impact significance criteria to assess whether project-related traffic noise would cause a significant impact, and, if so, where these impacts would occur. The results of the comparisons are presented in Table 4.

Table 4
Modeled Traffic Noise Levels with and without Project (dBA CNEL)

Modeled Receptor	Receptor Address	Roadway Intersection	Existing	Existing Plus Project	Cumulative with Project	Maximum Project-Related Noise Level Increase (dBA)
M1: Single-family residences, west of project site	2148 Heather Lane	Heather Lane	59	59	59	0
M2: Single-family residences, southwest of project site	2134 David Way	David Way	55	55	55	0
M3: On-Site receptor	Northeast corner of project site	Jimmy Durante Boulevard and San Dieguito Drive	66	66	66	0

Source: FHWA 2004
Note: Project-related traffic noise levels are rounded to the nearest whole numbers.

As Table 4 shows, the proposed project would increase the noise level along these roads by 0 dBA (when rounded to whole numbers) along the study area roads in the vicinity of the project site. Therefore, as there would be no audible or measurable increase in average traffic noise levels, noise impacts due to project-related traffic would not be significant. The proposed project is not anticipated to result in significant traffic noise increases or cause an exceedance of applicable traffic noise standards. Therefore, the impact from traffic noise associated with the proposed project would be less than significant.

5.2 Excessive Groundborne Vibration or Groundborne Noise Levels

Groundborne vibration is a small, rapidly fluctuating motion transmitted through the ground that diminishes (attenuates) fairly rapidly over distance. Anticipated groundborne vibration from heavy equipment operations during construction of the proposed project was evaluated and compared to relevant vibration impact criteria using the Federal Transit Administration's Transit Noise and Vibration Impact Assessment, which provides vibration impact criteria and recommended methodologies and guidance for assessment of vibration effects (FTA 2006).

At a distance of approximately 20 feet, the vibration level from heavy construction machinery (such as a loaded truck or a drilling rig) would be between approximately 0.106 peak particle velocity in inches per second (PPV IPS) and 0.124 PPV IPS. Vibration levels of this magnitude would likely be perceptible at nearby residences, but they would be below the Federal Transit

Administration's threshold of potential damage for normal structures (0.20 PPV IPS) and would not be considered excessive. Therefore, short-term construction-related vibration impacts would be less than significant.

5.3 Substantial Permanent Increase in Ambient Noise Levels

Long-term operational noise would result from the proposed project. The project would incrementally increase off-site traffic volumes along adjacent roads, including Jimmy Durante Boulevard and San Dieguito Drive, as well as overall traffic noise in the vicinity of the proposed project. However, as addressed in Section 5.1 and shown in Table 4, the proposed project would not result in an audible or measurable increase in average traffic noise levels along local roadways in the vicinity of the site. Therefore, noise impacts due to project-related traffic would be less than significant.

5.4 Substantial Temporary or Periodic Increase in Ambient Noise

As discussed in Section 5.1, the closest off-site existing sensitive receptor to construction of the proposed project is a single-family residence located 30 feet to the west. Other single-family residences border the western and southern edges of the site at a distance of more than 30 feet from the proposed project site. At a distance of 30 feet (the approximate distance from the nearest construction area to the nearest residences to the northeast), construction noise levels would range from approximately 79 to 90 dBA L_{eq}.

To comply with the City of Del Mar's Noise Control Ordinance, construction activities would be limited to Monday through Friday, 7 a.m. to 7 p.m., and Saturday 9 a.m. to 7 p.m. (City of Del Mar 1997). No construction activities are expected on Sundays or during federal holidays. Because the proposed project would exceed the 75 dB construction noise standard established in the City of Del Mar's Noise Control Ordinance, impacts would be significant. To avoid construction noise impacts, MM-NOI-1 is required to control construction noise to the extent practicable and feasible.

With implementation of MM-NOI-1, construction noise would have less-than-significant impacts. No additional mitigation is required for conventional construction activities.

5.5 Airport Land Use Plan

The closest airport to the proposed project site is McClellan-Palomar Airport, located at 2192 Palomar Airport Road in Carlsbad, California, more than 10 miles north of the project site. The proposed project would not be located within 2 miles of any airport, and would not expose people residing or working in the project area to excessive noise levels associated with an airport. The proposed project would, therefore, result in no impact related to airports.

5.6 Private Airstrip

The nearest private airstrip to the proposed project site is the Lyall-Roberts Airport located at Lyall Roberts Orchards, 15524 Highway 76 in Escondido, California, approximately 10 miles from the proposed project site. The proposed project would not expose people residing or working in the project area to excessive noise levels associated with any airstrip, and would, therefore, result in no impact.

5.7 Cumulative Impacts

Construction noise impacts primarily affect the areas immediately adjacent to a construction site. Temporary construction activities are likely to include only standard construction equipment; no pile driving or blasting activities are expected. Additionally, the proposed project would comply with the City of Del Mar's Noise Control Ordinance related to construction activities (Monday through Friday, 7 a.m. to 7 p.m., and Saturday, 9 a.m. to 7 p.m.; no construction activities on Sunday or during federal holidays) (City of Del Mar 1997). Thus, although several construction activities may occur simultaneously in the surrounding community, given the distance between the project site and the cumulative projects within the City of Del Mar, and given the projects' compliance with local jurisdictional noise standards, it is unlikely that the noise increase would exceed 3 dB (the minimum change in the sound level of individual events that an average human ear can detect). Additionally, MM-NOI-1 is required to control construction noise to the extent practicable and feasible, and would minimize construction noise impacts associated with the proposed project to a less-than-significant level. Therefore, the increased noise would not result in significant cumulative impacts.

As shown in Table 4, the proposed project's traffic-related impacts would not result in a noise level increase along adjacent roadways. Therefore, impacts would not be cumulatively considerable and would be less than significant.

5.8 Mitigation

The following mitigation measure was evaluated for feasibility and would be incorporated to reduce potentially significant impacts related to increases in noise levels from construction of the proposed project.

MM-NOI-1 Prior to initiation of project construction, the City of Del Mar shall approve a construction noise mitigation program to include the following:

- Temporary sound barriers/shielding shall be installed to shield non-mobile equipment in the vicinity of nearby residences, or, alternatively, to shield at the site's boundaries (i.e., the southern and western sides, where adjacent residences are closest).

- Construction equipment shall be properly outfitted and maintained with feasible noise-reduction devices (e.g., functioning mufflers and silencers, tightly closed access panels) to minimize construction-generated noise.
- Stationary noise sources such as generators or pumps shall be located as far away from noise-sensitive land uses as feasible.
- Laydown and construction vehicle staging areas shall be located away from noise-sensitive land uses if feasible.
- Whenever possible, residential areas that will be subject to construction noise shall be informed 1 week before the start of each construction phase.

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6 SUMMARY AND CONCLUSIONS

This noise analysis evaluates the potential for significant adverse impacts due to proposed project construction and operation. Implementation of the proposed project would result in two primary types of potential noise impacts: short-term (i.e., temporary) noise during construction and long-term noise during operation of the proposed project.

Noise from construction would exceed the 75 dB construction noise standard established in the City of Del Mar's Noise Control Ordinance; therefore, impacts would be significant. To avoid construction noise impacts, MM-NOI-1 is required to control construction noise to the extent practicable and feasible. The proposed project's traffic-related impacts would not result in a noise level increase along adjacent roadways; therefore, operational impacts would be less than significant. Vibration levels associated with proposed project construction would likely be perceptible at nearby residences, but they would be below the Federal Transit Administration's threshold of potential damage for normal structures (0.20 PPV IPS) and would not be considered excessive and impacts would be less than significant. The proposed project is not located within the vicinity of an airport or private airstrip, and would not expose people residing or working in the project area to excessive noise levels associated with a private airstrip; there would be no impact. Finally the analysis concluded that the proposed project would not result in any significant cumulative impacts.

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APPENDIX A

Noise Measurement Data

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT Watermark | PROJECT # 7747
SITE ID M1
SITE ADDRESS 2148 Heather Lane | OBSERVER(S) Caitlin Hennson
START DATE 9-22-15 | END DATE 9-22-15
START TIME 9:47 | END TIME 10:03

METEOROLOGICAL CONDITIONS

TEMP 74 F | HUMIDITY 80 % R.H. | WIND (CALM) LIGHT MODERATE
WINDSPD 04 MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT Rion NL-32 | TYPE (1) 2 | SERIAL # 01630561
CALIBRATOR Rion NC-74 | SERIAL # 35175869
CALIBRATION CHECK PRE-TEST 93.9 dBA SPL | POST-TEST 94.1 dBA SPL | WINDSCRN V

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM (ANSI) OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
1	9:47	10:03	54.5	90.7	41.5	49.0	53.4	57.2	

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: Jimmy Durante Blvd | DIST. TO RDWY C/L OR EOP:

TRAFFIC COUNT DURATION: ___ MIN

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB SPEED	SB/WB SPEED	NB/EB	SB/WB
	AUTOS	See M3	for counts		
	MED TRKS				
	HVY TRKS				
	BUSES				
	MOTRCLS				

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

COUNT 2 (OR RDWY 2)	NB/EB MIN	SB/WB MIN	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) (DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Veteranarian Hospital bird noise

DESCRIPTION / SKETCH

TERRAIN HARD SOFT (MIXED) FLAT OTHER:
PHOTOS
OTHER COMMENTS / SKETCH

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT Watermark | PROJECT # 7197
SITE ID M2
SITE ADDRESS 2147 Heather Lane | OBSERVER(S) Caitlin Munson
START DATE 9-22-15 | END DATE 9-22-15
START TIME 10:17 | END TIME 15min

METEOROLOGICAL CONDITIONS

TEMP 74 F | HUMIDITY 80 % R.H. | WIND (CALM) LIGHT MODERATE
WINDSPD 0-4 MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT Rion NL-32 | TYPE (1) 2 | SERIAL # 01030561
CALIBRATOR Rion NC-74 | SERIAL # 35125880
CALIBRATION CHECK | PRE-TEST 93.9 dBA SPL | POST-TEST 94.1 dBA SPL | WINDSCRN ✓

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM (ANSI) OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
1.	10:17	15min	53.7	69.9	43.1	45.9	48.7	51.1	

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER: Veterinarian hospital, landscaping
ROADWAY TYPE: | DIST. TO RDWY C/L OR EOP:
TRAFFIC COUNT DURATION: ___ MIN SPEED ___ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	See M3 for Counts								
MED TRKS									
HVY TRKS									
BUSES									
MOTRCLS									

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Veterinarian Hospital bird noises

DESCRIPTION / SKETCH

TERRAIN HARD SOFT (MIXED) FLAT OTHER:
PHOTOS
OTHER COMMENTS / SKETCH

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT	Watermark	PROJECT #	7797
SITE ID	M3		
SITE ADDRESS	Project Site NE corner	OBSERVER(S)	Caitlin Munson
START DATE	9-22-15	END DATE	9-22-15
START TIME	8:41	END TIME	9:01

METEOROLOGICAL CONDITIONS

TEMP 74 F | HUMIDITY 80 % R.H. | WIND (CALM) LIGHT MODERATE

WINDSPD 0-4 MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY

SKY SUNNY CLEAR (OVRCAST) PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT Rion NL-32 | TYPE (1) 2 | SERIAL # 01039514

CALIBRATOR Rion NC-74 | SERIAL # 35125809

CALIBRATION CHECK | PRE-TEST 93.9 dBA SPL | POST-TEST 94.1 dBA SPL | WINDSCRN ✓

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM (ANSI) OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
1	8:41	9:01	61.8	73.1	49.6	51.1	59.2	65.8	
									/

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:

ROADWAY TYPE: Jimmy Durante & San Dieguito | DIST. TO RDWY C/L OR EOP:

TRAFFIC COUNT DURATION: 20 MINU | SPEED

COUNT 1 (OR RDWY 1)

DIRECTION	(NB/EB)	(SB/WB)	NB/EB	SB/WB
AUTOS	73	138		
MED TRKS	0	2		
HVY TRKS	2	1		
BUSES	0	0		
MOTRCLS	0	0		

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ☐

COUNT 2 (OR RDWY 2)

20 MIN | SPEED 15 MPH

(NB/EB)	(SB/WB)	NB/EB	SB/WB
8	7		
0	1		
0	0		
0	0		
0	0		

SPEEDS ESTIMATED BY: RADAR / (DRIVING THE PACE) Jimmy Durante | San Dieguito Dr.

POSTED SPEED LIMIT SIGNS SAY: 45 MPH

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL

DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE

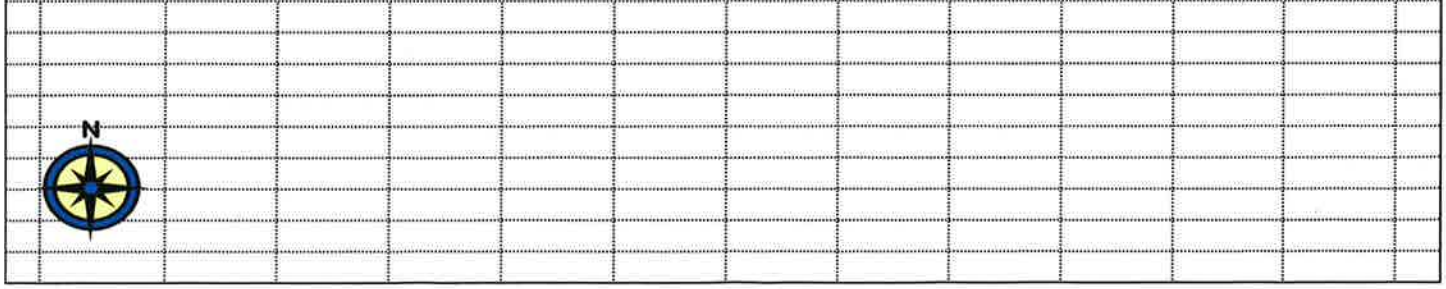
OTHER: idling truck, train horn, Veterinarian Hospital Bird noise

DESCRIPTION / SKETCH

TERRAIN HARD SOFT (MIXED) FLAT OTHER:

PHOTOS

OTHER COMMENTS / SKETCH



DUDEK

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MEMORANDUM

To:	City of Del Mar
From:	Mike Greene, Dudek
Subject:	Watermark Del Mar Specific Plan Noise Analysis Results for Option B
Date:	September 27, 2017
Attachment A:	Noise Modeling Calculations

Dudek is pleased to submit this noise memorandum to assist the City of Del Mar with environmental planning requirements for the proposed Watermark Del Mar Specific Plan (Option A and Option B) located in the City of Del Mar (City), as shown in **Figures 1 and 2**. The proposed project would develop 48 residential units under Option A, or 38 residential units under Option B, on a 2.37 acre site. The noise impacts from construction and operation of Option A were addressed in the original analysis (Dudek, 2015). This memorandum estimates noise impacts from construction and operation of the Option B Option At an equivalent level of detail as the Option A analysis.

The contents and organization of this memorandum are as follows: project description; general analysis and methodology; regulatory background and existing conditions, thresholds of significance and noise impacts analysis; conclusions; and references cited.

1 PROJECT DESCRIPTION

Two separate Specific Plans were prepared for both Option A and Option B and can be found in Appendix A of the EIR. The proposed Specific Plans for Option A and Option B are intended to create a regulatory framework to govern development of the project site as a high-quality multi-family residential development. As the current zone or Community Plan do not allow for multi-family residential, a Specific Plan is proposed. The project proposes a multi-family residential development consisting of two options: Option A would include 48 residential units (**Figure 3**) built over the partially subterranean parking garage, and Option B would include 38 residential units built over the partially subterranean parking garage (**Figure 4**). For a side-by-side comparison of Option A and Option B.

Both Options would include a recreation room, a pool, a spa area, and associated maintenance and administrative facilities. Both Options would provide a secured parking structure partially underground on the 2.37-acre site with a vehicular access point from San Dieguito Drive. Option

A would have 108 stalls and Option B would have 100 stalls. Each Option would allow for the continuation of paid parking for Del Mar Fairground events until building permits are issued for the chosen Option.

The Option A and Option B Specific Plans provide a description of the proposed land use and infrastructure requirements, and describe guidelines and standards for site development. As a regulatory document, the Option A and Option B Specific Plans create new zoning for the project site that would regulate the permitted uses, density, height, and other aspects. Under either Option, the zone would be designated on the City of Del Mar's zoning map as WDMSP. Section 5 of the Specific Plan for both Options includes the development regulations that would govern the project site, and Sections 6 include the design standards that would ensure the quality and character envisioned for the development.

2 GENERAL ANALYSIS AND METHODOLOGY

Potential noise impacts from Option B were estimated using the same methods as Option A, at an equivalent level of detail. Temporary impacts from construction noise were estimated using the approximate distances to the nearest noise-sensitive receivers and typical construction noise levels based upon information from the Environmental Protection Agency and the Federal Transit Administration. Construction vibration levels were assessed using methodology and typical equipment vibration emission levels from the Federal Transit Administration. Potential noise effects from vehicular traffic were assessed using the Federal Highway Administration's Traffic Noise Model Version 2.5 (FHWA 2004). Data used to model noise from vehicular traffic were derived from the project-specific traffic volume comparison memorandum prepared by Darnell and Associates (Darnell & Associates, Inc. 2017).

3 REGULATORY BACKGROUND AND EXISTING CONDITIONS

3.1 Federal

Noise Control Act

The Noise Control Act of 1972 recognized the role of the federal government in dealing with major commercial noise sources that require uniform treatment. Since Congress has the authority to regulate interstate and foreign commerce, regulation of noise generated by such commerce also falls under congressional authority. The federal government specifically preempts local control of noise from aircraft, railroads, and interstate highways. The U.S. Environmental Protection Agency has identified acceptable noise levels for various land uses to protect the public, with an adequate margin of safety, and to establish noise emissions standards for interstate commerce.

The Department of Housing and Urban Development's standards define day-night average sound levels (L_{dn}) at below 65 dBA for outdoors as acceptable for residential areas. Outdoor levels up to 75 dBA L_{dn} may be made acceptable through the use of insulation in buildings (HUD 2009).

3.2 State

California Code of Regulations, Title 24, Noise Insulation Standards

The pertinent California noise regulations are contained in the California Code of Regulations. Title 24, Noise Insulation Standards, establishes the acceptable interior environmental noise level for multi-family dwellings at 45 dBA L_{dn}. This may be extended by local legislative action to include single-family dwellings.

California Code of Regulations, Section 65302(f)

California Code of Regulations, Section 65302(f), requires local land use planning jurisdictions to prepare a general plan. The noise element is a mandatory component of the general plan. It may include general community noise guidelines developed by the California Department of Health Services and specific planning guidelines for noise/land use compatibility developed by the local jurisdiction. The state guidelines also recommend that the local jurisdiction consider adopting a local noise control ordinance. The California Department of Health Services developed guidelines (OPR 2003) for community noise acceptability for use by local agencies. Selected relevant levels are as follows (L_{dn} may be considered nearly equal to CNEL):

- CNEL below 60 dBA – normally acceptable for low-density residential use
- CNEL of 55 to 70 dBA – conditionally acceptable for low-density residential use
- CNEL below 65 dBA – normally acceptable for high-density residential use
- CNEL of 60 to 70 dBA – conditionally acceptable for high-density residential use, transient lodging, churches, and educational and medical facilities
- CNEL below 70 dBA – normally acceptable for playgrounds and neighborhood parks

"Normally acceptable" is defined as satisfactory for the specified land use, assuming that normal conventional construction is used in buildings. "Conditionally acceptable" may require some additional noise attenuation or special study. Under most of these land use categories, overlapping ranges of acceptability and unacceptability are presented, leaving some ambiguity in areas where noise levels fall within the overlapping range.

California Occupational Safety and Health Administration Occupational Noise Exposure Regulations

California additionally regulates noise emissions levels of licensed motor vehicles traveling on public thoroughfares, sets noise emissions limits for certain off-road vehicles and watercraft, and sets required sound levels for light-rail-transit vehicle warning signals.

The extensive state regulations pertaining to worker noise exposure are, for the most part, applicable only to the construction phase of any project,[1] or workers in a central plant and/or a maintenance facility or involved in the use of landscape maintenance equipment or heavy machinery.

3.3 Local

City of Del Mar Community Plan

Objective D: Reduce the level of noise created by major transportation routes in the community.

Policy 1: Limit the speed of vehicular traffic along City streets, particularly Camino Del Mar.

Policy 2: Encourage sound reduction techniques in new buildings within the 65 decibel boundaries adjacent to Camino del Mar and the railroad right-of-way (City of Del Mar 1976).

City of Del Mar Noise Ordinance

9.20.050 Construction Noise. Any person who operates powered construction or landscape equipment and/or who erects, constructs, demolishes, excavates for, alters or repairs any building or structure within the City of Del Mar in such a manner as to cause noise to be received beyond the boundaries of the property on which the construction work is occurring shall comply with the following:

A. No construction work shall be performed on Sundays or City holidays.

B. No construction work shall be performed before 9:00 a.m. or after 7:00 p.m. on Saturday.

C. No construction work shall be performed before 7:00 a.m. or after 7:00 p.m. on Monday through Friday.

D. Construction activity shall not cause an hourly average sound level greater than 75 decibels on property zoned or used for residential purposes.

[1] For example, the California Occupational Safety and Health Administration Occupational Noise Exposure Regulations (8 CCR, General Industrial Safety Orders, Article 105, Control of Noise Exposure, Section 5095, et seq.).

Exception: A person may perform construction work on the person's own property, provided such construction activity is not carried on for profit or livelihood, between the hours of 10:00 a.m. and 5:00 p.m. on Sundays and City holidays (City of Del Mar 1997).

3.4 Existing Conditions

The following summarizes the existing conditions as described in the noise analysis conducted in 2015 for Option A.

A sound level survey was conducted on September 22, 2015, to evaluate existing sound levels and assess potential project noise impacts on the surrounding area. Short-term sound levels were measured at existing noise-sensitive receptors adjacent to and within the project area, as shown in **Figure 5**. Noise measurements were taken at nearby residences (M-1, M-2) and on the project site (M-3). During the field measurements, physical observations of the predominant noise sources were noted. The major noise source in the project area was vehicle traffic. Other secondary noise sounds included landscaping noise, rustling leaves, birds (from a nearby veterinarian hospital), distant aircraft overflights, and other community noises. The results of the sound level measurements are summarized in Table 2. As shown in Table 2, measured noise levels varied from 54 dBA L_{eq} at M-2 to 62 dBA L_{eq} at M-3 when rounded to whole numbers, as is customary for community noise measurements.

Table 2
Short-Term Sound Level Measurement Results

Site ID	Measurement Location	Measurement Period			Noise Sources	Measurement Results (dBA)					
		Date	*Start Time (a.m.)*	*Duration (minutes)*		L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}
M-1	2148 Heather Lane, Del Mar, CA 92014	9-22-15	9:42	20	Traffic, landscaping noise, birds, rustling leaves	54.5	70.2	41.5	49.0	53.4	57.2
M-2	2147 Heather Lane, Del Mar, CA 92014	9-22-15	10:17	15	Traffic, landscaping noise, birds, rustling leaves, distant aircraft	53.7	69.9	43.4	45.9	48.7	56.1
M-3	Northeast corner of project site	9-22-15	8:41	20	Traffic, birds, train horn, idling truck	61.8	73.1	44.6	51.1	59.2	65.8

L_{eq} = equivalent continuous sound level (energy-averaged sound level); L_{max} = maximum sound level during the measurement interval; L_{min} = minimum sound level during the measurement interval; L_{90} = sound level exceeded for 90% of the measurement period; L_{50} = sound level exceeded for 50% of the measurement period; L_{10} = sound level exceeded for 10% of the measurement period

4 NOISE IMPACTS ASSESSMENT

4.1 Thresholds of Significance

California has guidelines to address the significance of noise impacts based on Appendix G of the California Environmental Quality Act Guidelines, which provides guidance that a project would have a significant environmental impact if it would do any of the following:

1. Result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
2. Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
3. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
4. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
5. Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and if so, the project would expose people residing or working in the project area to excessive noise levels.

Be within the vicinity of a private airstrip, and if so, the project would expose people residing or working in the project area to excessive noise levels.

4.2 Impact Analysis

4.2.1 Construction Noise Analysis

Construction of Option B would slightly decrease the intensity of development compared with Option A. As shown in Table 1, the density would decrease by approximately 4.4 dwelling units per acre. However, the setback distance from the project site limits to the nearest adjacent noise-sensitive receiver, approximately 30 feet away, would be the same under either Option A or Option B.

The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is depicted in Table 3. The noise values represent maximum noise generation, or full-power operation, of the equipment. As an example, a loader and two dozers, all operating at full power and relatively close together, would generate a maximum sound level of approximately 90 dBA at 50 feet from their operations. As distance increases between the equipment and/or

distance increases between areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of separate noise sources added together. In addition, typical operating cycles may involve 2 minutes of full-power operation, followed by 3 or 4 minutes at lower levels. The average noise level during construction activities is generally lower, since maximum noise generation may only occur up to 50% of the time.

Table 3
Construction Equipment Noise Emissions Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Backhoe	80
Air compressor	81
Generator	81
Compactor	82
Crane, mobile	83
Compactor	82
Grader	85
Loader	85
Paver	89
Pneumatic tool	85
Truck	88

Source: FTA 2006

The closest off-site existing sensitive receptor to construction of Option B is a single-family residence located 30 feet to the west. Other single-family residences border the western and southern edges of the site at a distance of more than 30 feet from the Option B.

Routine noise levels from conventional construction activities (with a typical number of equipment operating on the site) range from 75 to 86 dBA L_{eq} at a distance of 50 feet. Due to improvements in construction equipment silencing technology, these sound levels are 3 dB lower than the noise levels reported in the 1971 reference study (EPA 1971). Typically, the quietest phase of building site construction for similar projects is that associated with constructing foundations, producing 75 dBA L_{eq} at a distance of 50 feet. Typically, the loudest phases, producing 86 dBA L_{eq} at 50 feet, are those associated with grading and finishing activities. The noise levels from construction operations decrease (or increase) at a rate of approximately 6 dB per doubling (or halving) of distance from the source. Therefore, at a distance of 30 feet (the approximate distance from the nearest construction area to the nearest residences to the northeast), construction noise levels would range from approximately 79 to 90 dBA L_{eq}. This is the same range of noise levels as would occur under Option A.

To comply with the City of Del Mar's Noise Control Ordinance, construction activities would be limited to Monday through Friday, 7 a.m. to 7 p.m., and Saturday 9 a.m. to 7 p.m. (City of Del Mar 1997). No construction activities are expected on Sundays or during federal holidays. Because Option B would exceed the 75 dB construction noise standards established in the City of Del Mar's Noise Control Ordinance, impacts would be significant. To avoid construction noise impacts, Mitigation Measure (MM) NOI-1 is required to control construction noise to the extent practicable and feasible (see Section 4.3). With implementation of MM-NOI-1, construction noise would have a less-than-significant impact. No additional mitigation is required for conventional construction activities.

4.2.2 Construction Vibration Analysis

Option B includes the construction of 38 residential units and would slightly decrease the intensity of development compared with Option A. As shown in Table 1, the density would decrease by approximately 4.4 dwelling units per acre. However, the setback distance from the project site limits to the nearest adjacent noise-sensitive receiver, approximately 30 feet away, would be the same under either Option A or Option B.

Groundborne vibration is a small, rapidly fluctuating motion transmitted through the ground that diminishes (attenuates) fairly rapidly over distance. Anticipated groundborne vibration from heavy equipment operations during construction of Option B was evaluated and compared to relevant vibration impact criteria using the Federal Transit Administration's Transit Noise and Vibration Impact Assessment, which provides vibration impact criteria and recommended methodologies and guidance for assessment of vibration effects (FTA 2006).

At a distance of approximately 20 feet, the vibration level from heavy construction machinery (such as a loaded truck or a drilling rig) would be between approximately 0.106 peak particle velocity in inches per second (PPV IPS) and 0.124 PPV IPS. Vibration levels of this magnitude would likely be perceptible at nearby residences, but they would be below the Federal Transit Administration's threshold of potential damage for normal structures (0.20 PPV IPS) and would not be considered excessive. Therefore, short-term construction-related vibration impacts would be less than significant.

4.2.3 Traffic Noise Analysis

Based upon the traffic volumes comparison memorandum (Darnell & Associates, 2017), the Option B project alternative would result in approximately 80 fewer average daily trips (ADT) compared with Option A. Whereas under Option A approximately the ADT would be 384, under Option B the project would generate approximately 304 ADT. In terms of AM and PM peak-hour trips, Option B would produce approximately 4 fewer trips in the AM peak-hour and 6

fewer trips in the PM peak-hour. Using the same traffic noise model (FHWA's TNM v. 2.5) as used for the Option A noise analysis, the Option B traffic noise levels were modeled. The results are shown in Table 4. As shown in Table 4, the change, under either Option A or Option B noise levels along these roads would increase by 0 dBA (when rounded to whole numbers) along the study area roads in the vicinity of the project site. Therefore, as there would be no audible or measurable increase in average traffic noise levels, noise impacts due to project-related traffic would not be significant. Option B is not anticipated to result in significant traffic noise increases or cause an exceedance of applicable traffic noise standards. Therefore, the impact from traffic noise associated with Option B would be less than significant.

Table 4
Modeled Traffic Noise Levels with and without Option A and Option B (dBA CNEL)

Modeled Receptor	Receptor Address	Roadway Intersection	Existing	Existing Plus Project (Option A)	Existing Plus Project (Option B)	Cumulative with Project (Option A)	Cumulative with Project (Option B)	Maximum Project-Related Noise Level Increase (dBA)
M1: Single-family residences, west of project site	2148 Heather Lane	Heather Lane	59	59	59	59	59	0
M2: Single-family residences, southwest of project site	2134 David Way	David Way	55	55	55	55	55	0
M3: On-Site receptor	Northeast corner of project site	Jimmy Durante Boulevard and San Dieguito Drive	66	66	66	66	66	0

Source: FHWA 2004
Note: Project-related traffic noise levels are rounded to the nearest whole numbers.

4.3 Mitigation Measures

The following mitigation measure was evaluated for feasibility and would be incorporated to reduce potentially significant impacts related to increases in noise levels from construction of Option B.

MM-NOI-1 Prior to initiation of construction, the City of Del Mar shall approve a construction noise mitigation program to include the following:

- Temporary sound barriers/shielding shall be installed to shield non-mobile equipment in the vicinity of nearby residences, or, alternatively, to shield at the site's boundaries (i.e., the southern and western sides, where adjacent residences are closest).
- Construction equipment shall be properly outfitted and maintained with feasible noise-reduction devices (e.g., functioning mufflers and silencers, tightly closed access panels) to minimize construction-generated noise.
- Stationary noise sources such as generators or pumps shall be located as far away from noise-sensitive land uses as feasible.
- Laydown and construction vehicle staging areas shall be located away from noise-sensitive land uses if feasible.

Whenever possible, residential areas that will be subject to construction noise shall be informed 1 week before the start of each construction phase.

5 CONCLUSIONS

Construction of Option B, which includes 38 residential units instead of the 48 residential units proposed under Option A, would result in a small decrease in the number of operational daily and peak-hour vehicle trips; however, based upon the traffic noise modeling, neither Option A or Option B would result in a significant increase in traffic noise levels. The increase under either Option A or Option B would be less than 1 decibel (0 dB, when rounded to whole numbers). Noise and vibration levels at adjacent sensitive receivers would be equivalent under either Option A or Option B.

6 REFERENCES

City of Del Mar. 1976. The Community Plan for the City of Del Mar, California. March 1976. Contains 1985 Amendments. http://www.delmar.ca.us/DocumentCenter/View/250.

City of Del Mar. 1997. City of Del Mar Municipal Code, Chapter 9.2, Noise Regulations. October 1997. http://www.delmar.ca.us/DocumentCenter/Home/View/381.

Darnell & Associates, Inc. 2017. Traffic Comparison of the Proposed 48 Condominium Unit Residential Project Located at the Southwest Corner of Jimmy Durante Boulevard and San Dieguito Drive in Del Mar, California. May 30, 2017

Dudek. 2015. Noise Technical Report for the Watermark Del Mar Specific Plan EIR, October 2015.

HUD (Department of Housing and Urban Development). 2009. HUD Noise Guidebook, Chapter 5, Noise Assessment Guidelines. Published March 2009. https://www.hudexchange.info/resource/313/hud-noise-guidebook/.

EPA (U.S. Environmental Protection Agency). 1971. *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*. Prepared for the EPA. Prepared by Bolt, Beranek & Newman. Boston, Massachusetts: Bolt, Beranek & Newman. December 1971.

FHWA (Federal Highway Administration). 2004. FHWA Traffic Noise Model, Version 2.5. Washington, D.C.: FHWA Office of Environment and Planning. April 2004.

FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment*. FTA-VA-90-1003-06. Burlington, Massachusetts: DOT, Federal Transit Administration, Office of Planning and Environment (prepared under contract by Harris, Miller, Miller and Hanson). May 2006.

OPR (Governor's Office of Planning and Research). 2003. "Appendix A: Guidelines for the Preparation and Content of the Noise Element of the General Plan." In *County General and Other Plans*. California Environmental Resources Evaluation System, California Land Use Planning Information Network. http://ceres.ca.gov/planning/genplan/appendix_a.html.

DUDEK

SOURCE: ESRI, 2017

FIGURE 1

Regional Map

Watermark Del Mar Noise Memorandum

DUDEK

SOURCE: Bing Maps 2017

FIGURE 2
Vicinity Map

Watermark Del Mar Noise Memorandum

SOURCE: Benson & Bohl Architects 2017

FIGURE 3
Conceptual Site Plan - Option A (48 Units)

20 10 0 20 40 60

SCALE: 1"=20'

SOURCE: Benson & Bohl Architects 2017

FIGURE 4

Conceptual Site Plan - Option B (38 Units)

SOURCE: SANDAG, 2014.

FIGURE 5

Noise Measurement Locations

DUDEK

Watermark Del Mar Noise Memorandum

ATTACHMENT A

Noise Modeling Calculations

Dudek **25 July 2017**
M Greene **TNM 2.5**

INPUT: ROADWAYS
PROJECT/CONTRACT: **7797**
RUN: **Watermark Ex plus Proj Rev 0717 Opt B**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Jimmy Durante Blvd	48.0	point5	5	0.0	0.0	19.00				Average	
		point6	6	390.0	370.0	13.00					
San Dieguito Drive	36.0	point7	7	390.0	370.0	13.00				Average	
		point8	8	604.0	100.0	13.00					

Dudek **25 July 2017**

M Greene **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes

PROJECT/CONTRACT: **7797**

RUN: **Watermark Ex plus Proj Rev 0717 Opt B**

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Jimmy Durante Blvd	point5	5	904	45	28	45	19	45	1	45	1	45
	point6	6										
San Dieguito Drive	point7	7	110	15	3	15	2	15	1	15	1	15
	point8	8										

Dudek						**25 July 2017**					
M Greene						**TNM 2.5**					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	**7797**										
RUN:	**Watermark Ex plus Proj Rev 0717 Opt B**										
Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height**	**Input Sound Levels and Criteria**				**Active**
			X	**Y**	**Z**	**above**	**Existing**	**Impact Criteria**		**NR**	**in**
						Ground	**LAeq1h**	**LAeq1h**	**Sub'l**	**Goal**	**Calc.**
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M3	1	1	330.0	205.0	12.00	5.00	0.00	66	10.0	8.0	Y
M1	2	1	130.0	-65.0	40.00	5.00	0.00	66	10.0	8.0	Y
M2	3	1	320.0	-205.0	72.00	5.00	0.00	66	10.0	8.0	Y

Dudek					**25 July 2017**															
M Greene					**TNM 2.5**															
INPUT: BARRIERS																				
PROJECT/CONTRACT:	**7797**																			
RUN:	**Watermark Ex plus Proj Rev 0717 Opt B**																			
Barrier									**Points**											
Name	**Type**	**Height**		**If Wall**	**If Berm**			**Add'tnl**	**Name**	**No.**	**Coordinates (bottom)**			**Height**	**Segment**					
		Min	**Max**	**$ per**	**$ per**	**Top**	**Run:Rise**	**$ per**			**X**	**Y**	**Z**	**at**	**Seg Ht Perturbs**			**On**	**Important**	
				Unit	**Unit**	**Width**		**Unit**						**Point**	**Incre-**	**#Up**	**#Dn**	**Struct?**	**Reflec-**	
				Area	**Vol.**			**Length**							**ment**				**tions?**	
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft					
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	21.0	-95.0	30.00	54.00	0.00	0	0			
									point2	2	56.0	-54.0	30.00	54.00						
Barrier2	W	0.00	99.99	0.00				0.00	point3	3	160.0	-80.0	40.00	3.50	0.00	0	0			
									point4	4	115.0	-45.0	40.00	3.50	0.00	0	0			
									point5	5	95.0	-67.0	40.00	3.50						

RESULTS: SOUND LEVELS **7797**

Dudek	**25 July 2017**
M Greene	**TNM 2.5**
	Calculated with TNM 2.5
RESULTS: SOUND LEVELS	
PROJECT/CONTRACT:	**7797**
RUN:	**Watermark Ex plus Proj Rev 0717 Opt B**
BARRIER DESIGN:	**INPUT HEIGHTS**
	Average pavement type shall be used unless a State highway agency substantiates the use
ATMOSPHERICS:	**74 deg F, 80% RH** **of a different type with approval of FHWA.**

Receiver												
Name	**No.**	**#DUs**	**Existing**	**No Barrier**					**With Barrier**			
			LAeq1h	**LAeq1h**		**Increase over existing**		**Type**	**Calculated**	**Noise Reduction**		
				Calculated	**Crit'n**	**Calculated**	**Crit'n Sub'l Inc**	**Impact**	**LAeq1h**	**Calculated**	**Goal**	**Calculated minus Goal**
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M3	1	1	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0
M1	2	1	0.0	58.6	66	58.6	10	----	58.6	0.0	8	-8.0
M2	3	1	0.0	54.8	66	54.8	10	----	54.8	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?>					25 July 2017						
<Analysis By?>					TNM 2.5						
INPUT: ROADWAYS							Average pavement type shall be used unless				
PROJECT/CONTRACT:	<Project Name?>						a State highway agency substantiates the use				
RUN:	Watermark Cum + Proj Rev 0717 Opt B						of a different type with the approval of FHWA				
Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Jimmy Durante Blvd	48.0	point5	5	0.0	0.0	19.00				Average	
		point6	6	390.0	370.0	13.00					
San Dieguito Drive	36.0	point7	7	390.0	370.0	13.00				Average	
		point8	8	604.0	100.0	13.00					

<Organization?> 25 July 2017
<Analysis By?> TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: Watermark Cum + Proj Rev 0717 Opt B

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Jimmy Durante Blvd	point5	5	942	45	30	45	20	45	1	45	1	45
	point6	6										
San Dieguito Drive	point7	7	115	15	3	15	3	15	1	15	1	15
	point8	8										

<Organization?>
25 July 2017
<Analysis By?>
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: Watermark Cum + Proj Rev 0717 Opt B

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M3	1	1	330.0	205.0	12.00	5.00	0.00	66	10.0	8.0	Y
M1	2	1	130.0	-65.0	40.00	5.00	0.00	66	10.0	8.0	Y
M2	3	1	320.0	-205.0	72.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>
25 July 2017
<Analysis By?>
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: Watermark Cum + Proj Rev 0717 Opt B

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	21.0	-95.0	30.00	54.00	0.00	0	0		
									point2	2	56.0	-54.0	30.00	54.00					
Barrier2	W	0.00	99.99	0.00				0.00	point3	3	160.0	-80.0	40.00	3.50	0.00	0	0		
									point4	4	115.0	-45.0	40.00	3.50	0.00	0	0		
									point5	5	95.0	-67.0	40.00	3.50					

<Organization?>
<Analysis By?>

25 July 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: Watermark Cum + Proj Rev 0717 Opt B
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 74 deg F, 80% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M3	1	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
M1	2	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0
M2	3	1	0.0	55.0	66	55.0	10	----	55.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

APPENDIX J

Hazard Report Phase 1 ESA

April 16, 2014
Project No.: 20150082.001A

Mr. Marne Bouillon
Project Manager
Kitchell Development
853 Camino Del Mar, Suite 200
Del Mar, California 92014

Subject: **Phase I Environmental Site Assessment**
Assessor Parcel Numbers: 299-100-47 and 299-100-48
Jimmy Durante Boulevard / San Dieguito Road
Del Mar, California 92014

Dear Mr. Bouillon:

Enclosed is the Phase I Environmental Site Assessment (ESA) report for the above-referenced property. We trust the information presented in this report meets your needs at this time.

An executive summary is provided; however, we recommend that the report be read in its entirety for a comprehensive understanding of the items contained therein.

We appreciate the opportunity to provide these services to Kitchell Development. Should you require additional information, or have questions regarding this report, please contact Chuck Cleeves at (858) 320-2291.

Respectfully submitted,

KLEINFELDER, INC.

Margaret R. Carroll
Project Professional

Chuck Cleeves
Project Manager

MRC:CC:lm

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5015 Shoreham Place, San Diego, CA 92122 **p |** 858.320.2000 **f |** 858.320.2001

PHASE I ENVIRONMENTAL SITE ASSESSMENT
ASSESSOR PARCEL NUMBERS: 299-100-47 AND 299-100-48
JIMMY DURANTE BOULEVARD / SAN DIEGUITO ROAD
DEL MAR, CALIFORNIA 92014

Kleinfelder Job No.: 20150082.001A

April 16, 2014

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A Report Prepared for:

Kitchell Development
853 Camino Del Mar, Suite 200
Del Mar, California 92014

PHASE I ENVIRONMENTAL SITE ASSESSMENT
ASSESSOR PARCEL NUMBERS: 299-100-47
AND 299-100-48
JIMMY DURANTE BOULEVARD / SAN DIEGUITO ROAD
DEL MAR, CALIFORNIA 92014

Kleinfelder Job No.: 20150082.001A

Prepared by:

Margaret Carroll

Margaret R. Carroll
Project Professional

Reviewed by:

Chuck Cleeves
Project Manager

Peer Reviewed by:

Lizanne Simmons
California Professional Geologist No. 7431

KLEINFELDER, INC.
5015 Shoreham Place
San Diego, California 92122

April 16, 2014

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1 EXECUTIVE SUMMARY

A Phase I Environmental Site Assessment (ESA) was performed by Kleinfelder, for Kitchell Development (Kitchell / Client), of two parcels of land that are identified by the San Diego County Assessor's Office as Assessor Parcel Numbers (APNs) 299-100-47 and 299-100-48. These parcels (collectively referred to as the "Site") are located south of the intersection of Jimmy Durante Boulevard and San Dieguito Road in the city of Del Mar, San Diego County, California (see Plate 1, Site Location Map).

This report was prepared using the ASTM International (ASTM, formerly known as the American Society for Testing and Materials) Designation E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (the "Standard Practice"), and the All Appropriate Inquiry (AAI) section of the Small Business Liability Relief and Revitalization Act (the Federal Brownfields Law). The Phase I ESA findings include:

- The Site consists of approximately 2.30 acres of land and is presently vacant land. The northern, eastern, and northwestern portions of the Site consist of relatively flat terrain with little vegetation. The southwestern portion consists of a man-made (graded) plateau area. The remaining portions of the Site, generally the southern and southeastern portions consist of a steep slope (bluff) upward and are heavily vegetated. At the base of the bluff, the southeastern portion of the Site also consists of a wetlands area.
- The Site historically appeared to be part of a lagoon at the mouth of the San Dieguito River in 1904 and appeared to be vacant land in 1939, 1953, and 1966. During these years, the northern portion of the Site appeared to be flat and unpaved; the remaining areas appeared to be situated on a slope and covered with vegetation. Some clearing of vegetation and soil disturbance was apparent on the western portion of the Site by 1966. The Site remained relatively physically unchanged through the present. The Site was used for overflow parking from the nearby Del Mar Fairgrounds in at least 2009.
- An approximately 8-inch monitoring well cover was observed on the northern portion of the Site. A 25-foot piezometer was reportedly installed in a previous exploratory boring during a preliminary geologic hazard evaluation for the Site and is used to monitor groundwater levels.

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- No obvious indications that a significant release of hazardous materials/wastes or petroleum products has occurred at the Site were observed by Kleinfelder during the Site reconnaissance.
- The database agency search did not reveal on-Site or off-Site listings that represent recognized environmental conditions (RECs) to the Site.
- There were no off-Site facilities that, in Kleinfelder's opinion, represent a REC to the Site.

In summary Kleinfelder's Phase I ESA did not identify RECs.

In addition to these conditions, deviations from the Phase I ESA Standard (if any) are discussed in Chapter 8 of this report. This report is subject to the limitations in Section 2.5.

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2 INTRODUCTION

This report is a summary of work performed using the guidelines set forth in ASTM Designation E 1527-13*, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process"* (the ASTM Standard) and All Appropriate Inquiry (AAI) standards of the Small Business Liability and Revitalization Act (the "Brownfields Law"). This report also generally conforms to the ASTM Standard's suggested table of contents. Minor format modifications have been made to the ASTM Standard's suggested table of contents to assist in better reading and understanding the report findings.

2.1 PURPOSE

The purpose of this Phase I ESA is to identify, to the extent feasible pursuant to the scope of services defined in our Proposal No. MF150334.001P, dated March 24, 2014, and limitations discussed in this report, recognized environmental conditions (RECs). As defined in the ASTM Standard, a REC is:

> *The presence or likely presence of any hazardous substances or petroleum products in, on or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.*

As defined in the ASTM Standard, a *de minimis* condition is:

> *A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.*

ASTM Standard E 1527-13 also introduces the designation of Controlled REC (CREC). As defined in the ASTM Standard a CREC is:

> *"… a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or*

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petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

This report describes Kleinfelder's assessment methodology and documents our findings, subject to the limitations presented in Section 2.5 of this report.

Kleinfelder professionals conducting this site assessment included Ms. Margaret Carroll, who conducted the Site reconnaissance and who is the primary author of this report. Ms. Carroll is an Environmental Professional. Other Environmental Professionals include Ms. Lizanne Simmons and Mr. Chuck Cleeves. Resumes of Environmental Professionals are available from Kleinfelder upon request.

2.2 DETAILED SCOPE-OF-SERVICES

The following sections describe Kleinfelder's work scope:

- Section 2, **Introduction**, includes a discussion of the purpose/reason for performing the Phase I ESA, additional services requested by the Client (e.g., an evaluation of business environmental risk factors associated with the Site), significant assumptions (e.g., property boundaries if not marked in the field), limitations, exceptions, special terms and conditions (e.g., contractual), and user reliance parameters.
- Section 3, **Site Description**, is a compilation of information concerning the Site location, legal description, current and proposed use of the Site, a description of structures and improvements on the Site at the time of Kleinfelder's assessment, and adjoining property use.
- Section 4, **Records Review**, is a compilation of Kleinfelder's review of several databases available from Federal, State, and local regulatory agencies regarding hazardous substance use, storage, or disposal at the Site; and for off-Site facilities within the search distances specified in the ASTM Standard. Records provided by the Client are summarized and copies of relevant documents are included in the appendices of this report. Physical setting sources (including topography and soil and groundwater conditions) and typical Client-provided information (e.g., title records, environmental liens, specialized knowledge, valuation reduction for environmental issues, and owner, property manager, and occupant information) are also summarized in this section. Other interviews with

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people knowledgeable about the Site (including the Client) are included in Section 7.

- Section 5, **History of the Site**, summarizes the history of the Site and adjoining properties. This Site history is based on various sources, which may include a review of historical aerial photographs, Sanborn Fire Insurance Maps, city or suburban directories, historical topographic maps, building department records, and results of previous Site assessments (if any and reasonably ascertainable).
- Section 6, **Site Reconnaissance**, describes Kleinfelder's observations during the Site reconnaissance. The methodology used and limiting conditions, are described.
- Section 7, **Interviews**, is a summary of telephone and personal interviews performed with "Key Site Managers" that may include the Site owner/manager, occupants/tenants, local government officials, and the Client. Additional interview sources may be contacted if Key Site Managers were not available prior to production of this report, and may include adjoining landowners and people with historical knowledge of the area.
- Section 8, **Evaluation**, is a presentation of our findings and opinions regarding the information in Sections 3 through 7, and presents our conclusions regarding the presence of RECs, historical RECs, controlled RECs, and *de minimis* conditions connected with the Site, and recommendations.
- Section 9, **References**, is a summary of some of the resources used to compile this report.

Pertinent documentation regarding the Site is included in the appendices of this report.

2.3 ADDITIONAL SERVICES

An evaluation of business environmental risk associated with the Site was not included in Kleinfelder's scope of services. The scope of this Phase I ESA does not incorporate ASTM Standard non-scope considerations such as asbestos-containing materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and high-voltage power lines.

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2.4 SIGNIFICANT ASSUMPTIONS

Kleinfelder does not guarantee the accuracy of the information supplied by its sources, but reserves the right to rely on this information in formulating a professional opinion on the potential for contamination at the Site. Kleinfelder also assumes the Client provided all applicable and available environmental records and specialized knowledge regarding the Site. Kleinfelder has not made other significant assumptions during the performance of this Phase I ESA.

2.5 LIMITATIONS AND EXCEPTIONS

Phase I ESAs are non-comprehensive by nature and may not identify all environmental problems, and will not eliminate all risk. This report is a qualitative assessment. Kleinfelder offers a range of investigative and engineering services to suit the needs of our clients, including more quantitative investigations. Although risk can never be eliminated, more detailed and extensive investigations yield more information, which may help the Client understand and better manage risks. Since such detailed services involve greater expense, we ask our clients to participate in identifying the level of service, which will provide them with an acceptable level of risk. Please contact the signatories of this report if you would like to discuss this issue of risk further.

Kleinfelder performed this Phase I ESA in general accordance with the guidelines set forth in the ASTM Standard, and the proposed scope subsequently approved by our Client. No warranty, either express or implied, is made. Environmental issues not specifically addressed in this report were beyond the scope of our services and not included in our evaluation.

This report may be used only by the Client and only for the purposes stated within a reasonable time from its issuance, *but in no event later than 1 year from the date of the report.* Land or facility use, on- and off-Site conditions, regulations, or other factors may change over time, and additional work may be required with the passage of time. Since Site activities and regulations beyond our control could change at any time after the completion of this report, our observations, findings, and opinions can be considered valid only as of the date of the Site visit. Pursuant to the ASTM Standard's Section 4.6, this report should not be relied upon after 180 days from the date of its oldest component. Any party other than the Client who wishes to use this report shall notify Kleinfelder of such intended use. Based on the intended use of the report, Kleinfelder may require that

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additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the Client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party, but only to the extent of any such non-compliance by the Client.

2.6 SPECIAL TERMS AND CONDITIONS

No special terms and conditions were agreed to by the Client and Kleinfelder.

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3 SITE DESCRIPTION

The Site description is presented in this section and illustrates the condition of the Site at the time of the Phase I ESA. The Site location is shown on Plate 1. Tables 3-1 through 3-4 summarize the physical characteristics of the Site and adjoining properties.

3.1 LOCATION AND LEGAL DESCRIPTION

The information presented in Table 3-1 includes the physical location and legal description of the Site. This information was obtained from review of various maps (such as topographic maps and tax assessor maps), aerial photographs, public records at City and/or County offices, interviews, and/or information provided by the Client.

Table 3-1
Location and Legal Description

Parameter	Information/Comments
LOCATION	The Site is situated on the south side of the intersection of Jimmy Durante Boulevard and San Dieguito Road in the city of Del Mar, San Diego County, California (see Plate 1, Site Location Map, and Plate 2, Site Vicinity Aerial Photograph).
ASSESSOR'S PARCEL NUMBER	The Site is assigned San Diego County APNs 299-100-47 and 299-100-48.
LEGAL DESCRIPTION	The legal descriptions for the Site parcels are included in Environmental Data Resources, Inc.'s (EDR), EDR Environmental Lien and AUL Search report (EDR, 2014b), which is attached in Appendix C.
ADDRESS(ES)	Street addresses are associated with the Site.
SECTION, TOWNSHIP, AND RANGE	Township 14 South, Range 4 West, Section 11, San Bernardino Baseline and Principal Meridian.
ZONING	Information obtained from the City of Del Mar website (http://delmar.geoviewer8.com) indicates APN 299-100-47 is zoned in the City of Del Mar's North Commercial Zone (NC) and APN 299-100-48 is zoned in NC Zone within the Lagoon Overlay (NC, LG).

3.2 CURRENT / PROPOSED USE OF THE PROPERTY

At the time of Kleinfelder's assessment, land use in the general Site vicinity appeared to be commercial and residential. Current and proposed uses are described in Table 3-2.

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Table 3-2
Current / Proposed Uses

Parameter	General Observations
CURRENT USE	The Site is presently vacant land.
PROPOSED USE	Residential development with possible mixed use.

3.3 DESCRIPTION OF STRUCTURES / IMPROVEMENTS

Structures and/or improvements observed on the Site at the time of Kleinfelder's Site reconnaissance are described in Table 3-3.

Table 3-3
Structures / Improvements

Parameter	General Observations
STRUCTURES	No structures were observed.
IMPROVEMENTS	A utility pole was observed on the eastern portion of the Site, along San Dieguito Road. An 8-inch monitoring well cover, encased in concrete was observed on the northern portion (see Plate 2) of the Site. Based on a *Report of Preliminary Geologic Hazard Evaluation* report prepared for the Site by Christian Wheeler Engineering (CWE) and dated September 24, 2012, this monitoring well includes a 25-foot-deep piezometer that was installed within a borehole during the evaluation to monitor groundwater levels over an approximately one-month period from May 29, 2012 to June 28, 2012.

3.4 CURRENT USES OF ADJOINING PROPERTIES

Kleinfelder performed a brief drive-by survey of the properties immediately adjoining to the Site on April 14, 2014. A summary of the surrounding properties is presented in Table 3-4 and shown on Plate 2, Site Vicinity Aerial Photograph.

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Table 3-4
Adjoining Properties

Direction	Land Use Description
NORTH	The intersection of Jimmy Durante Boulevard and San Dieguito Road adjoins the northernmost portion of the Site to the north, beyond which is the San Dieguito River. North of the river is the southernmost portion of the Del Mar Fairgrounds property.
EAST/ NORTHEAST	San Dieguito Road adjoins the Site to the east-northeast, beyond which is a vacant lot (indicated to be North County Transit District [NCTD] private property), and various facilities including; Co's Traffic Control Inc., Del Mar Blue Print Co., Rose Towing, Del Mar Automotive, and Eucalyptus Stoneware, all listed at 2201 San Dieguito Road. The San Dieguito River is located east-northeast of these facilities.
SOUTH/ SOUTHWEST/ SOUTHEAST	Residences adjoin the Site to the southwest, and to the south and southeast on top of a bluff.
WEST/ NORTHWEST	Jimmy Durante Boulevard adjoins the Site to the west-northwest, beyond which are a vacant lot, an Animal and Bird Hospital at 2132 Jimmy Durante Boulevard, Manetain Hair Salon at 2148 Jimmy Durante Boulevard, and a multi-tenant office building at 2120 Jimmy Durante Boulevard.

Hazardous materials and petroleum products were not observed during the drive-by survey to be stored on the properties adjoining to the Site. No other indications of obvious or suspect RECs were apparent on the adjoining properties at the time of Kleinfelder's Site reconnaissance.

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4 RECORDS REVIEW

4.1 STANDARD ENVIRONMENTAL RECORD SOURCES

The purpose of the records review is to obtain and review records that would help to evaluate RECs of potential concern in connection with the Site and bordering properties.

Federal, state and local regulatory agencies publish databases or "lists" of businesses and properties that handle hazardous materials or hazardous waste, or are the known location of a release of hazardous substances to soil and/or groundwater. These databases are available for review and/or purchase at the regulatory agencies, or the information may be obtained through a commercial database service. Kleinfelder contracted a commercial database service, EDR, of Shelton, Connecticut to perform the government database search for listings within the appropriate ASTM minimum search distance of the Site. A description of the types of information contained in each of the databases reviewed and the agency responsible for compiling the data is also included in The EDR Radius Map™ Report with GeoCheck®. The EDR database search results are presented in Appendix B, and include the databases summarized in Table 4-1.

TABLE 4-1
RECORDS REVIEW SEARCH DISTANCES

FEDERAL	DISTANCE
United States Environmental Protection Agency (US EPA) National Priority List (NPL)	1 mile
Delisted NPL	½ mile
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)	½ mile
CERCLIS-No Further Remedial Action Planned (NFRAP)	½ mile
Resource Conservation Recovery Act (RCRA)-Corrective Action (CORRACTS) Treatment, Storage, and Disposal Facility (TSDF)	1 mile
RCRA-non CORRACTS TSD	½ mile
RCRA-Generator (RCRA-GEN)/Facility Index System (FINDS)	Site & adjoining

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TABLE 4-1 (Continued)
RECORDS REVIEW SEARCH DISTANCE

STATE/LOCAL	DISTANCE
Institutional Control/Engineering Control Registries and Emergency Response Notification System (ERNS)	Site
State Brownfields Sites	½ mile
State-Equivalent CERCLIS	½ mile
State Landfills or Solid Waste Listing	½ mile
State Leaking Underground Storage Tank (LUST) Listing	½ mile
Site Mitigation and Brownfields Reuse Program Database	½ mile
State Voluntary Cleanup Sites	½ mile
State Equivalent NPL	1 mile
State Institutional Control/Engineering Control Registries	Site
State Registered Storage Tanks	Site & adjoining

EDR utilizes a geographical information system to plot the locations of reported spills, leaks, incidents, etc. Kleinfelder reviews this information to help establish if the Site, or nearby properties, have been included in the noted databases and lists. The EDR report includes two maps (following Executive Summary Page 9 of EDR's report) that show the locations of the listed properties with respect to the Site, and a summary of pertinent information for these properties. For each listed property, the summaries include the name of the responsible party, the property address, the distance and direction from Site boundaries, and the databases and lists on which the listed property appears (see Executive Summary Pages 5 through 9 of the EDR report). Additional details regarding listed properties may be found following the Executive Summary and maps, on Pages 8 through 60 of the EDR report. Database dates are also included in the EDR report.

4.2 RESULTS OF DATABASE SEARCH

The following sections contain information on the results of EDR's record search. Listed search distances are those specified in the ASTM Standard. The Site was not listed in databases searched by EDR.

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4.2.1 Federal Lists

Off Site, there were no listings in Federal lists within the ASTM search distance.

4.2.2 State Lists

Off Site, there were several facilities listed within the ASTM search distance. Kleinfelder reviewed the listings to assess the potential for impacts to soil or groundwater beneath the Site. The following facilities were considered to have listings that may be potential RECs to the Site:

- *"John C Read Construction Co" and "John Reed Construction" (2126 Jimmy Durante Boulevard)* – This facility address is located approximately 225 feet northwest of, and cross-gradient to down-gradient from the Site with respect to the estimated direction of groundwater flow. A release of gasoline was reported in 1988 at this location during underground storage tank (UST) closure activities. Soil and groundwater were affected and contaminated soil was excavated and disposed off-site. The San Diego Department of Environmental Health [SDDEH], as the lead local agency, issued case closure (Case No. H20144-001) on September 22, 1995. A second case (Case No. H20144-002) was opened in 1988 as a result of a failed integrity test at this facility. This case was also closed by the SDDEH on August 17, 1988. Based on the distance and direction of this facility, and its closure status for the reported releases, it is Kleinfelder's opinion that this facility is not considered a REC.
- *"Camp C.J. Miller" (No Address Indicated)* – This facility is located between approximately ¼ and ½ mile north-northeast of the Site, beyond the San Dieguito River. The facility is listed in the Envirostor database as a military evaluation site. The case is reportedly inactive with the need for evaluation. Additional details are not provided by the listing. However, based on the distance and direction of this facility from the Site, it is Kleinfelder's opinion that this facility is not a REC.
- *"Del Mar MS4" (2240 Jimmy Durante Boulevard)* – This facility address is located approximately 425 feet to the north-northwest of and cross-gradient to down-gradient from the Site with respect to the estimated direction of groundwater flow. The facility is listed as an active facility that generates waste oil and filters. A 1,000-gallon diesel UST and a 1,000-gallon gasoline UST were reportedly

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maintained at this location, but were removed and closed in April 1999. No releases were reported during UST removal activities. The presence or historical presence of USTs is not indicative of a release. Therefore, it is Kleinfelder's opinion that this facility is not a REC.

- *"Navy Dirigible" and "Navy Dirigible Base" (No Address Indicated)* – This former facility is located greater than 1,800 feet east of and cross-gradient from the Site with respect to the direction of groundwater flow. It is located within the City of San Diego boundaries. This property (approximately 80 acres) was acquired by the United States Navy in 1941 for use as an auxiliary airfield and emergency landing strip. In 1942, it was converted into a naval auxiliary air facility to support dirigibles. The facility is listed in the Envirostor database as inactive and needing evaluation. However, based on the distance and direction of this former base from the Site, it is Kleinfelder's opinion that it is not a REC.
- *"San Dieguito Wetlands Restoration" (0 San Dieguito Road)* – This facility is located between approximately 175 and 200 feet northeast of and up-gradient to cross-gradient from the Site, along the bank of the San Dieguito River. During a slope stability evaluation associated with a San Dieguito River project, Southern California Edison Company (SCE) encountered potential hydrocarbon contamination in a test hole. The SDDEH opened Case No. 208049-002 so they may provide oversight. Subsequent investigation of this area indicated there was no evidence of a hydrocarbon release, but rather asphaltic demolition wastes were detected. This asphaltic demolition waste was indicated to be likely from emergency river bank restoration efforts following severe flood erosion of the river bank in 1982. Approximately 170 tons of asphaltic and cement demolition wastes were recovered and removed during the project. SDDEH issued case closure on September 14, 2012. Based on the distance and direction, type of wastes encountered (asphaltic demolition waste) and closure status, it is Kleinfelder's opinion that this facility is not a REC.
- *"Del Mar Thoroughbred Club" (2260 Jimmy Durante Boulevard)* – This facility is located on the larger Del Mar Fairgrounds property that is located approximately 425 feet north of (beyond the San Dieguito River) and cross-gradient to down-gradient from the Site with respect to the estimated direction of groundwater flow. A release of diesel was reported at this facility during tank closure activities. Contaminated soil was reportedly excavated and disposed off-site. The case (Case No. H04644-003) was closed on September 26, 2000. A

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gasoline release was also reported at this facility that affected groundwater. Contaminated soil was removed and disposed off-site and the case (Case No. H04644-001) was also closed on September 26, 2000. Based on the distance and direction of this facility from the Site, and its closure status for the releases, it is Kleinfelder's opinion that this facility is not a REC.

- *"Del Mar Fair" and "CA ST of 22nd District Agric A" (2260 Jimmy Durante Boulevard)* – These facilities, located on the Del Mar Fairgrounds property located approximately 425 feet north (cross-gradient to down-gradient) of the Site, beyond the San Dieguito River, are listed as having had a release of gasoline that affected soil. Contaminated soil was reportedly excavated and disposed off-site and the case (Case No. H03436-001) was closed on October 12, 2000. Additional information obtained from the SDDEH for this facility indicates that groundwater was also affected, but the contamination did not extend beyond 125 feet from the UST area. Based on the distance and direction of this facility from the Site, the media (soil) affected, and closure status for the release, it is Kleinfelder's opinion that this facility is not a REC.

4.2.3 Supplemental Federal, State, and Local Lists

Off Site facilities were also listed within the ASTM search distance in supplemental Federal, State, and local lists. Kleinfelder reviewed the listings to assess the potential for impacts to soil, groundwater, or soil vapor beneath the Site. Facilities considered to be an environmental concern to the Site were previously discussed. One additional facility, not previous discussed is summarized as follows:

- A facility (name not reported) at 2201 San Dieguito Road was listed in EDR's Historical Auto Station database from 1999 through 2012. EDR searches national collections of business directories for lists of potential gasoline station/service station sites based on the listed name. This address is associated with a property that adjoins to the east-northeast (up-gradient) of the Site, beyond San Dieguito Road. Based on our review of historical city directories for this property, an automobile repair facility was noted as one occupant at this address between 1976 and 2013. This facility appears to be set back from San Dieguito Road to the east and is approximately 125 feet east of the southeastern most portion of the Site; thus, in a cross-gradient direction from the Site. No releases were reported at this facility. Based on the estimated cross-gradient location of this facility from the Site, and because no releases

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were reported at this location, it is Kleinfelder's opinion that this facility is not a REC.

4.2.4 Orphan List

Facilities not plotted by EDR due to poor or inadequate address information are referred to as orphan sites. There are 6 unmapped orphan site listings in EDR's report. The orphan summary/unmapped sites report was reviewed by Kleinfelder to assess the potential for the orphan listings to pose a REC to the Site. Based on our review of these listings, information obtained during this Phase I ESA, and our reconnaissance of the Site vicinity, these orphan sites appear to be in other databases discussed previously, outside the ASTM Standard search distances, and/or located hydrogeologically down- or cross-gradient relative to the Site, and in our opinion they do not represent RECs.

4.3 OTHER RECORDS REVIEWED / AGENCIES CONTACTED

The following additional sources of environmental records were reviewed during this Phase I ESA for the purposes of meeting the ASTM Standard. Local regulatory agencies were contacted for reasonably ascertainable and practically reviewable documentation regarding RECs present at the Site and adjoining facilities. Summaries of interviews with local regulatory agency representatives are included in Section 7 of this report (with interview documentation included in Appendix C). The following agencies (if marked with an "X") were contacted for documentation:

- ☐ DOGGR
- ☐ San Diego Air Pollution Control District (SDAPCD)
- ☒ City of Del Mar, Building Services and Planning and Community Development Department
- ☒ San Diego County, Department of Environmental Health
- ☒ Pipeline and Hazardous Materials Safety Administration (PHMSA), National Pipeline Mapping System (NPMS)
- ☒ Department of Toxic Substances Control
- ☒ SWRCB / Regional Water Quality Control Board (RWQCB)

Information from these agencies is presented below.

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4.3.1 State of California, Division or Oil, Gas, and Geothermal Resources

The DOGGR was not contacted for this Phase I ESA because information concerning oil and gas fields was obtained by Kleinfelder from DOGGR's Well Finder database (http://maps.conservation.ca.gov/doggr/index.html). Findings from the map review are discussed in Table 4-3, and a copy of the DOGGR map is provided in Appendix C.

4.3.2 San Diego Air Pollution Control District (SDAPCD)

Information at SDAPCD is maintained by address. Since no Site address is associated with the Site, a request for information was not submitted to the SDAPCD.

4.3.3 City of Del Mar, Building Services and Planning and Community Development Department

Kleinfelder contacted the City of Del Mar Building Services on April 10, 2014 and inquired about building permits and addresses associated with the Site parcels. The call was automatically directed to the City of Solana Beach Building Department, who according to the building representative, handles building permits for the City of Del Mar. The representative indicated that building permits are not available for properties without an address, so information regarding the Site was not available. Kleinfelder was transferred to Mr. Russell Brown of the City of Solana Beach Planning Department. He indicated that although the City of Del Mar handles its own planning, no addresses were reported in the system for the Site.

Kleinfelder visited the City of Del Mar Planning and Community Development Department on April 14, 2014 and spoke with Mr. Adam Birnbaum, Planning Manager. According to Mr. Birnbaum, the Site has been vacant land. The property has been referred to as the Riverview Office Project, which was a proposed development for the Site. Mr. Birnbaum provided a copy of an April 2008 Final Environmental Impact Report (EIR), prepared by Dudek Engineering & Environmental (Dudek) for the Riverview Office Project (Dudek, 2008). The EIR refers to a three-volume 2007 Draft EIR, but the City of Del Mar did not have a copy of the draft. The Final EIR did not refer to hazardous materials concerns at the Site. Kleinfelder visited the City of Del Mar Public Library on April 15, 2014, a repository for the Draft EIR. The Draft EIR did not include information pertaining to hazardous materials associated with the Site.

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4.3.4 San Diego County, Department of Environmental Health

Kleinfelder submitted written requests to the SDDEH on April 8 and 9, 2014 for information pertaining to the Site APNs, and on April 10, 2014 for information pertaining to off-Site adjoining facilities considered potential concerns. Based on an email response from Joyce Ellman, Office Support Specialist with the SDDEH, inspection reports for the years 2002 through 2011 were available that she indicated were associated with the APN 299-100-48 (one of the Site parcels). However, the facility was listed as 2265 Jimmy Durante Boulevard, and was formerly located in the same area as 2201 San Dieguito Road (located east-northeast of the Site). She indicated there were no records pertaining to a monitoring well at the Site.

Information for properties in the immediate vicinity of the Site, including 2201 San Dieguito Road, 2240 Jimmy Durante Boulevard, and 2260 Jimmy Durante Boulevard was also requested to assess whether these properties may present a potential concern to the Site. Based on the information reviewed, these facilities are not considered RECs to the Site.

4.3.5 Pipeline and Hazardous Materials Safety Administration, National Pipeline Mapping System

According to the California State Fire Marshal, pipeline information is available at the PHMSA's online NPMS (https://www.npms.phmsa.dot.gov). Kleinfelder researched pipeline information on the NPMS on April 10, 2014 for the Site and vicinity. Based on our review of the NPMS, there are no mapped natural gas transmission pipelines or hazardous liquid pipelines located on the subject Site, or in the immediate Site vicinity. A copy of the NPMS map is included in Appendix C.

4.3.6 State Water Resources Control Board, GeoTracker™ / Regional Water Quality Control Board

Kleinfelder reviewed the SWRCB GeoTracker™ website (http://geotracker.waterboards.ca.gov/) for information pertaining to the Site. Based on information obtained on GeoTracker™, a land disposal site referred to as "Del Mar Dump" was shown to be located on the Site. The San Diego RWQCB is listed as the lead regulatory agency overseeing cleanup activities at this facility under Case No. 9 000475N02. Detailed information and documents pertaining to this facility were not available on the GeoTracker™ website.

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A written request was subsequently submitted to the SDRWQCB for information pertaining to the former "Del Mar Dump" listing. Kleinfelder also attempted to contact the case worker, Mr. John Odermatt, for the Del Mar Dump site; however, Mr. Odermatt is out of the office for the first few weeks of April 2014 and was not available. Kleinfelder left a phone message with the general information number at the SDRWQCB in an attempt to obtain additional information for the Site. Rachel, a file clerk representative, returned the call and indicated she had received our written request for information for the Del Mar Dump site on April 8, 2014. According to Rachel, the Del Mar Dump was an "unregulated" disposal site and the SDRWQCB had very little records pertaining to the facility. She indicated that Ms. Amy Grove could provide additional information in Mr. Odermatt's absence. A message was left with Ms. Grove.

Mr. Roger Mitchell, Senior Geologist with the SDRWQCB responded in an April 14, 2014 email with copies of SDRWQB available documents pertaining to the Del Mar Dump site. In addition, Mr. Mitchell contacted us regarding the Del Mar Dump listing. In summary, the records provided by Mr. Mitchell were associated with illegal trash dumping that appeared to take place in the 1970s, not at the Site, but to the north-northeast of the Site, beyond the San Dieguito River. The SDRWQCB suspects this Site to be a historical burn dump Site wherein residents would bring trash to the property and burn it. Mr. Mitchell indicated that the Del Mar Dump facility is not being regulated by the SDRWQCB and there are no groundwater monitoring wells under the SDRWQCB's oversight associated with this listing. In addition, Mr. Mitchell indicated that the GeoTracker™ mislocation appears to have gone unnoticed and will need to be updated, as the Del Mar Dump facility is not located on Site and is not an open case.

Based on the information obtained from the SDRWQCB and telephone conversations with SDRWQCB personnel, the GeoTracker™ listing for the Del Mar Dump site appears to be associated with an off-Site location and is not a REC to the Site.

4.3.7 State Department of Toxic Substances Control

Information at the DTSC is maintained by address. Since no Site address is associated with the Site, a request for information was not submitted to the DTSC.

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4.4 PHYSICAL SETTING SOURCE(S)

Table 4-2 presents information concerning the physical setting of the Site. This information was obtained from published maps.

Table 4-2
Physical Setting

Data	General Information
USGS TOPOGRAPHIC QUADRANGLE	Based on a review of the United States Geological Survey (USGS) Del Mar, California 7.5-Minute Series (Topographic) Quadrangle Map dated 1994 and a Slope Analysis and Encroachment Study for Durante Apartments dated August 24, 2012 (provided by the Client), the Site is located at approximate elevations between 12 and 60 feet above mean sea level (msl). The topographic relief of the Site slopes generally downward to the north, toward the San Dieguito River.
SOIL TYPE	The Site consists of Young alluvial flood-plain deposits (Holocene and late Pleistocene) classified as poorly consolidated, poorly sorted, permeable flood-plain deposits of sandy, silty or clay-bearing alluvium. These deposits may be overlain along the southern portion of the Site by old paralic deposits that are classified as poorly sorted, moderately permeable, reddish-brown, interfingered strand-line, beach, estuarine and colluvial deposits composed of siltstone, sandstone and conglomerate (Kennedy and Tan, 2008). Based upon the results of CWE's *Report of Preliminary Geologic Hazards Evaluation* dated September 24, 2012, the Site was reported to be underlain by Tertiary-age sedimentary deposits of the Del Mar Formation and Torrey Sandstone, Quaternary-age alluvial, talus, and old paralic deposits, and a relatively thin and irregular veneer of man-placed fill soils (CWE, 2012).
OIL AND GAS WELLS	Kleinfelder reviewed DOGGR's Well Finder online database for oil and gas wells located on the Site and in the Site vicinity. There are no oil or gas wells depicted on the Site. A copy of the Well Finder search results are provided in Appendix C.

Information about the regional geology is presented in Table 4-3. This information was obtained by Kleinfelder from published data and maps, interviews with public agencies, and/or previous investigations performed by Kleinfelder in the Site vicinity.

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Table 4-3
Regional Geology and Hydrogeology

Physical Parameter	Information/Comments
REGIONAL PHYSIOGRAPHY AND GEOLOGY	The Site is located in the Peninsular Ranges Geomorphic Province, a northwest-southeast oriented complex of blocks separated by similarly tending faults. The Peninsular Ranges Geomorphic Province extends 125 miles from the Transverse Ranges and the Los Angeles Basin south of the Mexican border and beyond another 775 miles. It is bound on the east by the Colorado Desert and the Gulf of California (Norris and Webb, 1990). Locally, the Site is located in the Coastal Plains Physiographic Province of San Diego County (CWE, 2012).
REGIONAL HYDROGEOLOGY	The Site is located within the San Dieguito Groundwater Basin, which underlies Osuna Valley and the lower portion of San Dieguito Valley in central coastal San Diego County. The basin is bound by the Pacific Ocean to the west and elsewhere by non-water-bearing parts of the La Jolla Group. The San Dieguito River drains this valley west to the Pacific Ocean (DWR, 2004).
DEPTH TO GROUNDWATER AND DIRECTION OF ANTICIPATED FLOW [1]	The depth to groundwater is anticipated to be shallow beneath the lower lying areas of the Site (northern portion) based on its proximity to the San Dieguito Lagoon and San Dieguito River. Based on CWE's *Report of Preliminary Geologic Hazards Evaluation* (CWE, 2012), groundwater was encountered in exploratory borings at depths between approximately 5½ feet and 11 feet below Site grades. Additionally, wet to saturated conditions were encountered within the lower portions of the alluvium within two test trench pits T-4 and T-5, located on the northwestern portion of the Site at approximate elevations of 7 feet and 9 feet, respectively. Due to the close proximity of the Site to the San Dieguito Lagoon/River, CWE indicated that variations in the local groundwater table and flow direction may be expected with tidal fluctuations. Ponded surface water was also noted during Site visits conducted between May and August of 2012 along the street area adjacent to San Dieguito Road and also along the base of the relatively steep slope along the eastern and northeast portion of the Site. A 25-foot-deep piezometer was installed within the resultant borehole from our exploratory boring B-1 located on the northern portion of the Site. Groundwater levels in the borehole were measured over an approximately one month period from May 29, 2012 to June 28, 2012 at depths between 10.17 feet and 10.50 feet.

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Table 4-3 (continued)
Regional Geology and Hydrogeology

Physical Parameter	Information/Comments
REGIONAL GROUNDWATER QUALITY PROBLEMS	Regional groundwater quality problems were not identified for the Site vicinity. However, water pumped from alluvium in the San Dieguito Groundwater Basin has high sulfate, chloride, and total dissolved solids (TDS) concentrations that cause inferior ratings for domestic and irrigation use for most of the basin. TDS content ranges from about 500 milligrams per liter (mg/L) in the northeastern part of the basin to more than 5,000 mg/L near the coast (DWR, 2004).
WATER SUPPLY	Not applicable at the present time. However, the City of Del Mar supplies water service within the City of Del Mar.
FLOOD ZONE DESIGNATION	According to The EDR Radius Map™ Report with GeoCheck®, the low lying areas of the Site (generally the northern and eastern portions) are located within a 100-year flood zone, graduating slightly to a 500-year flood zone near the toe of the on-Site slope. The remaining areas of the Site (generally the western and southern portions) are not located within a 100-year or 500-year flood zone (EDR, 2014a).

[1] Groundwater flow direction is based on regional information sources. Site-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other factors.

4.5 USER PROVIDED INFORMATION

According to the Client, the purpose for performing this Phase I ESA is to evaluate the potential for RECs at the Site prior to acquisition of the property. Information regarding the current owners/occupants of the Site is summarized in Table 4-4.

Table 4-4
Owner / Occupant Information

Entity	Name
OWNER	According to the EDR Environmental Lien and AUL Search report (EDR, 2014b), the Site is presently vested in “Del Mar Charrette”.
OCCUPANT(S)	The Site is presently unoccupied.

Summaries of interviews of key individuals with knowledge of the Site (“Key Site Managers”) are provided in Section 7. The following sections present information provided to Kleinfelder by the Client.

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4.5.1 Title Records

A chain-of-title report was not provided by the Client. Therefore, a review of a chain-of-title report was not performed as part of this Phase I ESA.

4.5.2 Environmental Liens and Usage Limitations

According to information provided in EDR's regulatory agency database search report (EDR, 2014a), there are no liens pertaining to the Site listed in the Federal Superfund Liens List maintained by US EPA, and no known recorded land-use environmental deed restrictions pertaining to the Site listed in the State Liens Database.

A review of the EDR Environmental Lien and AUL Search report (EDR, 2014b) for the Site indicates there are no environmental liens or activity and use limitations (AULs) associated with the Site.

4.5.3 Value Reduction

As part of the ASTM Designation E 1527-13 process, information is to be gathered regarding the prospective purchase price of the Site relative to its fair market value. If there appears to be a value reduction, that reduction must be identified with respect to whether the difference could be attributed to environmental degradation of the property. Kleinfelder submitted a questionnaire to the Client that included a question about the prospective purchase price of the Site relative to its fair market value. Mr. Marne Bouillon responded with a completed questionnaire dated April 14, 2014 that the purchase price of the Site reflects the fair market value of the property.

4.5.4 Other Information/Documents Provided

Documents pertaining to the Site that were provided to Kleinfelder by the Client are summarized as follows:

<u>Report of Preliminary Geologic Hazards Evaluation, September 24, 2012 (CWE)</u>

This report was prepared by CWE as part of a project that included proposed Durante Apartments to be located on Site. According to this report, based on CWE's review of historical documents (aerial photographs and topographic maps), there was no evidence of previous structures or other permanent improvements located on the Site. Prior to 1959, the only significant disturbance to the Site was reported to be minor

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leveling and grading along the northern and western portions near San Dieguito Road and Jimmy Durante Boulevard, respectively. Significant grading, including cuts of up to as much as 15 to 20 feet, was indicated to have occurred between 1959 and 1979 along the southern and southeastern portions of the Site.

As part of the geologic hazards evaluation, CWE drilled three small diameter borings across the northern, alluviated areas of the Site and excavated a series of test trenches across the Site. The borings and test trenches were advanced in order to explore the existing soil conditions to the depths influenced by the proposed construction and to collect representative samples of the soils and earth materials underlying the Site. A piezometer was installed within one of the borings (B-1), drilled within the northern portion of the Site to periodically monitor the groundwater level in that portion of the Site. Groundwater was monitored at depths between 10.17 feet and 10.50 feet from the B-1 between May and June 2012. There was no evidence of a former landfill at the Site based on the exploratory borings and test trenches.

Slope Analysis and Encroachment Study for Durante Apartments, dated August 24, 2012 and revised December 11, 2012 (Sowards and Brown Engineering [SBE])

This Slope Analysis and Evaluation Study is a map which depicts the topography of the Site. The northern and eastern portions of the Site are depicted as generally flat terrain. The existing man-made (graded) plateau area is apparent on the southwestern portion of the Site. The steeply sloped bluff is depicted generally near the southern and southeastern portions of the Site. A wetlands area is depicted on the southeastern portion of the Site and the limits are shown based on SBE's August 24, 2012 survey.

There was no indication of a REC based on our review of the provided documents.

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5 HISTORY OF THE SITE

The history of the Site was researched to identify obvious uses. Historical land use was researched to the first developed use, or back to 1940, whichever was earlier or readily available. Table 5-1 summarizes the availability of information reviewed during this assessment.

Table 5-1
Historical Information Sources

Source	Years Reviewed	Source / Availability
SANBORN FIRE INSURANCE MAPS	Not available	EDR, 2014c
AERIAL PHOTOGRAPHS	1939, 1953, 1966, 1974, 1980, 1990, 1994, 2005, 2009, 2010, and 2012	EDR, 2014d
CITY DIRECTORIES	1970 through 2013 (select years)	EDR, 2014e
HISTORICAL TOPOGRAPHIC MAP REPORT	1904, 1967, 1975, and 1994	EDR, 2014f
BUILDING DEPARTMENT	Not applicable	Not available
PREVIOUS ASSESSMENT(S)	Not Provided	Not Available

5.1 SANBORN FIRE INSURANCE MAPS

Sanborn Fire Insurance Maps provide historical land use information for some metropolitan areas and small, established towns. Kleinfelder requested EDR to search its library of Sanborn Fire Insurance Maps for maps of the Site. EDR responded that Sanborn Fire Insurance Maps were not available for the Site (EDR, 2014c).

5.2 AERIAL PHOTOGRAPHS

A review of historical aerial photography may indicate past activities at a property that may not be documented by other means or observed during a reconnaissance visit. The effectiveness of this technique depends on the scale and quality of the photographs and the available coverage. Aerial photographs were obtained from several historical photograph collections through EDR (2014d), and span a period of 84 years. A tabulation of the aerial photographs reviewed by Kleinfelder is presented in Table 5-2. Copies of the aerial photographs provided by EDR are included in Appendix D.

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Table 5-2
Historical Aerial Photographs Reviewed

Date	Approximate Scale	Type	Source	Quality
1939	1” = 500’	Black and White Monoscopic	Fairchild	Fair
1953	1” = 500’	Black and White Monoscopic	Park	Good
1966	1” = 500’	Black and White Monoscopic	USGS	Fair
1974	1” = 500’	Black and White Monoscopic	AMI	Good
1980	1” = 500’	Black and White Monoscopic	AMI	Good
1990	1” = 500’	Black and White Monoscopic	AMI	Good
1994	1” = 500’	Black and White Monoscopic	EDR	Good
2005	1” = 500’	Color	EDR	Good
2009	1” = 500’	Color	EDR	Good
2010	1” = 500’	Color	EDR	Good
2012	1” = 500’	Color	EDR	Good

Note: Aerial photographs only provide information concerning indications of land use, and no conclusions regarding the release of hazardous substances or petroleum products can be drawn from the review of photographs alone.

5.2.1 Site

The Site appeared to be vacant land in 1939, 1953, and 1966. The northern portion of the Site appeared to be flat and unpaved; the remaining areas appeared to be situated on a slope and covered with vegetation. Some clearing of vegetation and soil disturbance was apparent on the western portion of the Site by 1966. The Site remained relatively physically unchanged in the remaining aerial photographs. A small area of ponding was apparent on the northernmost portion of the Site in the 1980 through 2005 aerial photographs. Parked vehicles were apparent on the Site in 2009, but the Site was again vacant and unoccupied by vehicles in the 2010 and 2012 aerial photographs.

5.2.2 Surrounding Areas

The Site is located in an area generally south and west of the San Dieguito River. Jimmy Durante Boulevard was apparent in the 1939 aerial photograph to the northwest of the Site, and an unimproved road, at the present-day location of San Dieguito Road, was apparent to the northeast of the Site. A small structure appeared to be located adjoining to the north of the Site at the approximate location of the present-day

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intersection of these two roadways. A larger structure was apparent to the north of the Site beyond Jimmy Durante Boulevard. The existing Del Mar Racetrack and associated structures, located north of the river appeared to be under construction. Railroad tracks were apparent west of the Site with a railroad line originating from these tracks and traversing eastward, north of Jimmy Durante Boulevard, then turning toward the southeast along the western bank of the San Dieguito River. Remaining adjoining properties to the west, south and east appeared to be vacant.

By 1953, San Dieguito Road appeared as an improved roadway. Increased development was noted in the Site vicinity; including structures adjoining to the west-northwest of the Site, beyond Jimmy Durante Boulevard and residences located to the south of the Site. Increased development was also noted at the Del Mar Race track property (north of the river) and west of the railroad tracks in the Del Mar community. The 1966 and 1974 aerial photographs showed additional development, including present-day structures located to the east of the Site beyond San Dieguito Road. The 1980 photograph showed increased residential development south of the Site.

The Site vicinity appeared general the same on the 1990 through 2012 aerial photographs as in the earlier photographs. However, by 2005 the structure noted immediately north-northwest of the intersection of Jimmy Durante Boulevard and San Dieguito Road was no longer apparent and an additional structure was noted west of the Site beyond Jimmy Durante Boulevard.

Based on our review of aerial photographs, there was no evidence of on-Site or off-Site concerns that represent a REC to the Site.

5.3 CITY DIRECTORIES

City directories provide information regarding property occupants by address. EDR provided a city directory image report, included in Appendix D, for the period between 1970 and 2013 (EDR, 2014e). Listings for the Site were not provided in EDR's city directory image report. Properties adjoining the Site were searched along Jimmy Durante Boulevard and San Dieguito Road. The properties west-northwest of the Site along Jimmy Durante Boulevard appeared to be developed since at least 1970 with increased occupancy in the multi-tenant office buildings noted as early as 1980. The properties adjoining to the east-northeast of the Site along San Dieguito Road were not listed in the 1970 city directory, but were occupied by multiple tenants (at 2201 San

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Dieguito Road) since at least 1976. An automobile repair facility was noted as one occupant at this address in the select city directories between 1976 and 2013.

No releases were reported in the EDR database search report for facilities at the address of 2201 San Dieguito Road (location of the automobile repair facility). Moreover, during a Site visit, this facility is set back from the roadway and is approximately 125 feet east of (cross-gradient to down-gradient) from the southeastern portion of the Site. Because this facility is located in an estimated cross-gradient to down-gradient direction from the Site and no releases were reported at this location, it is Kleinfelder's opinion this facility is not a REC. Based on other listings, in Kleinfelder's opinion the adjoining facilities do not represent a REC.

5.4 HISTORICAL TOPOGRAPHIC MAP REVIEW

Kleinfelder obtained information regarding historical topographic maps of the Site vicinity from EDR (2014f). The topographic maps reviewed for this assessment are listed in Table 5-3 and copies of the maps are included in Appendix D.

Table 5-3
Historical Topographic Maps Reviewed

Year	Quadrangle	Series	Scale
1904	Southern CA Sheet 2	60 minute	1:250,000
1967	Del Mar	7.5 minute	1:24,000
1975	Del Mar	7.5 minute	1:24,000
1994	Del Mar	7.5 minute	1:24,000

5.4.1 Site

Due to the scale of the 1904 topographic map, it is difficult to assess the precise location of the Site. However, the Site may be located within a lagoon that is located at the mouth of the San Diego River. The Site is depicted as vacant land on the 1967, 1975 and 1994 maps.

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5.4.2 Surrounding Areas

The immediate Site vicinity is shown to be located near the southwestern portion of the San Dieguito Valley, which is drained by the San Dieguito River. The Site vicinity does not appear to be developed in 1904, but a railroad line is shown in the distance west of the Site, along the coast of the Pacific Ocean.

The 1967, 1975 and 1994 topographic maps depict the Site vicinity to be developed. Structures are depicted to the west-northwest and east-northeast of the Site, beyond Jimmy Durante Boulevard (not labeled on the 1967 map) and San Dieguito Drive, respectively. Railroad spurs are shown originating from an Atchison Topeka and Santa Fe (ATSF) railroad line, located west of the Site, and traversing eastward along the northern side of the adjoining buildings along Jimmy Durante Boulevard and San Dieguito Drive. The San Dieguito River drains southwesterly toward San Dieguito Drive where it then travels northwest toward the Pacific Ocean. A sewage disposal pond is depicted approximately 450 to 500 feet east of the Site along the San Dieguito River. The San Diego Freeway is shown east of the sewage disposal pond. Del Mar Racetrack and associated buildings are located on a large property north of the intersection of Jimmy Durante Boulevard and San Dieguito Drive, north of the San Dieguito River. Two small structures, at the present-day location of residences, are shown adjoining the Site to the south and southwest. Other properties south of the Site appear to be located at higher elevations and within a red-shaded area, which represents a developed area although structures are not shown.

Based on review of the historical topographic maps, there were no on-Site or off-Site features that would suggest a REC for the Site.

5.5 BUILDING DEPARTMENT

Kleinfelder contacted the City of Del Mar Building Services on April 10, 2014 and inquired about building permits and addresses associated with the Site parcels. The call was automatically directed to the City of Solana Beach Building Department, who according to the building representative, handles building permits for the City of Del Mar. The representative indicated that building permits are not available for properties without an address, so information regarding the Site was not available.

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5.6 PREVIOUS ASSESSMENTS

Previous assessment reports and documents provided by the Client are summarized in Section 4.5.4. A review of available documents and previous assessment reports at regulatory agencies is provided in those respective sections.

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6 SITE RECONNAISSANCE

Kleinfelder's Phase I ESA activities included a Site reconnaissance. This section summarizes the findings from the Site reconnaissance.

6.1 METHODOLOGY AND LIMITING CONDITIONS

Ms. Margaret Carroll of Kleinfelder performed a Site reconnaissance on April 14, 2014. The Site reconnaissance included a visual inspection of the Site to assist in identifying the presence or likely presence of hazardous substances or petroleum hydrocarbons under conditions that indicate an existing release, a past release, or threat of release into structures, soil, groundwater, or surface water at the Site (i.e., RECs). Observations of readily-apparent environmental conditions are summarized in Table 6-1, and color photographs of the Site are presented on Plates 3 through 8. The approximate Site boundaries are shown on Plate 2, "Site Vicinity Aerial Photograph." Ms. Carroll was able to observe most of the Site and was unaccompanied during the Site visit.

6.2 GENERAL SITE SETTING

The Site is located on the south side of the intersection of Jimmy Durante Boulevard and San Dieguito Road in the City of Del Mar, California. The Site is presently vacant land that is generally flat on its northern, eastern, and northwestern portions. A man-made (graded) plateau was observed on the west-southwest portion of the Site. A steep slope upward toward the south is located on the southern and southeastern portions of the Site. The Site is generally surrounded by properties used for residential and commercial purposes.

6.3 SITE OBSERVATIONS

Kleinfelder's Site observations are summarized in Table 6-1.

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Table 6-1
Site Observations

General Observations	Remarks	Observed	Not Observed
Current use	Vacant land that consists of unpaved areas that	X	
Current use likely to indicate RECs			X
Past use	The Site appears to have been part of a lagoon at the mouth of the San Dieguito River as early as 1904, but appeared to be vacant land in 1939, 1953, and 1966. The northern portion of the Site appeared to be flat and unpaved; the remaining areas appeared to be situated on a slope and covered with vegetation. Some clearing of vegetation and soil disturbance was apparent on the western portion of the Site by 1966. The Site was used for overflow parking of vehicles as evidenced in a 2009 aerial photograph, but the Site was again vacant and unoccupied in 2010 and 2012.		X
Past use likely to indicate RECs			X
Structures			X
Roads			X
Topography of Site and surrounding area	The Site is relatively flat on the northern, eastern, and northwestern portions. A man-made plateau was observed on the west-southwest portion and a steep slope upward toward the south was observed on the southern and southeastern portions of the Site. A wetlands area was observed near the southeastern portion of the Site.	X	
Aboveground storage tanks			X
Asbestos and lead			X
Below grade vaults			X
Burned or buried debris			X
Chemical storage			X
Chemical mixing areas			X

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Table 6-1 (continued)
Site Observations

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		Observed	Not Observed
Discolored soil or water			X
Ditches, streams			X
Drains and piping			X
Drums			X
Electrical or hydraulic equipment (polychlorinated biphenyls [PCBs])			X
Fill dirt from an unknown source	Possible fill dirt associated with the plateau area of the Site. CWE encountered artificial fill material near the surface of the exploratory borings and test trenches during their preliminary geologic hazards evaluation (CWE, 2012). The fill was reported to be less than 2 feet in thickness across the explored portions of the Site with slightly deeper fills reported within the southern portion of the Site. The encountered fill materials generally consisted of light brown to medium grayish-brown, silty sand.	X	
Fill dirt from a known source			X
Hazardous chemical and petroleum products in connection with known use			X
Hazardous chemical and petroleum products in connection with unknown use			X
Non-hazardous containers with contents			X
Hazardous waste storage			X
Heating and cooling system and fuel source			X
Industrial waste treatment equipment			X
Loading and unloading areas			X
Odors			X

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Table 6-1 (continued)
Site Observations

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		Observed	Not Observed
Pits, ponds, or lagoons			X
Pools of liquid			X
Process waste water			X
Sanitary sewer system			X
Septic system (e.g. tank and leach fields)			X
Soil piles			X
Solid waste/evidence of unauthorized dumping	Several polyvinyl chloride (PVC) pipes and plywood pieces were observed discarded near the plateau and sloped areas near the southwest and south-central areas of the Site.	X	
Stained pavement, soil or concrete			X
Stains or corrosion (interior, non-water)			X
Storm drains/catch basins	A storm drain utility cover was observed on the eastern portion of the Site, near an on-Site utility pole. Other storm drains were observed off-Site along San Dieguito Road.	X	
Stressed vegetation			X
Sumps and clarifiers			X
Surface water	Standing water was observed in a wetlands area near the southeastern portion of the Site and along San Dieguito Road adjacent to it.	X	
Underground storage tank(s) (including heating oil tanks)			X
Unidentified substance containers			X
Waste water discharge			X
Water supplies (potable and process)			X

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Table 6-1 (continued)
Site Observations

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		Observed	Not Observed
Wells (irrigation, monitoring, or domestic)	An 8-inch monitoring well cover encased in concrete was observed near the northern portion of the Site. A 25-foot piezometer was reportedly installed in an exploratory boring as part of a preliminary geologic hazard evaluation (CWE, 2012), and is not associated with a release of hazardous materials.	X	
Wells (dry)			X
Wells (oil and gas)			X
Wetlands	A wetlands area was observed on the southeastern portion of the Site. This area contained vegetation typically associated with wetlands areas.	X	

6.4 RESULTS OF SITE RECONNAISSANCE

The Site is vacant, undeveloped land. The northern, eastern, and northwestern portions of the Site consist primarily of low-lying and generally flat terrain with little vegetation. A man-made (graded) plateau was observed on the southwestern portion of the Site. The southeastern portion of the Site was observed to be an area of wetlands, consisting of some standing water and vegetation typical of a wetlands area. The southern and southeastern portions of the Site were observed to slope steeply upward toward the south and were heavily vegetated.

Other than sections of PVC pipe and plywood pieces, there was no evidence of illegal dumping at the Site. An 8-inch monitoring well cover, encased in concrete, was observed near the northern portion of the Site, near the intersection of Jimmy Durante Boulevard and San Dieguito Road. A 25-foot piezometer was installed in an exploratory boring as part of a preliminary geologic hazard evaluation (CWE, 2012) and is not associated with a reported release of hazardous materials. Overhead electric and telephone lines were observed encroaching onto the eastern and northern portions of the Site. A utility pole was observed on the northeastern portion of the Site. A storm drain manhole cover was observed near this utility pole.

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Evidence of discolored water, stressed vegetation, hazardous materials, and USTs was not observed on the Site during the Site reconnaissance. In addition, other than the observed wetlands on the southeastern portion of the Site, no pits, ponds, or lagoons were observed on the Site during the reconnaissance.

There was no evidence of a REC to the Site based on the Site reconnaissance.

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7 INTERVIEWS

Key Site Managers are contacted to obtain current and historical environmental information concerning the Site. The following sections highlight information revealed during the interviews.

7.1 INTERVIEW WITH CLIENT/OWNER/MANAGER

Kleinfelder sent an interview questionnaire to the Client. Mr. Marne Bouillon responded with a completed questionnaire dated April 14, 2014 indicating the Site has been vacant, but in the past has been used as overflow parking for the seasonal fair at the Del Mar Fairgrounds. He is unaware of AULs or environmental liens associated with the property. In addition, he is unaware of spills, environmental cleanups, or presence of contamination at the Site.

7.2 INTERVIEW WITH OCCUPANTS

The Site is presently vacant land; therefore, no occupants were available to interview. However, Kleinfelder forwarded an interview questionnaire to Mr. Mike Batter of Kay Batter Associates Inc., who is the current owner (since 2003) of the Site, for information pertaining to the past use of the Site. Mr. Batter indicated that previous environmental and geotechnical assessments were performed for the Site. Available reports have been discussed in the appropriate sections to this report.

In 2013, Mr. Batter indicated that “pesticides” were reported to have been sprayed on “native vegetation” on portions of the Site. Mr. Batter was unaware of the name of the pesticides used. Although Mr. Batter indicated that pesticides were sprayed on the Site, herbicides are typically sprayed to control vegetation. However, based on the recent application of pesticides (or herbicides) at the Site and current regulations pertaining to pesticide usage, Kleinfelder does not consider the application of pesticides (or herbicides) in 2013 to be a REC. Other information was not provided.

7.3 INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS

Information obtained from regulatory agencies contacted by Kleinfelder is discussed in Section 4.2.

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8 EVALUATION

Kleinfelder performed this Phase I ESA of the Site consistent with the scope and limitations of ASTM Designation E 1527-13. The following sections describe Kleinfelder's findings and provide general background information about the Site. Findings address RECs, CRECs, historical RECs, and notation of *de minimis* quantities, as applicable to the Site. In summary, Kleinfelder's assessment revealed the following information concerning the Site:

8.1 BACKGROUND

The following is a summary of Site background information:

- The Site consists of approximately 2.30 acres of land and is presently vacant land. The northern, eastern, and northwestern portions of the Site consist of relatively flat terrain with little vegetation. The southwestern portion consists of a man-made (graded) plateau area. The remaining portions of the Site, generally the southern and southeastern portions consist of a steep slope (bluff) upward and are heavily vegetated. The southeastern portion of the Site consists of a wetlands area.

- The Site historically appeared to be part of a lagoon at the mouth of the San Dieguito River in 1904, and appeared to be vacant land in 1939, 1953, and 1966. During these years, the northern portion of the Site appeared to be flat and unpaved; the remaining areas appeared to be situated on a slope and covered with vegetation. Some clearing of vegetation and soil disturbance was apparent on the western portion of the Site by 1966. The Site remained relatively physically unchanged through the present. The Site was used for overflow parking from the nearby Del Mar Fairgrounds in at least 2009.

8.2 FINDINGS AND OPINIONS

The following is a summary of the findings and opinions of this Phase I ESA:

- An approximately 8-inch monitoring well cover was observed on the northern portion of the Site. A 25-foot piezometer was reportedly installed in a previous exploratory boring during a preliminary geologic hazard evaluation for the Site and is used to monitor groundwater levels.

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- No obvious indications that a significant release of hazardous materials/wastes or petroleum products has occurred at the Site were observed by Kleinfelder during the Site reconnaissance.
- The database agency search did not reveal on-Site listings that represent RECs to the Site.
- There were no off-Site facilities that, in Kleinfelder's opinion, represent a REC to the Site.

8.3 DEVIATIONS AND ADDITIONAL SERVICES

The scope of this Phase I ESA does not incorporate ASTM Standard non-scope considerations, such as asbestos-containing material, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality/vapor intrusion, and high-voltage power lines.

8.4 CONCLUSIONS AND RECOMMENDATIONS

Kleinfelder has performed a Phase I ESA, in conformance with the scope of services required by ASTM Designation E 1527-13, our Proposal No. MF150334.001P, dated March 24, 2014 and limitations discussed in this report. Exceptions to and deviations from this practice are described in Sections 8.1 and 8.2 of this report. Kleinfelder's Phase I ESA did not identify RECs in relation to the Site.

8.5 DATA GAPS

Kleinfelder attempted to obtain reasonably ascertainable information regarding the Site. There were no data failures (data gaps) identified for this Phase I ESA.

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9 REFERENCES

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Christian Wheeler Engineering (CWE), 2012, *Report of Preliminary Geologic Hazard Evaluation, Proposed Durante Apartments, 2100 Jimmy Durante Boulevard, Del Mar, California*, September 24.

Environmental Data Resources, Inc. (EDR), 2014a, *The EDR Radius Map™ Report with GeoCheck®, 2101-2125 Jimmy Durante Blvd, Del Mar, CA 92014*, Inquiry No. 3906289.2s, April 8.

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_____, 2014c, *Certified Sanborn® Map Report, 2101-2125 Jimmy Durante Blvd, Del Mar, CA 92014*, Inquiry No. 3906289.3, April 8.

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_____, 2014f, *EDR Historical Topographic Map Report, 2101-2125 Jimmy Durante Blvd, Del Mar, CA 92014*, Inquiry No. 3906289.4, April 9.

Kennedy, Michael P. and Tan, Siang S, 2008, Geologic Map of the San Diego 30'x60' Quadrangle, California.

Sowards & Brown Engineering (SBE), 2012, *Slope Analysis and Encroachment Study for Durante Apartments*, August 24, revised December 11.

United States Geological Survey (USGS), 1994, 7.5-minute Topographic Map of the Del Mar, California Quadrangle, scale 1:24,000.

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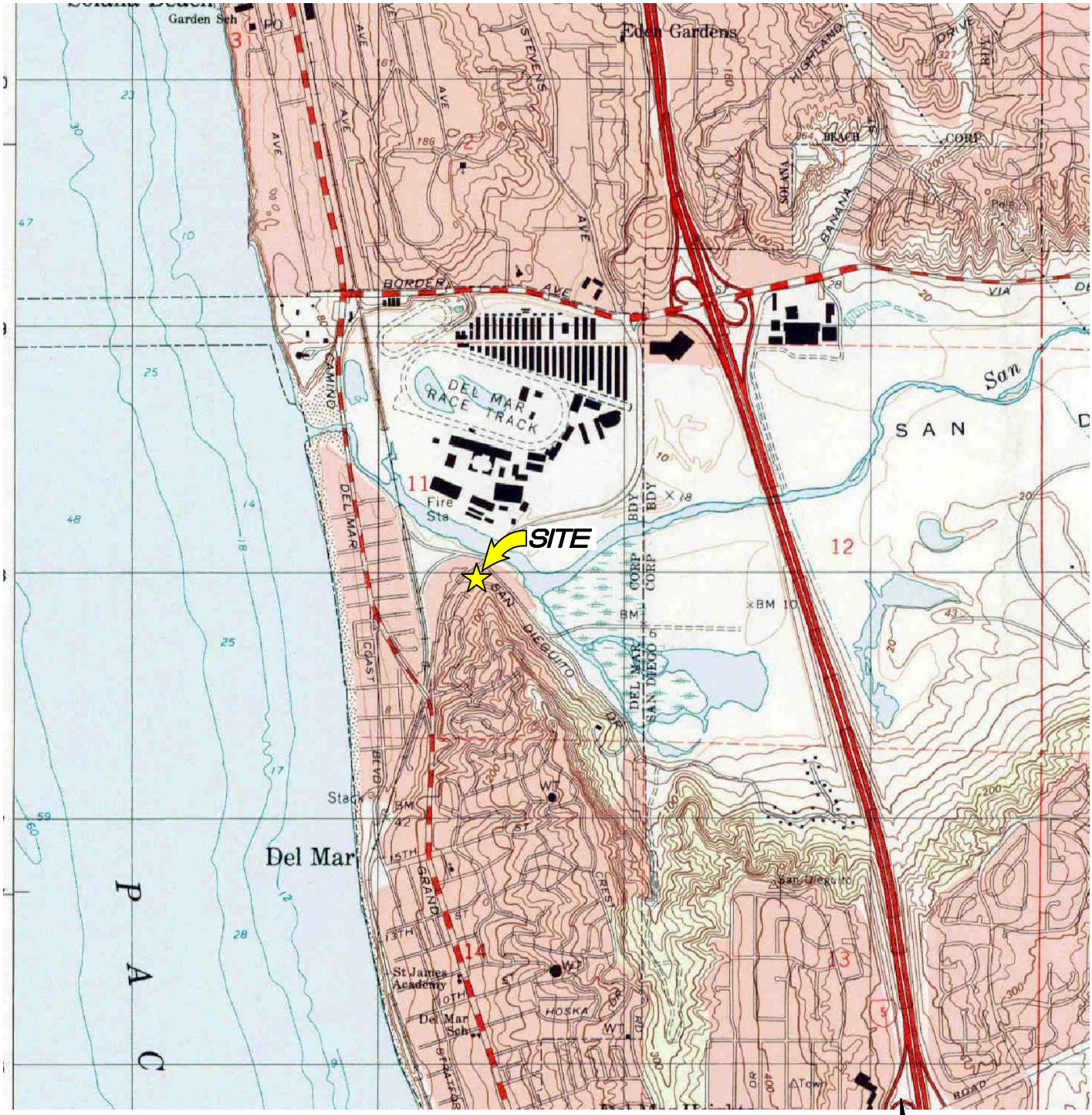
PLATES



SOURCE: U.S.G.S. 7.5' Topographic series, Del Mar, California Quadrangle 1994.

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PROJECT NO.	20150082
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DRAWN BY:	MRG
CHECKED BY:	CP
FILE NAME:	20150082p1_SLM.dwg

SITE LOCATION MAP

ASSESSOR'S PARCEL NUMBERS:
299-100-47 AND 299-100-48
JIMMY DURANTE BLVD. / SAN DIEGUITO ROAD
DEL MAR, CALIFORNIA

FIGURE
1

PLOTTED: 16 Apr 2014, 10:33am, mgriffin
CAD FILE: L:\CADD\2014\20150082\Kitchell_Ph1_4-2014\ LAYOUT: 1
Images: td_Site Location Map-pl1.jpg Images: TopoMaps_Del Mar-CA_1994.jpg
ATTACHED IMAGES:
ATTACHED XREFS:
LONG BEACH, CA

SOURCE: GOOGLE EARTH PRO 2014, DATED 11/02/12.

60 30 0 60

APPROXIMATE SCALE (feet)

N

EXPLANATION

APPROXIMATE SITE BOUNDARY

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FILE NAME:	20150082p2_SVAP.dwg

SITE VICINITY AERIAL PHOTOGRAPH

ASSESSOR'S PARCEL NUMBERS:
299-100-47 AND 299-100-48
JIMMY DURANTE BLVD. / SAN DIEGUITO ROAD
DEL MAR, CALIFORNIA

PLATE 2

PLOTTED: 16 Apr 2014, 10:41am, mgriffin
CAD FILE: L:\CADD\2014\20150082\Kitchell_Ph1_4-2014\ LAYOUT: 2
ATTACHED IMAGES: Images: Aerial_Del-Mar_200_11-02-2012.jpg Images: td_Aerial_Del-Mar.jpg Images: td_Slope-Analysis.jpg
ATTACHED XREFS:
LONG BEACH, CA

Photograph 1 - View facing north at the northern portion of the Site and intersection of Jimmy Durante Boulevard and San Dieguito Road.

Photograph 2 - View facing south-southwest at the southern portion of the Site. The wetlands area is shown in the foreground and is located on the southeastern portion of the Site.

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Document1

Photograph 3 - Closer view of the wetlands area and standing water located on the southeastern portion of the Site.

Photograph 4 - View facing generally west at the Site from San Dieguito Road.

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Document1

Photograph 5 - View facing southwest at man-made plateau located on the southwestern portion of the Site. Adjoining residences to the southwest are shown in background.

Photograph 6 - View facing northeast at the northern and northeastern portions of the Site. Man-made plateau is just right (south) of this picture.

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Document1

Photograph 7 - View facing southeast at eastern portion of the Site and off-Site adjoining properties to the east-northeast, beyond San Dieguito Road.

Photograph 8 - View facing northwest at Site (from man-made plateau) and off-Site adjoining properties, beyond Jimmy Durante Boulevard.

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Document1

Photograph 9 - View of the on-Site monitoring well located on the northern portion of the Site.

Photograph 10 - Close-up view of the on-Site monitoring well located on the northern portion of the Site.

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Document1

Photograph 11 - View facing northwest at the low-lying eastern, northern, and northwestern portions of the Site. Sloped area of Site is shown at left upper corner.

Photograph 12 - View of polyvinyl chloride pipe and plywood located on the south-central portion of the Site.

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Document2

APPENDIX A

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

We declare that to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all-appropriate inquiries in conformance with the standards and practices set forth in CFR Part 312.

Margaret R. Carroll
Environmental Professional

Chuck Cleeves
Project Manager

Lizanne Simmons, PG
Principal Geologist

The resumes of above-listed environmental professionals performing this Phase I ESA are on file at the Kleinfelder office and are available on request.

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APPENDIX B

REGULATORY AGENCY DATABASE REPORT

2101-2125 JIMMY DURANTE BLVD
2101-2125 JIMMY DURANTE BLVD
Del Mar, CA 92014

Inquiry Number: 3906289.2s
April 08, 2014

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2101-2125 JIMMY DURANTE BLVD
DEL MAR, CA 92014

COORDINATES

Latitude (North):	32.9697000 - 32° 58' 10.92''
Longitude (West):	117.2634000 - 117° 15' 48.24''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	475385.3
UTM Y (Meters):	3647767.8
Elevation:	17 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	32117-H3 DEL MAR OE W, CA
Most Recent Revision:	0
East Map:	32117-H2 DEL MAR, CA
Most Recent Revision:	1975

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL---------- National Priority List

EXECUTIVE SUMMARY

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls
LUCIS ---------- Land Use Control Information System

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST ---------- Active UST Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

FEMA UST - Underground Storage Tank Listing

State and tribal voluntary cleanup sites

VCP - Voluntary Cleanup Program Properties
INDIAN VCP - Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS - A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 - Torres Martinez Reservation Illegal Dump Site Locations
ODI - Open Dump Inventory
WMUDS/SWAT - Waste Management Unit Database
SWRCY - Recycler Database
HAULERS - Registered Waste Tire Haulers Listing
INDIAN ODI - Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL - Clandestine Drug Labs
HIST Cal-Sites - Historical Calsites Database
SCH - School Property Evaluation Program
Toxic Pits - Toxic Pits Cleanup Act Sites
CDL - Clandestine Drug Labs
San Diego Co. HMMD - Hazardous Materials Management Division Database
US HIST CDL - National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA FID UST - Facility Inventory Database

Local Land Records

LIENS 2 - CERCLA Lien Information
LIENS - Environmental Liens Listing
DEED - Deed Restriction Listing

Records of Emergency Release Reports

HMIRS - Hazardous Materials Information Reporting System
CHMIRS - California Hazardous Material Incident Report System
LDS - Land Disposal Sites Listing
MCS - Military Cleanup Sites Listing
SPILLS 90 - SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR - RCRA - Non Generators
DOT OPS - Incident and Accident Data

EXECUTIVE SUMMARY

DOD	Department of Defense Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
CA BOND EXP. PLAN	Bond Expenditure Plan
UIC	UIC Listing
NPDES	NPDES Permits Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
Notify 65	Proposition 65 Records
DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
ENF	Enforcement Action Listing
HAZNET	Facility and Manifest Data
EMI	Emissions Inventory Data
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
COAL ASH DOE	Steam-Electric Plant Operation Data
MWMP	Medical Waste Management Program Listing
PCB TRANSFORMER	PCB Transformer Registration Database
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PRP	Potentially Responsible Parties
US AIRS	Aerometric Information Retrieval System Facility Subsystem
WDS	Waste Discharge System
LEAD SMELTERS	Lead Smelter Sites
2020 COR ACTION	2020 Corrective Action Program List
EPA WATCH LIST	EPA WATCH LIST
PROC	Certified Processors Database
US FIN ASSUR	Financial Assurance Information
Financial Assurance	Financial Assurance Information Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

EXECUTIVE SUMMARY

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 09/10/2013 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DEL MAR THOROUGHBRED CLUB	***JIMMY DURANTE BLVD***	***NNE 1/8 - 1/4 (0.134 mi.)***	***D9***	***31***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 02/03/2014 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAMP C.J. MILLER Status: Inactive - Needs Evaluation		NNE 1/4 - 1/2 (0.372 mi.)	12	48
NAVY DIRIGIBLE Status: Inactive - Needs Evaluation		ESE 1/2 - 1 (0.513 mi.)	F17	60

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 12/16/2013 has revealed that there are 6 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN C READ CONSTRUCTION CO	***2126 JIMMY DURANTE BL***	***W 0 - 1/8 (0.010 mi.)***	***B3***	***23***
JOHN REED CONSTRUCTION	***2126 JIMMY DURANTE***	***W 0 - 1/8 (0.010 mi.)***	***B4***	***24***
Status: Completed - Case Closed				

Lower Elevation	Address	Direction / Distance	Map ID	Page
DEL MAR THOROUGHBRED CLUB	***DEL MAR RACE TRACK***	***NE 1/8 - 1/4 (0.147 mi.)***	***D10***	***32***
Status: Completed - Case Closed				
DEL MAR THOROUGHBRED CLUB	***2260 JIMMY DURANTE BLVD***	***NNE 1/4 - 1/2 (0.400 mi.)***	***E13***	***49***
DEL MAIR FAIR	2260 JIMMY DURANTE BLVD	NNE 1/4 - 1/2 (0.400 mi.)	E14	52
CA ST OF 22ND DISTRICT AGRIC A	***2260 JIMMY DURANTE BL***	***NNE 1/4 - 1/2 (0.400 mi.)***	***E15***	***53***
Status: Completed - Case Closed				

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 12/16/2013 has revealed that there are 3 SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN REED CONSTRUCTION	***2126 JIMMY DURANTE***	***W 0 - 1/8 (0.010 mi.)***	***B4***	***24***
Facility Status: Completed - Case Closed				

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAN DIEGUITO WETLANDS RESTORAT	0 SAN DIEGUITO ROAD	E 0 - 1/8 (0.048 mi.)	C8	30
Facility Status: Completed - Case Closed				
DEL MAR THOROUGHBRED CLUB	***DEL MAR RACE TRACK***	***NE 1/8 - 1/4 (0.147 mi.)***	***D10***	***32***
Facility Status: Completed - Case Closed				

SAN DIEGO CO. SAM: The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

A review of the SAN DIEGO CO. SAM list, as provided by EDR, and dated 03/23/2010 has revealed that there are 2 SAN DIEGO CO. SAM sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN C READ CONSTRUCTION CO	***2126 JIMMY DURANTE BL***	***W 0 - 1/8 (0.010 mi.)***	***B3***	***23***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CA ST OF 22ND DISTRICT AGRIC A	***2260 JIMMY DURANTE BL***	***NNE 1/4 - 1/2 (0.400 mi.)***	***E15***	***53***

State and tribal registered storage tank lists

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, and dated 08/01/2009 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DEL MAR THOROUGHBRED CLUB	***DEL MAR RACE TRACK***	***NE 1/8 - 1/4 (0.147 mi.)***	***D10***	***32***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 4 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN C. READ CONSTRUCTION CO.	2126 JIMMY DURANTE BLVD	W 0 - 1/8 (0.010 mi.)	B5	26

Lower Elevation	Address	Direction / Distance	Map ID	Page
DEL MAR MS4	***2240 JIMMY DURANTE BLVD***	***N 0 - 1/8 (0.007 mi.)***	***A2***	***13***
DEL MAR THOROUGHBRED CLUB	***JIMMY DURANTE BLVD***	***NNE 1/8 - 1/4 (0.134 mi.)***	***D9***	***31***
22ND DISTRICT AGRICULTURAL ASS	DEL MAR FAIRGROUNDS	NE 1/8 - 1/4 (0.147 mi.)	D11	48

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 3 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN C READ CONSTRUCTION CO	***2126 JIMMY DURANTE BLVD***	***W 0 - 1/8 (0.010 mi.)***	***B6***	***27***

Lower Elevation	Address	Direction / Distance	Map ID	Page
DEL MAR MS4	***2240 JIMMY DURANTE BLVD***	***N 0 - 1/8 (0.007 mi.)***	***A1***	***8***
DEL MAR THOROUGHBRED CLUB	***DEL MAR RACE TRACK***	***NE 1/8 - 1/4 (0.147 mi.)***	***D10***	***32***

Other Ascertainable Records

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 12/31/2011 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NAVY DIRIGIBLE BASE		ESE 1/2 - 1 (0.508 mi.)	F16	59

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN REED CONSTRUCTION	***2126 JIMMY DURANTE***	***W 0 - 1/8 (0.010 mi.)***	***B4***	***24***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
CA ST OF 22ND DISTRICT AGRIC A	***2260 JIMMY DURANTE BL***	***NNE 1/4 - 1/2 (0.400 mi.)***	***E15***	***53***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	2201 SAN DIEGUITO DR	E 0 - 1/8 (0.017 mi.)	C7	29

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 6 records.

Site Name	Database(s)
SAN DIEGUITO WETLANDS RESTORATION	LUST, SAN DIEGO CO. SAM
PHILIP D. SCHOFIELD & MARCIA S	HIST UST
SAN ELIJO LAGOON GATEWAY	SLIC
JUNE & MILTON ULLMAN	SAN DIEGO CO. SAM
SOLANA BEACH CHIROPRACTIC	SAN DIEGO CO. SAM
THE GAS STATION ETC	SAN DIEGO CO. SAM

OVERVIEW MAP - 3906289.2s

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 2101-2125 JIMMY DURANTE BLVD ADDRESS: 2101-2125 JIMMY DURANTE BLVD Del Mar CA 92014 LAT/LONG: 32.9697 / 117.2634	CLIENT: Kleinfelder, Inc. CONTACT: Margaret Carroll INQUIRY #: 3906289.2s DATE: April 08, 2014 5:53 pm

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DETAIL MAP - 3906289.2s

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

County Boundary

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 2101-2125 JIMMY DURANTE BLVD ADDRESS: 2101-2125 JIMMY DURANTE BLVD Del Mar CA 92014 LAT/LONG: 32.9697 / 117.2634	CLIENT: Kleinfelder, Inc. CONTACT: Margaret Carroll INQUIRY #: 3906289.2s DATE: April 08, 2014 5:55 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	1	1	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		2	1	3	NR	NR	6

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500		2	1	0	NR	NR	3
SAN DIEGO CO. SAM	0.500		1	0	1	NR	NR	2
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
San Diego Co. HMMD	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		2	2	NR	NR	NR	4
SWEEPS UST	0.250		2	1	NR	NR	NR	3
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	1	NR	1
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500		1	0	1	NR	NR	2
CUPA Listings	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	0	NR	NR	NR	1
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA LF	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
North
< 1/8
0.007 mi.
39 ft.

DEL MAR MS4
2240 JIMMY DURANTE BLVD
DEL MAR, CA 92014

Site 1 of 2 in cluster A

NPDES **S106060498**
SWEEPS UST **N/A**
San Diego Co. HMMD

Relative:
Lower

Actual:
12 ft.

NPDES:

Npdes Number:	Not reported
Facility Status:	Active
Agency Id:	12525
Region:	9
Regulatory Measure Id:	214389
Order No:	R9-2007-0001
Regulatory Measure Type:	Enrollee
Place Id:	219460
WDID:	9 0000510S4
Program Type:	MNSTW1
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/16/1990
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Del Mar City
Discharge Address:	1050 Camino Del Mar
Discharge City:	Del Mar
Discharge State:	CA
Discharge Zip:	92014

Npdes Number:	CAS0109266
Facility Status:	Active
Agency Id:	536787
Region:	9
Regulatory Measure Id:	387335
Order No:	Order No. R9-2013-0001
Regulatory Measure Type:	NPDES Permits
Place Id:	219460
WDID:	Not reported
Program Type:	MNSTW1
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	06/27/2013
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	San Diego Region MS4 Copermitees
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported

SWEEPS UST:

Status:	Active
Comp Number:	5383
Number:	9
Board Of Equalization:	44-022213
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-005383-000001
Tank Status:	A
Capacity:	1000

DEL MAR MS4 (Continued) **S106060498**

Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	OTHER
Number Of Tanks:	2

Status:	Active
Comp Number:	5383
Number:	9
Board Of Equalization:	44-022213
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-005383-000002
Tank Status:	A
Capacity:	1000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

SAN DIEGO CO. HMMD:

Facility Id:	105383
Business Type:	6HK52
EPA Id Number:	CAL000007191
APN:	299-071-03-00
Last HMMD Inspection:	08/31/2011
Permit Status:	OPEN
Permit Expiration:	02/28/2013
Facility Owner:	CITY OF DEL MAR
Facility Address:	1050 CAMINO DEL MAR
Facility City:	DEL MAR
Facility State:	CA
Facility Zip:	92014-2604
UST Owner:	CITY OF DEL MAR
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 105383 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	105383
Tank Type:	SINGLE WALL
Additional Id:	1-A
Capacity Gallons:	1000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1999-04-02 00:00:00
Year Installed:	1978-01-01 00:00:00
Pipe Type:	SINGLE WALL

DEL MAR MS4 (Continued) **S106060498**

Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY
UST Name:	UNDERGROUND TANK 105383 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	105383
Tank Type:	SINGLE WALL IN VAULT
Additional Id:	1-B
Capacity Gallons:	1000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1999-04-02 00:00:00
Year Installed:	1978-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY

Active Permits:

Facility Id:	105383
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 223 UNSPEC OIL CONTAINING WASTE
Other Information:	SATURATED ABSORBENT
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported
Facility Id:	105383
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 221 WASTE OIL & MIXED OIL
Other Information:	USED OIL
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported
Facility Id:	105383
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 888 USED OIL FILTERS
Other Information:	SELF HAUL TO DEL MAR AUTO (#126797)
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported
Facility Id:	105383
Update Date:	11/02/2012
Case Number:	Not reported
Name:	PAINT
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE

DEL MAR MS4 (Continued) **S106060498**

Hazardous Categories 2: Not reported

Violations Active Permits:

Facility Id: 105383
Update Date: 11/02/2012
Inspection Date: 04/18/2003
Violation Code: 6HV0215
Violation: OIL FILTERS IMPROPERLY MANAGED
Violation Citation: Used oil filters not properly drained, stored, or labeled prior to transport for the purpose of metal reclamation. CCR 66266.130
Activity: ACTIVE

Facility Id: 105383
Update Date: 11/02/2012
Inspection Date: 04/18/2003
Violation Code: 6HV0402
Violation: TRAINING PROGRAM NOT ADEQUATE
Violation Citation: Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity: ACTIVE

Facility Id: 105383
Update Date: 11/02/2012
Inspection Date: 08/31/2011
Violation Code: 6HV0132
Violation: EPA ID NUMBER NOT OBTAINED/MAINTAINED
Violation Citation: Generator of hazardous waste has not obtained/maintained an EPA identification number. CCR 66262.12(a)
Activity: ACTIVE

Facility Id: 105383
Business Type: 6HK52
EPA Id Number: CAL000007191
APN: 299-071-03-00
Last HMMD Inspection: 08/31/2011
Permit Status: OPEN
Permit Expiration: 02/28/2013
Facility Owner: CITY OF DEL MAR
Facility Address: 1050 CAMINO DEL MAR
Facility City: DEL MAR
Facility State: CA
Facility Zip: 92014-2604
UST Owner: CITY OF DEL MAR
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:

UST Name: UNDERGROUND TANK 105383 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 105383
Tank Type: SINGLE WALL
Additional Id: 1-A

DEL MAR MS4 (Continued) **S106060498**

Capacity Gallons:	1000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1999-04-02 00:00:00
Year Installed:	1978-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY

UST Name:	UNDERGROUND TANK 105383 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	105383
Tank Type:	SINGLE WALL IN VAULT
Additional Id:	1-B
Capacity Gallons:	1000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1999-04-02 00:00:00
Year Installed:	1978-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY

Active Permits:

Facility Id:	105383
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 223 UNSPEC OIL CONTAINING WASTE
Other Information:	SATURATED ABSORBENT
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Facility Id:	105383
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 221 WASTE OIL & MIXED OIL
Other Information:	USED OIL
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Facility Id:	105383
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 888 USED OIL FILTERS
Other Information:	SELF HAUL TO DEL MAR AUTO (#126797)
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

DEL MAR MS4 (Continued) **S106060498**

Facility Id: 105383
Update Date: 11/02/2012
Case Number: Not reported
Name: PAINT
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Violations Active Permits:
Facility Id: 105383
Update Date: 11/02/2012
Inspection Date: 04/18/2003
Violation Code: 6HV0215
Violation: OIL FILTERS IMPROPERLY MANAGED
Violation Citation: Used oil filters not properly drained, stored, or labeled prior to transport for the purpose of metal reclamation. CCR 66266.130
Activity: ACTIVE

Facility Id: 105383
Update Date: 11/02/2012
Inspection Date: 04/18/2003
Violation Code: 6HV0402
Violation: TRAINING PROGRAM NOT ADEQUATE
Violation Citation: Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity: ACTIVE

Facility Id: 105383
Update Date: 11/02/2012
Inspection Date: 08/31/2011
Violation Code: 6HV0132
Violation: EPA ID NUMBER NOT OBTAINED/MAINTAINED
Violation Citation: Generator of hazardous waste has not obtained/maintained an EPA identification number. CCR 66262.12(a)
Activity: ACTIVE

A2 **DEL MAR MS4** **HIST UST** **U001571132**
North **2240 JIMMY DURANTE BLVD** **ENF** **N/A**
< 1/8 **DEL MAR, CA 92014**
0.007 mi.
39 ft. **Site 2 of 2 in cluster A**

Relative:
Lower

Actual:
12 ft.

HIST UST:
Region: STATE
Facility ID: 00000036335
Facility Type: Other
Other Type: MUNICIPALITY
Total Tanks: 0002
Contact Name: SAM NICOSIA
Telephone: 6197553294
Owner Name: CITY OF DEL MAR
Owner Address: 1050 CAMINO DEL MAR
Owner City,St,Zip: DEL MAR, CA 92014

Tank Num: 001

DEL MAR MS4 (Continued) **U001571132**

Container Num: 2
Year Installed: 1980
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: 3/16" inches
Leak Detection: Visual

Tank Num: 002
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: None

ENF:

Region:	9
Facility Id:	219460
Agency Name:	Del Mar City
Place Type:	Utility
Place Subtype:	MS4
Facility Type:	Municipal/Domestic
Agency Type:	City Agency
# Of Agencies:	1
Place Latitude:	32.97022
Place Longitude:	-117.263285
SIC Code 1:	9511
SIC Desc 1:	Air and Water Resource and Solid Waste Management
SIC Code 2:	4941
SIC Desc 2:	Water Supply
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0
Threat To Water Quality:	1
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Stormwater runoff
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	MNSTW1
Program Category1:	NPDESSW
Program Category2:	NPDESSW
# Of Programs:	1
WDID:	9 0000510S4
Reg Measure Id:	214389
Reg Measure Type:	Enrollee

DEL MAR MS4 (Continued) **U001571132**

Region:	9
Order #:	Order No. R9-2013-0001
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	02/19/2014
Effective Date:	07/16/1990
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	52 - Area Wide Municipal Storm Water Permit
Direction/Voice:	Passive
Enforcement Id(EID):	251334
Region:	9
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	04/20/2004
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	04/20/2004
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 9 0000510S4
Description:	Letter sent for comments on JURMP Annual Report. Report due June 1, 2004.
Program:	MNSTW1
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	9
Facility Id:	219460
Agency Name:	Del Mar City
Place Type:	Utility
Place Subtype:	MS4
Facility Type:	Municipal/Domestic
Agency Type:	City Agency
# Of Agencies:	1

DEL MAR MS4 (Continued) **U001571132**

Place Latitude:	32.97022
Place Longitude:	-117.263285
SIC Code 1:	9511
SIC Desc 1:	Air and Water Resource and Solid Waste Management
SIC Code 2:	4941
SIC Desc 2:	Water Supply
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0
Threat To Water Quality:	1
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Stormwater runoff
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	MNSTW1
Program Category1:	NPDESSW
Program Category2:	NPDESSW
# Of Programs:	1
WDID:	9 0000510S4
Reg Measure Id:	214389
Reg Measure Type:	Enrollee
Region:	9
Order #:	Order No. R9-2013-0001
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	02/19/2014
Effective Date:	07/16/1990
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	52 - Area Wide Municipal Storm Water Permit
Direction/Voice:	Passive
Enforcement Id(EID):	247291
Region:	9

DEL MAR MS4 (Continued) **U001571132**

Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Notice to Comply
Effective Date:	08/29/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 9 0000510S4
Description:	failure to implement BMPs
Program:	MNSTW1
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	9
Facility Id:	219460
Agency Name:	Del Mar City
Place Type:	Utility
Place Subtype:	MS4
Facility Type:	Municipal/Domestic
Agency Type:	City Agency
# Of Agencies:	1
Place Latitude:	32.97022
Place Longitude:	-117.263285
SIC Code 1:	9511
SIC Desc 1:	Air and Water Resource and Solid Waste Management
SIC Code 2:	4941
SIC Desc 2:	Water Supply
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0
Threat To Water Quality:	1
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Stormwater runoff
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	MNSTW1
Program Category1:	NPDESSW
Program Category2:	NPDESSW

DEL MAR MS4 (Continued) **U001571132**

# Of Programs:	1
WDID:	9 0000510S4
Reg Measure Id:	214389
Reg Measure Type:	Enrollee
Region:	9
Order #:	Order No. R9-2013-0001
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	02/19/2014
Effective Date:	07/16/1990
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	52 - Area Wide Municipal Storm Water Permit
Direction/Voice:	Passive
Enforcement Id(EID):	244796
Region:	9
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	13267 Letter
Effective Date:	01/27/2003
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 9 0000510S4
Description:	13267 letter for failing to develop a local SUSMP and Ordinance consistent with the Model SUSMP
Program:	MNSTW1
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0
Region:	9
Facility Id:	219460
Agency Name:	Del Mar City
Place Type:	Utility

DEL MAR MS4 (Continued) **U001571132**

Place Subtype:	MS4
Facility Type:	Municipal/Domestic
Agency Type:	City Agency
# Of Agencies:	1
Place Latitude:	32.97022
Place Longitude:	-117.263285
SIC Code 1:	9511
SIC Desc 1:	Air and Water Resource and Solid Waste Management
SIC Code 2:	4941
SIC Desc 2:	Water Supply
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0
Threat To Water Quality:	1
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Stormwater runoff
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	MNSTW1
Program Category1:	NPDESSW
Program Category2:	NPDESSW
# Of Programs:	1
WDID:	9 0000510S4
Reg Measure Id:	214389
Reg Measure Type:	Enrollee
Region:	9
Order #:	Order No. R9-2013-0001
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	02/19/2014
Effective Date:	07/16/1990
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I

DEL MAR MS4 (Continued) **U001571132**

Fee Code:	52 - Area Wide Municipal Storm Water Permit
Direction/Voice:	Passive
Enforcement Id(EID):	244795
Region:	9
Order / Resolution Number:	R9-2003-039
Enforcement Action Type:	Notice of Violation
Effective Date:	01/27/2003
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	01/27/2003
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 9 0000510S4
Description:	NOV for failing to develop a local SUSMP and Ordinances consistent with the MOdel SUSMP
Program:	MNSTW1
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	9
Facility Id:	219460
Agency Name:	Del Mar City
Place Type:	Utility
Place Subtype:	MS4
Facility Type:	Municipal/Domestic
Agency Type:	City Agency
# Of Agencies:	1
Place Latitude:	32.97022
Place Longitude:	-117.263285
SIC Code 1:	9511
SIC Desc 1:	Air and Water Resource and Solid Waste Management
SIC Code 2:	4941
SIC Desc 2:	Water Supply
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0
Threat To Water Quality:	1
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Stormwater runoff
Facility Waste Type 2:	Not reported

DEL MAR MS4 (Continued) **U001571132**

Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	MNSTW1
Program Category1:	NPDESSW
Program Category2:	NPDESSW
# Of Programs:	1
WDID:	9 0000510S4
Reg Measure Id:	214389
Reg Measure Type:	Enrollee
Region:	9
Order #:	Order No. R9-2013-0001
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	02/19/2014
Effective Date:	07/16/1990
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	52 - Area Wide Municipal Storm Water Permit
Direction/Voice:	Passive
Enforcement Id(EID):	244719
Region:	9
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	13267 Letter
Effective Date:	09/13/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 9 0000510S4
Description:	13267 letter requesting information and monitoring regarding pumping of urban runoff from swale at 28th Street into San Dieguito Lagoon
Program:	MNSTW1
Latest Milestone Completion Date:	2003-07-01
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0

DEL MAR MS4 (Continued) **U001571132**

Total $ Paid/Completed Amount:	0
Region:	9
Facility Id:	219460
Agency Name:	Del Mar City
Place Type:	Utility
Place Subtype:	MS4
Facility Type:	Municipal/Domestic
Agency Type:	City Agency
# Of Agencies:	1
Place Latitude:	32.97022
Place Longitude:	-117.263285
SIC Code 1:	9511
SIC Desc 1:	Air and Water Resource and Solid Waste Management
SIC Code 2:	4941
SIC Desc 2:	Water Supply
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0
Threat To Water Quality:	1
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Stormwater runoff
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	MNSTW1
Program Category1:	NPDESSW
Program Category2:	NPDESSW
# Of Programs:	1
WDID:	9 0000510S4
Reg Measure Id:	214389
Reg Measure Type:	Enrollee
Region:	9
Order #:	Order No. R9-2013-0001
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	02/19/2014
Effective Date:	07/16/1990
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported

DEL MAR MS4 (Continued) **U001571132**

WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	52 - Area Wide Municipal Storm Water Permit
Direction/Voice:	Passive
Enforcement Id(EID):	242949
Region:	9
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Notice of Violation
Effective Date:	07/08/2003
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	07/08/2003
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 9 0000510S4
Description:	NOV for failure to adequately respond to 13267 information request
Program:	MNSTW1
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

B3 **JOHN C READ CONSTRUCTION CO** **LUST** **S101301513**
West **2126 JIMMY DURANTE BL** **SAN DIEGO CO. SAM** **N/A**
< 1/8 **DEL MAR, CA 92014**
0.010 mi.
52 ft. **Site 1 of 4 in cluster B**

Relative:
Higher

Actual:
21 ft.

LUST REG 9:

Region:	9
Status:	Case Closed
Case Number:	9UT1776
Local Case:	H20144-001
Substance:	Unleaded Gasoline
Qty Leaked:	0
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site
Local Agency:	San Diego
How Found:	Tank Closure
How Stopped:	Close Tank
Source:	Tank
Cause:	Unknown
Lead Agency:	Local Agency
Case Type:	Other ground water affected
Date Found:	07/25/1990
Date Stopped:	07/25/1990
Confirm Date:	08/20/1990

JOHN C READ CONSTRUCTION CO (Continued) **S101301513**

Submit Workplan: Not reported
Prelim Assess: 08/17/1988
Desc Pollution: Not reported
Remed Plan: / /
Remed Action: Not reported
Began Monitor: Not reported
Release Date: 07/25/1990
Enforce Date: Not reported
Closed Date: 9/22/95
Enforce Type: Not reported
Pilot Program: LOP
Basin Number: 905.11
GW Depth: 6.2'
Beneficial Use: NBNB/E
NPDES Number: Not reported
Priority: 1C
File Dispn: File discarded, case closed
Interim Remedial Actions: Yes
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported

SAN DIEGO CO. SAM:
Case Number: H20144-001
Agency: DEH Site Assessment & Mitigation
Funding: **LOP - Federal Fund**
Facility Type: GW With No Beneficial Use Designation
Facility Status: Closed Case
Date: 9/22/1995
Date Began: 7/28/1988

Case Number: H20144-002
Agency: DEH Site Assessment & Mitigation
Funding: **Non Billable**
Facility Type: Failed Integrity Test
Facility Status: Closed Case
Date: 8/17/1988
Date Began: 7/28/1988

B4 **JOHN REED CONSTRUCTION** **HIST CORTESE** **S104749381**
West **2126 JIMMY DURANTE** **LUST** **N/A**
< 1/8 **DEL MAR, CA 92014** **SLIC**
0.010 mi.
52 ft. **Site 2 of 4 in cluster B**

Relative:
Higher

Actual:
21 ft.

HIST CORTESE:
Region: CORTESE
Facility County Code: 37
Reg By: LTNKA
Reg Id: 9UT1776

LUST:
Region: STATE
Global Id: T0607300566
Latitude: 32.970348
Longitude: -117.264447
Case Type: LUST Cleanup Site
Status: Completed - Case Closed

JOHN REED CONSTRUCTION (Continued) **S104749381**

Status Date:	09/22/1995
Lead Agency:	SAN DIEGO COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	9UT1776
LOC Case Number:	H20144-001
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Status History:

Global Id:	T0607300566
Status:	Open - Case Begin Date
Status Date:	07/28/1988

Global Id:	T0607300566
Status:	Completed - Case Closed
Status Date:	09/22/1995

Regulatory Activities:

Global Id:	T0607300566
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0607300566
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

Global Id:	T0607300566
Action Type:	Other
Date:	01/01/1950
Action:	Leak Began

Global Id:	T0607300566
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Global Id:	T0607300566
Action Type:	ENFORCEMENT
Date:	08/17/1992
Action:	Notice of Responsibility

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	08/17/1988
Global Id:	T0608149274
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H20144-002
Latitude:	32.970382

JOHN REED CONSTRUCTION (Continued) **S104749381**

Longitude:	-117.264474
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

B5 **JOHN C. READ CONSTRUCTION CO.** **HIST UST** **U001571137**
West **2126 JIMMY DURANTE BLVD** **N/A**
< 1/8 **DEL MAR, CA 92014**
0.010 mi.
52 ft. **Site 3 of 4 in cluster B**

Relative:
Higher

Actual:
21 ft.

HIST UST:

Region:	STATE
Facility ID:	00000021411
Facility Type:	Other
Other Type:	GEN. CONTR.
Total Tanks:	0003
Contact Name:	Not reported
Telephone:	6194532100
Owner Name:	JOHN C. READ CONSTRUCTION CO.
Owner Address:	2126 JIMMY DURANTE BLVD.
Owner City,St,Zip:	DEL MAR, CA 92014

Tank Num:	001
Container Num:	1
Year Installed:	1974
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Tank Construction:	Not reported
Leak Detection:	Stock Inventor

Tank Num:	002
Container Num:	2
Year Installed:	1979
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Tank Construction:	Not reported
Leak Detection:	Stock Inventor, 10

Tank Num:	003
Container Num:	3
Year Installed:	1979
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	Stock Inventor, 10

B6
West
< 1/8
0.010 mi.
52 ft.

JOHN C READ CONSTRUCTION CO
2126 JIMMY DURANTE BLVD
DEL MAR, CA 92014

Site 4 of 4 in cluster B

SWEEPS UST **S106061665**
San Diego Co. HMMD **N/A**

Relative:
Higher

Actual:
21 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	20144
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-020144-000001
Tank Status:	Not reported
Capacity:	500
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	LEADED
Number Of Tanks:	3

Status:	Not reported
Comp Number:	20144
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-020144-000002
Tank Status:	Not reported
Capacity:	500
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	20144
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-020144-000003
Tank Status:	Not reported
Capacity:	1000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active

JOHN C READ CONSTRUCTION CO (Continued) **S106061665**

Comp Number: 20144
Number: 9
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

SAN DIEGO CO. HMMD:
Facility Id: 120144
Business Type: Not reported
EPA Id Number: Not reported
APN: 299-100-33-00
Last HMMD Inspection: 10/21/1992
Permit Status: INAC
Permit Expiration: Not reported
Facility Owner: JOHN C READ CONSTRUCTION CO
Facility Address: P O BOX 250
Facility City: DEL MAR
Facility State: CA
Facility Zip: 92014-0250
UST Owner: JOHN C READ CONSTRUCTION CO
Handle Regulated Hazmat: Y
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:
UST Name: UNDERGROUND TANK 120144 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 120144
Tank Type: SINGLE WALL
Additional Id: 1
Capacity Gallons: 500
UST Contents: LEADED
Other Content Info: LEADED
Reg Status: REMOVED
Remove Close Date: 1990-07-25 00:00:00
Year Installed: 1974-01-01 00:00:00
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 07
UST Monitor Method: SW TANK SW PRESSURE PIPE W/RESTRICTIVE LLD W/DAILY RECONCILIATION OR WEEKLY GAUGING: TANK AND PIPE TEST ANNUALLY

UST Name: UNDERGROUND TANK 120144 T002
Last Update: 2012-11-02 14:17:38

JOHN C READ CONSTRUCTION CO (Continued) **S106061665**

Permit Number:	120144
Tank Type:	UNKNOWN
Additional Id:	2
Capacity Gallons:	500
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1988-05-10 00:00:00
Year Installed:	1979-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	07
UST Monitor Method:	SW TANK SW PRESSURE PIPE W/RESTRICTIVE LLD W/DAILY RECONCILIATION OR WEEKLY GAUGING: TANK AND PIPE TEST ANNUALLY

UST Name:	UNDERGROUND TANK 120144 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	120144
Tank Type:	SINGLE WALL
Additional Id:	3
Capacity Gallons:	1000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1990-07-25 00:00:00
Year Installed:	1979-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	07
UST Monitor Method:	SW TANK SW PRESSURE PIPE W/RESTRICTIVE LLD W/DAILY RECONCILIATION OR WEEKLY GAUGING: TANK AND PIPE TEST ANNUALLY

C7 **EDR US Hist Auto Stat** **1015333559**
East **2201 SAN DIEGUITO DR** **N/A**
< 1/8 **DEL MAR, CA 92014**
0.017 mi.
91 ft. **Site 1 of 2 in cluster C**

Relative:
Lower

Actual:
10 ft.

EDR Historical Auto Stations:

Name:	DEL MAR AUTOMOTIVE SERVICE CENTER
Year:	1999
Address:	2201 SAN DIEGUITO DR

Name:	DEL MAR AUTOMOTIVE SERVICE CENTER
Year:	2000
Address:	2201 SAN DIEGUITO DR

Name:	DEL MAR AUTOMOTIVE SERVICE CTR
Year:	2001
Address:	2201 SAN DIEGUITO DR

Name:	DEL MAR AUTOMOTIVE
Year:	2003
Address:	2201 SAN DIEGUITO DR

Name:	DEL MAR AUTOMOTIVE
Year:	2007

(Continued) **1015333559**

Address: 2201 SAN DIEGUITO DR

Name: DEL MAR AUTOMOTIVE
Year: 2008
Address: 2201 SAN DIEGUITO DR

Name: DEL MAR AUTOMOTIVE
Year: 2010
Address: 2201 SAN DIEGUITO DR

Name: DEL MAR AUTOMOTIVE
Year: 2011
Address: 2201 SAN DIEGUITO DR

Name: DEL MAR AUTOMOTIVE
Year: 2012
Address: 2201 SAN DIEGUITO DR

C8 **SAN DIEGUITO WETLANDS RESTORATION** **SLIC** **S112142812**
East **0 SAN DIEGUITO ROAD** **N/A**
< 1/8 **DEL MAR, CA 92014**
0.048 mi.
251 ft. **Site 2 of 2 in cluster C**

Relative:
Lower

Actual:
9 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	09/14/2012
Global Id:	T10000004144
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	208049-002
Latitude:	32.9699360836493
Longitude:	-117.261468172073
Case Type:	Cleanup Program Site
Case Worker:	KH
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	On May 5, 2012, Southern California Edison Company (SCE) was digging test holes to evaluate slope stability as part of the revetment project on the southwest bank of the San Dieguito River project. This project begins approximately 150 feet southeast of the Jimmy Durante Bridge and continues 550 feet to the southeast. One of the test holes they encountered a potential hydrocarbons release which resulted in staff of the San Diego County Department of Environmental Health (DEH) visiting the site on May 7, 2012. This case was opened so that DEH could provided oversight and review. Subsequent investigation did not identify evidence of a hydrocarbon release. There was no visual observation of soil staining, or free-phase sheen on infiltrated groundwater in the test pit, and no characteristic odors of fuel hydrocarbon were detected. Observed in all excavations was the presence of asphaltic demolition wastes (ADWs). The origin of the ADW is likely from emergency river bank restoration efforts following severe flood erosion of the San Dieguito Riverbend bank in 1982. Approximately 170 tons of demolition wastes (cement & asphalt) have been recovered and sent for recycling during the construction of the

SAN DIEGUITO WETLANDS RESTORATION (Continued) **S112142812**

revetment.

Click here to access the California GeoTracker records for this facility:

D9 **DEL MAR THOROUGHBRED CLUB** **RCRA-SQG** **1000123685**
NNE **JIMMY DURANTE BLVD** **HIST UST** **CAD981677123**
1/8-1/4 **DEL MAR, CA 92014**
0.134 mi.
708 ft. **Site 1 of 3 in cluster D**

Relative:
Lower

Actual:
12 ft.

RCRA-SQG:

Date form received by agency:	10/06/1986
Facility name:	DEL MAR THOROUGHBRED CLUB
Facility address:	JIMMY DURANTE BLVD DEL MAR, CA 92014
EPA ID:	CAD981677123
Mailing address:	PO BOX 700 DEL MAR, CA 92014
Contact:	ENVIRONMENTAL MANAGER
Contact address:	JIMMY DURANTE BLVD DEL MAR, CA 92014
Contact country:	US
Contact telephone:	(619) 755-1141
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	22ND DIST AGRIC ASSN
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

DEL MAR THOROUGHBRED CLUB (Continued) **1000123685**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

HIST UST:

Region:	STATE
Facility ID:	00000024716
Facility Type:	Other
Other Type:	RACETRACK
Total Tanks:	0002
Contact Name:	R.J. O'CONNOR
Telephone:	6197551141
Owner Name:	DEL MAR THOROUGHBRED CLUB
Owner Address:	P.O. BOX 700
Owner City,St,Zip:	DEL MAR, CA 92014
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000550
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	Not reported
Leak Detection:	Stock Inventor, None
Tank Num:	002
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	Stock Inventor, None

D10 **DEL MAR THOROUGHBRED CLUB** **LUST S100726712**
NE **DEL MAR RACE TRACK** **SLIC N/A**
1/8-1/4 **DEL MAR, CA 92014** **AST**
0.147 mi. **SWEEPS UST**
778 ft. **Site 2 of 3 in cluster D** **San Diego Co. HMMD**

Relative:
Lower

Actual:
12 ft.

LUST:

Region:	STATE
Global Id:	T0607303013
Latitude:	32.9787694
Longitude:	-117.2566989
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Status Date:	09/26/2000
Lead Agency:	SAN DIEGO COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	9UT756
LOC Case Number:	H04644-001
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Status History:

Global Id:	T0607303013
Status:	Open - Case Begin Date
Status Date:	06/30/1987

Global Id:	T0607303013
Status:	Completed - Case Closed
Status Date:	09/26/2000

Regulatory Activities:

Global Id:	T0607303013
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0607303013
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

Global Id:	T0607303013
Action Type:	ENFORCEMENT
Date:	06/30/1987
Action:	Notice of Responsibility

Global Id:	T0607303013
Action Type:	Other
Date:	01/01/1950
Action:	Leak Began

Global Id:	T0607303013
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Region:	STATE
Global Id:	T0607301447
Latitude:	32.9787694
Longitude:	-117.2566989
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/26/2000
Lead Agency:	SAN DIEGO COUNTY LOP

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	9UT2696
LOC Case Number:	H04644-003
File Location:	Local Agency
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Status History:

Global Id:	T0607301447
Status:	Open - Case Begin Date
Status Date:	07/06/1993

Global Id:	T0607301447
Status:	Completed - Case Closed
Status Date:	09/26/2000

Regulatory Activities:

Global Id:	T0607301447
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0607301447
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

Global Id:	T0607301447
Action Type:	Other
Date:	01/01/1950
Action:	Leak Began

Global Id:	T0607301447
Action Type:	ENFORCEMENT
Date:	07/12/1993
Action:	Notice of Responsibility

Global Id:	T0607301447
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	04/27/1990
Global Id:	T0608135370
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H04644-002
Latitude:	Not reported
Longitude:	Not reported
Case Type:	Cleanup Program Site

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Case Worker: Not reported
Local Agency: Not reported
RB Case Number: Not reported
File Location: Local Agency
Potential Media Affected: Under Investigation
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

AST:
Owner: DEL MAR THOROUGHBRED CLUB
Total Gallons: 8690
Certified Unified Program Agencies: San Diego

SWEEPS UST:
Status: Not reported
Comp Number: 4644
Number: Not reported
Board Of Equalization: 44-022084
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-004644-000003
Tank Status: Not reported
Capacity: 2000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: 1

Status: Active
Comp Number: 4644
Number: 9
Board Of Equalization: 44-022084
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-004644-000001
Tank Status: A
Capacity: 2000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 2

Status: Active
Comp Number: 4644
Number: 9
Board Of Equalization: 44-022084
Referral Date: Not reported
Action Date: 06-26-92

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-004644-000002
Tank Status: A
Capacity: 550
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: OTHER
Number Of Tanks: Not reported

SAN DIEGO CO. HMMD:
Facility Id: 104644
Business Type: 6HK39
EPA Id Number: CAL000038829
APN: 298-421-08-00
Last HMMD Inspection: 12/04/2009
Permit Status: OPEN
Permit Expiration: 04/30/2013
Facility Owner: DEL MAR THOROUGHBRED CLUB
Facility Address: PO BOX 700
Facility City: DEL MAR
Facility State: CA
Facility Zip: 92014-
UST Owner: DEL MAR THOROUGHBRED CLUB
Handle Regulated Hazmat: Y
Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:
UST Name: UNDERGROUND TANK 104644 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 104644
Tank Type: DOUBLE WALL
Additional Id: 2
Capacity Gallons: 2000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: REMOVED
Remove Close Date: Not reported
Year Installed: 1987-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: SUCTION
Monitor Code: 21
UST Monitor Method: DW TANK DW SUCTION AND/ OR GRAVITY PIPING WITH INTERSTITIAL MONITORS: INTERSTITIAL.

UST Name: UNDERGROUND TANK 104644 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 104644
Tank Type: SINGLE WALL
Additional Id: 1
Capacity Gallons: 550
UST Contents: DIESEL

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1993-06-07 00:00:00
Year Installed:	Not reported
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	10
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/POS SHUTOFF LLD W/DAILY RECONCILE OR WEEKLY GAUGE: TNK TEST ANN, PIPE TEST ANN 0.1 GAL/HR OR MO 0.2 GAL/HR

UST Name:	UNDERGROUND TANK 104644 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	104644
Tank Type:	UNKNOWN
Additional Id:	2/AT4875
Capacity Gallons:	2000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	2004-01-14 00:00:00
Year Installed:	Not reported
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	10
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/POS SHUTOFF LLD W/DAILY RECONCILE OR WEEKLY GAUGE: TNK TEST ANN, PIPE TEST ANN 0.1 GAL/HR OR MO 0.2 GAL/HR

Active Permits:

Facility Id:	104644
Update Date:	11/02/2012
Case Number:	Not reported
Name:	CARBRITE CLEAN ALL; CONTAINS POTASSIUM HYDROXIDE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Facility Id:	104644
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 444 USED BATTERIES
Other Information:	BRODING BATTERIES
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Facility Id:	104644
Update Date:	11/02/2012
Case Number:	1305-62-0
Name:	CALCIUM HYDROXIDE CAUSTIC LIME
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Facility Id:	104644
Update Date:	11/02/2012

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Case Number: 7782-44-7
Name: OXYGEN
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 135 UNSPECIFIED AQUEOUS SOL'N
Other Information: PARTS WASHER
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 461 PAINT SLUDGE
Other Information: PAINT SLUDGE AND THINNER
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: GASOLINE
Other Information: REGULAR UNLEADED
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Facility Id: 104644
Update Date: 11/02/2012
Case Number: 8002-05-9
Name: OIL: LUBRICATING
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: WASTE OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 342 ORGANIC LIQUIDS W/METALS
Other Information: WASTE ANTIFREEZE - DRUM & AST

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported
Facility Id:	104644
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information:	FUEL FILTERS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported
Facility Id:	104644
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 902 INFECTIOUS WASTE, SHARPS
Other Information:	SHARPS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported
Facility Id:	104644
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE
Facility Id:	104644
Update Date:	11/02/2012
Case Number:	107-21-1
Name:	ETHYLENE GLYCOL
Other Information:	METAL DRUM & AST
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported
Facility Id:	104644
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 222 OIL/WATER SEPARATION SLUDGE
Other Information:	SUMP SLUDGE
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported
Facility Id:	104644
Update Date:	11/02/2012
Case Number:	74-86-2
Name:	ACETYLENE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Facility Id: 104644
Update Date: 11/02/2012
Case Number: 124-38-9
Name: INERT GASES CARBON DIOXIDE; COMPRESSED GAS W/ARGON
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: MIXTURE
Name: LACQUER THINNER
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Facility Id: 104644
Update Date: 11/02/2012
Case Number: 107-21-1
Name: VINYLE ACRYLIC PAINT ETHYLENE GLYCOL
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: OIL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:

Facility Id: 104644
Update Date: 11/02/2012
Inspection Date: 02/04/2003
Violation Code: 6HV1003
Violation: HMBP NOT AMENDED W/IN 30 DAYS
Violation Citation: Business plan was not amended within 30 days for a 100% quantity increase, new disclosable materials or a change in business info. HSC 25505
Activity: ACTIVE

Facility Id: 104644
Update Date: 11/02/2012
Inspection Date: 02/28/2005
Violation Code: 6HV0209
Violation: WASTE ONSITE >90/180/270 DAYS
Violation Citation: Hazardous waste is stored in excess of allowable time period (90 days) without a State permit or written variance. CCR 25201(a) & 66262.34(a)&(c)
Activity: ACTIVE

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	11/06/2007
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE

Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	12/04/2009
Violation Code:	6HV0221
Violation:	DID NOT COMPLY W/SATELLITE REGS.
Violation Citation:	Failed to comply with satellite regulations. 66262.34(e)
Activity:	ACTIVE

Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	11/06/2007
Violation Code:	6HV0402
Violation:	TRAINING PROGRAM NOT ADEQUATE
Violation Citation:	Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity:	ACTIVE

Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	02/04/2003
Violation Code:	6HV3257
Violation:	2NDRY CONTAINMENT NOT LIQUID FREE
Violation Citation:	Secondary containment system components not liquid free. 2631(d)(4)
Activity:	ACTIVE

Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	02/28/2005
Violation Code:	6HV1009
Violation:	HMBP: INADEQUATE SITE MAP
Violation Citation:	Business Plan does not have a site map which provides sufficient or complete information for emergency response agencies. HSC 25509(a)(5) & 25505(a)(2)
Activity:	ACTIVE

Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	12/04/2009
Violation Code:	6HV0225
Violation:	ACCUMULATED HW>180 OR >270 DAYS
Violation Citation:	Accumulated waste too long (>180 or 270 days). 66262.34(d), CFR 262.34(e)&(f), &/or 25201(a) [>90 days for AHW waste]
Activity:	ACTIVE

Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	02/28/2005
Violation Code:	6HV1012

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Violation:	SPCC PLAN NOT PREPARED
Violation Citation:	Spill Prevention Countermeasures & Control Plan not prepared as required. 25270.5 (c)
Activity:	ACTIVE
Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	11/06/2007
Violation Code:	6HV0307
Violation:	ILLEGAL DISPOSAL OF UNIVERSAL WASTE
Violation Citation:	Disposal of universal waste to an unauthorized point. 25189.5(a); SQH:66273.11(a); LQH: 66273.31(a)
Activity:	ACTIVE
Facility Id:	104644
Business Type:	6HK39
EPA Id Number:	CAL000038829
APN:	298-421-08-00
Last HMMD Inspection:	12/04/2009
Permit Status:	OPEN
Permit Expiration:	04/30/2013
Facility Owner:	DEL MAR THOROUGHBRED CLUB
Facility Address:	PO BOX 700
Facility City:	DEL MAR
Facility State:	CA
Facility Zip:	92014-
UST Owner:	DEL MAR THOROUGHBRED CLUB
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Y
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 104644 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	104644
Tank Type:	DOUBLE WALL
Additional Id:	2
Capacity Gallons:	2000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	Not reported
Year Installed:	1987-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	SUCTION
Monitor Code:	21
UST Monitor Method:	DW TANK DW SUCTION AND/ OR GRAVITY PIPING WITH INTERSTITIAL MONITORS: INTERSTITIAL.
UST Name:	UNDERGROUND TANK 104644 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	104644
Tank Type:	SINGLE WALL
Additional Id:	1

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Capacity Gallons: 550
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: REMOVED
Remove Close Date: 1993-06-07 00:00:00
Year Installed: Not reported
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 10
UST Monitor Method: SW TANK DW PRESSURE PIPE W/POS SHUTOFF LLD W/DAILY RECONCILE OR WEEKLY GAUGE: TNK TEST ANN, PIPE TEST ANN 0.1 GAL/HR OR MO 0.2 GAL/HR

UST Name: UNDERGROUND TANK 104644 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 104644
Tank Type: UNKNOWN
Additional Id: 2/AT4875
Capacity Gallons: 2000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: REMOVED
Remove Close Date: 2004-01-14 00:00:00
Year Installed: Not reported
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 10
UST Monitor Method: SW TANK DW PRESSURE PIPE W/POS SHUTOFF LLD W/DAILY RECONCILE OR WEEKLY GAUGE: TNK TEST ANN, PIPE TEST ANN 0.1 GAL/HR OR MO 0.2 GAL/HR

Active Permits:
Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: CARBRITE CLEAN ALL; CONTAINS POTASSIUM HYDROXIDE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 444 USED BATTERIES
Other Information: BRODING BATTERIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: 1305-62-0
Name: CALCIUM HYDROXIDE CAUSTIC LIME
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Facility Id:	104644
Update Date:	11/02/2012
Case Number:	7782-44-7
Name:	OXYGEN
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE

Facility Id:	104644
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 135 UNSPECIFIED AQUEOUS SOL'N
Other Information:	PARTS WASHER
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Facility Id:	104644
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 461 PAINT SLUDGE
Other Information:	PAINT SLUDGE AND THINNER
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Facility Id:	104644
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	GASOLINE
Other Information:	REGULAR UNLEADED
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE

Facility Id:	104644
Update Date:	11/02/2012
Case Number:	8002-05-9
Name:	OIL: LUBRICATING
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	ACUTE

Facility Id:	104644
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 221 WASTE OIL & MIXED OIL
Other Information:	WASTE OIL
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Facility Id:	104644
Update Date:	11/02/2012
Case Number:	Not reported

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Name: WASTE 342 ORGANIC LIQUIDS W/METALS
Other Information: WASTE ANTIFREEZE - DRUM & AST
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 902 INFECTIOUS WASTE, SHARPS
Other Information: SHARPS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: 68476-34-6
Name: DIESEL
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Facility Id: 104644
Update Date: 11/02/2012
Case Number: 107-21-1
Name: ETHYLENE GLYCOL
Other Information: METAL DRUM & AST
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 222 OIL/WATER SEPARATION SLUDGE
Other Information: SUMP SLUDGE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: 74-86-2
Name: ACETYLENE
Other Information: Not reported
Material Waste: Material

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Facility Id: 104644
Update Date: 11/02/2012
Case Number: 124-38-9
Name: INERT GASES CARBON DIOXIDE; COMPRESSED GAS W/ARGON
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: MIXTURE
Name: LACQUER THINNER
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Facility Id: 104644
Update Date: 11/02/2012
Case Number: 107-21-1
Name: VINYLE ACRYLIC PAINT ETHYLENE GLYCOL
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Facility Id: 104644
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: OIL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:

Facility Id: 104644
Update Date: 11/02/2012
Inspection Date: 02/04/2003
Violation Code: 6HV1003
Violation: HMBP NOT AMENDED W/IN 30 DAYS
Violation Citation: Business plan was not amended within 30 days for a 100% quantity increase, new disclosable materials or a change in business info. HSC 25505
Activity: ACTIVE

Facility Id: 104644
Update Date: 11/02/2012
Inspection Date: 02/28/2005
Violation Code: 6HV0209
Violation: WASTE ONSITE >90/180/270 DAYS
Violation Citation: Hazardous waste is stored in excess of allowable time period (90 days) without a State permit or written variance. CCR 25201(a) &

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

	66262.34(a)&(c)
Activity:	ACTIVE
Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	11/06/2007
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	12/04/2009
Violation Code:	6HV0221
Violation:	DID NOT COMPLY W/SATELLITE REGS.
Violation Citation:	Failed to comply with satellite regulations. 66262.34(e)
Activity:	ACTIVE
Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	11/06/2007
Violation Code:	6HV0402
Violation:	TRAINING PROGRAM NOT ADEQUATE
Violation Citation:	Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity:	ACTIVE
Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	02/04/2003
Violation Code:	6HV3257
Violation:	2NDRY CONTAINMENT NOT LIQUID FREE
Violation Citation:	Secondary containment system components not liquid free. 2631(d)(4)
Activity:	ACTIVE
Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	02/28/2005
Violation Code:	6HV1009
Violation:	HMBP: INADEQUATE SITE MAP
Violation Citation:	Business Plan does not have a site map which provides sufficient or complete information for emergency response agencies. HSC 25509(a)(5) & 25505(a)(2)
Activity:	ACTIVE
Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	12/04/2009
Violation Code:	6HV0225
Violation:	ACCUMULATED HW>180 OR >270 DAYS
Violation Citation:	Accumulated waste too long (>180 or 270 days). 66262.34(d), CFR 262.34(e)&(f), &/or 25201(a) [>90 days for AHW waste]
Activity:	ACTIVE
Facility Id:	104644

DEL MAR THOROUGHBRED CLUB (Continued) **S100726712**

Update Date:	11/02/2012
Inspection Date:	02/28/2005
Violation Code:	6HV1012
Violation:	SPCC PLAN NOT PREPARED
Violation Citation:	Spill Prevention Countermeasures & Control Plan not prepared as required. 25270.5 (c)
Activity:	ACTIVE
Facility Id:	104644
Update Date:	11/02/2012
Inspection Date:	11/06/2007
Violation Code:	6HV0307
Violation:	ILLEGAL DISPOSAL OF UNIVERSAL WASTE
Violation Citation:	Disposal of universal waste to an unauthorized point. 25189.5(a); SQH:66273.11(a); LQH: 66273.31(a)
Activity:	ACTIVE

D11
NE
1/8-1/4
0.147 mi.
778 ft.

22ND DISTRICT AGRICULTURAL ASS **HIST UST** **1000183052**
DEL MAR FAIRGROUNDS **N/A**
DEL MAR, CA 92014

Site 3 of 3 in cluster D

Relative:
Lower

Actual:
12 ft.

HIST UST:

Region:	STATE
Facility ID:	00000058595
Facility Type:	Other
Other Type:	FAIRGROUNDS
Total Tanks:	0001
Contact Name:	LARRY BAUMANN
Telephone:	6197551161
Owner Name:	22ND DISTRICT AGRICULTURAL ASS
Owner Address:	DEL MAR FAIRGROUNDS
Owner City,St,Zip:	DEL MAR, CA 92014
Tank Num:	001
Container Num:	ONE
Year Installed:	Not reported
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Tank Construction:	Not reported
Leak Detection:	Visual, Stock Inventor

12
NNE
1/4-1/2
0.372 mi.
1964 ft.

CAMP C.J. MILLER **ENVIROSTOR** **S107736010**
N/A
DEL MAR, CA

Relative:
Lower

Actual:
12 ft.

ENVIROSTOR:

Facility ID:	80000974
Status:	Inactive - Needs Evaluation
Status Date:	07/01/2005
Site Code:	Not reported

CAMP C.J. MILLER (Continued) **S107736010**

Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	78
Senate:	39
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	32.975
Longitude:	-117.2597
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA99799FA35700
Alias Type:	Federal Facility ID
Alias Name:	J09CA7328
Alias Type:	INPR
Alias Name:	80000974
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Inventory Project Report (INPR)
Completed Date:	09/21/1999
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

E13 **DEL MAR THOROUGHBRED CLUB** **LUST** **S100933739**
NNE **2260 JIMMY DURANTE BLVD** **San Diego Co. HMMD** **N/A**
1/4-1/2 **DEL MAR, CA 92014** **WDS**
0.400 mi.
2110 ft. **Site 1 of 3 in cluster E**

Relative:
Lower

Actual:
12 ft.

LUST REG 9:

Region:	9
Status:	Case Closed
Case Number:	9UT2696
Local Case:	H04644-003
Substance:	Diesel

DEL MAR THOROUGHBRED CLUB (Continued) **S100933739**

Qty Leaked: Not reported
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site
Local Agency: San Diego
How Found: Tank Closure
How Stopped: Close Tank
Source: Tank
Cause: Corrosion
Lead Agency: Local Agency
Case Type: Aquifer affected
Date Found: 07/06/1993
Date Stopped: 07/06/1993
Confirm Date: 07/06/1993
Submit Workplan: Not reported
Prelim Assess: 07/06/1993
Desc Pollution: Not reported
Remed Plan: / /
Remed Action: Not reported
Began Monitor: Not reported
Release Date: 07/08/1993
Enforce Date: Not reported
Closed Date: 9/26/00
Enforce Type: Not reported
Pilot Program: LOP
Basin Number: 905.11
GW Depth: 5.5
Beneficial Use: Municipal groundwater use
NPDES Number: Not reported
Priority: 2B
File Dispn: Not reported
Interim Remedial Actions: Not reported
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported

Region: 9
Status: Case Closed
Case Number: 9UT756
Local Case: H04644-001
Substance: Unleaded Gasoline
Qty Leaked: Not reported
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site
Local Agency: San Diego
How Found: Tank Closure
How Stopped: New Tank
Source: Tank
Cause: Corrosion
Lead Agency: Local Agency
Case Type: Other ground water affected
Date Found: 07/01/1987
Date Stopped: 07/09/1987
Confirm Date: 07/09/1987
Submit Workplan: Not reported
Prelim Assess: 07/31/1987
Desc Pollution: Not reported
Remed Plan: / /
Remed Action: Not reported

DEL MAR THOROUGHBRED CLUB (Continued) **S100933739**

Began Monitor: Not reported
Release Date: 07/09/1987
Enforce Date: Not reported
Closed Date: 9/26/00
Enforce Type: Not reported
Pilot Program: LOP
Basin Number: 905.11
GW Depth: 2.5'
Beneficial Use: NBNB/E
NPDES Number: Not reported
Priority: 2B
File Dispn: File discarded, case closed
Interim Remedial Actions: Yes
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported

SAN DIEGO CO. HMMD:
Facility Id: 136166
Business Type: 6HK18
EPA Id Number: Not reported
APN: 299-071-03-00
Last HMMD Inspection: 03/14/2012
Permit Status: OPEN
Permit Expiration: 07/31/2013
Facility Owner: VERIZON WIRELESS
Facility Address: 15505 SAND CANYON AV #D
Facility City: IRVINE
Facility State: CA
Facility Zip: 92618-
UST Owner: Not reported
Handle Regulated Hazmat: Y
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Active Permits:
Facility Id: 136166
Update Date: 11/02/2012
Case Number: 7664-93-9
Name: SULFURIC ACID SOLUTION IN 12 BATTERY
Other Information: CELLS (6NB ABSOLYTE IIP)
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: EXTREMELY HAZARDOUS

Violations Active Permits:
Facility Id: 136166
Update Date: 11/02/2012
Inspection Date: 01/10/2007
Violation Code: 6HV1002
Violation: HMBP NOT ESTABISHED/IMPLEMENTED.
Violation Citation: Hazardous materials handler has not established/implemented a business plan. HSC 25503.5(a)
Activity: ACTIVE

DEL MAR THOROUGHBRED CLUB (Continued) **S100933739**

CA WDS:

Facility ID:	San Diego 37I001942
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	9
Facility Telephone:	Not reported
Facility Contact:	Not reported
Agency Name:	22ND DIST AGRICULTURAL ASSOC
Agency Address:	2260 JIMMY DURANTE BLVD
Agency City,St,Zip:	DEL MAR 920142216
Agency Contact:	Not reported
Agency Telephone:	Not reported
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

E14 **DEL MAIR FAIR** **LUST** **S100853677**
NNE **2260 JIMMY DURANTE BLVD** **N/A**
1/4-1/2 **DEL MAR, CA 92014**
0.400 mi.
2110 ft. **Site 2 of 3 in cluster E**

Relative:
Lower

Actual:
12 ft.

LUST REG 9:

Region:	9
Status:	Case Closed
Case Number:	9UT3584

DEL MAIR FAIR (Continued) **S100853677**

Local Case: H03436-001
Substance: Unleaded Gasoline
Qty Leaked: 0
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site
Local Agency: San Diego
How Found: Tank Closure
How Stopped: Close Tank
Source: Unknown
Cause: Unknown
Lead Agency: Local Agency
Case Type: Soil only
Date Found: 10/30/1997
Date Stopped: 10/30/1997
Confirm Date: / /
Submit Workplan: Not reported
Prelim Assess: 01/12/1998
Desc Pollution: Not reported
Remed Plan: / /
Remed Action: Not reported
Began Monitor: Not reported
Release Date: 11/17/1997
Enforce Date: Not reported
Closed Date: 10/12/00
Enforce Type: Not reported
Pilot Program: LOP
Basin Number: 905.11
GW Depth: 6'
Beneficial Use: MUNBU
NPDES Number: Not reported
Priority: 1B
File Dispn: Administratively opened on database, however no file physically exists
Interim Remedial Actions: Not reported
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported

E15 **CA ST OF 22ND DISTRICT AGRIC A** **NPDES** **S104745683**
NNE **2260 JIMMY DURANTE BL** **HIST CORTESE** **N/A**
1/4-1/2 **DEL MAR, CA 92014** **LUST**
0.400 mi. **EMI**
2110 ft. **Site 3 of 3 in cluster E** **SAN DIEGO CO. SAM**

Relative:
Lower

Actual:
12 ft.

NPDES:
Npdes Number: Not reported
Facility Status: Active
Agency Id: 0
Region: 9
Regulatory Measure Id: 439499
Order No: Not reported
Regulatory Measure Type: Enrollee
Place Id: Not reported
WDID: 9 37M2000085
Program Type: Phase II Small MS4
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 07/25/2013
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: 22nd District Agricultural Association

CA ST OF 22ND DISTRICT AGRIC A (Continued) **S104745683**

Discharge Address:	2260 Jimmy Durante Blvd
Discharge City:	Del Mar
Discharge State:	California
Discharge Zip:	92014
Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	9
Regulatory Measure Id:	439924
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	9 37C367399
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	08/12/2013
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	22nd District Agricultural Association
Discharge Address:	2260 Jimmy Durante Blvd
Discharge City:	Del Mar
Discharge State:	California
Discharge Zip:	92014
Npdes Number:	CAG999002
Facility Status:	Active
Agency Id:	345310
Region:	9
Regulatory Measure Id:	379729
Order No:	R9-2011-0022
Regulatory Measure Type:	Enrollee
Place Id:	767542
WDID:	9 000002294
Program Type:	NPDNONMUNIPRCS
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	06/16/2011
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	22nd District Agricultural Association
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	9
Regulatory Measure Id:	218202
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	9 37I001942
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	02/03/1993

CA ST OF 22ND DISTRICT AGRIC A (Continued) **S104745683**

Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	22nd District Agricultural Association
Discharge Address:	2260 Jimmy Durante Blvd
Discharge City:	Del Mar
Discharge State:	California
Discharge Zip:	92014
Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	9
Regulatory Measure Id:	312832
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	9 37C343985
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	10/13/2006
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	22nd District Agricultural Association
Discharge Address:	2260 Jimmy Durante Blvd
Discharge City:	Del Mar
Discharge State:	California
Discharge Zip:	92014

HIST CORTESE:

Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT2696
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT3584
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT756

LUST:

Region:	STATE
Global Id:	T0607302352
Latitude:	32.9787694
Longitude:	-117.2566989
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/12/2000
Lead Agency:	SAN DIEGO COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	9UT3584

CA ST OF 22ND DISTRICT AGRIC A (Continued) **S104745683**

LOC Case Number:	H03436-001
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Status History:

Global Id:	T0607302352
Status:	Open - Case Begin Date
Status Date:	10/30/1997

Global Id:	T0607302352
Status:	Completed - Case Closed
Status Date:	10/12/2000

Regulatory Activities:

Global Id:	T0607302352
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0607302352
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

Global Id:	T0607302352
Action Type:	Other
Date:	01/01/1950
Action:	Leak Began

Global Id:	T0607302352
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

EMI:

Year:	2000
County Code:	37
Air Basin:	SD
Facility ID:	1553
Air District Name:	SD
SIC Code:	7999
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

CA ST OF 22ND DISTRICT AGRIC A (Continued) **S104745683**

Year:	2001
County Code:	37
Air Basin:	SD
Facility ID:	1553
Air District Name:	SD
SIC Code:	7999
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	37
Air Basin:	SD
Facility ID:	1553
Air District Name:	SD
SIC Code:	7999
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	37
Air Basin:	SD
Facility ID:	1553
Air District Name:	SD
SIC Code:	7999
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	37
Air Basin:	SD
Facility ID:	1553
Air District Name:	SD
SIC Code:	7999

CA ST OF 22ND DISTRICT AGRIC A (Continued) **S104745683**

Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.0463705
Reactive Organic Gases Tons/Yr:	0.043267125
Carbon Monoxide Emissions Tons/Yr:	0.07699525
NOX - Oxides of Nitrogen Tons/Yr:	0.33697375
SOX - Oxides of Sulphur Tons/Yr:	0.00434875
Particulate Matter Tons/Yr:	0.019433
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.019093

Year:	2005
County Code:	37
Air Basin:	SD
Facility ID:	1553
Air District Name:	SD
SIC Code:	7999
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.0463705
Reactive Organic Gases Tons/Yr:	.043267125
Carbon Monoxide Emissions Tons/Yr:	.07699525
NOX - Oxides of Nitrogen Tons/Yr:	.33697375
SOX - Oxides of Sulphur Tons/Yr:	.00434875
Particulate Matter Tons/Yr:	.0201967505854800936
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.019093

Year:	2006
County Code:	37
Air Basin:	SD
Facility ID:	1553
Air District Name:	SD
SIC Code:	7999
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.0463705
Reactive Organic Gases Tons/Yr:	.043267125
Carbon Monoxide Emissions Tons/Yr:	.07699525
NOX - Oxides of Nitrogen Tons/Yr:	.33697375
SOX - Oxides of Sulphur Tons/Yr:	.00434875
Particulate Matter Tons/Yr:	.0201967505854800936
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.019093

SAN DIEGO CO. SAM:

Case Number:	H03436-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - Federal Fund**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	10/12/2000
Date Began:	10/30/1997

F16 **NAVY DIRIGIBLE BASE** **FUDS** **1009484357**
ESE **N/A**
1/2-1 **DEL MAR, CA**
0.508 mi.
2681 ft. **Site 1 of 2 in cluster F**

Relative:
Lower

Actual:
15 ft.

FUDS:

Federal Facility ID:	CA9799FA060
FUDS #:	J09CA7237
INST ID:	54024
Facility Name:	NAVY DIRIGIBLE BASE
City:	DEL MAR
State:	CA
EPA Region:	09
County:	SAN DIEGO
Congressional District:	50
US Army District:	Los Angeles District (SPL)
Fiscal Year:	2011
Telephone:	213-452-3920
NPL Status:	Not Listed
RAB:	Not reported
CTC:	11.7
Current Owner:	STATE
Current Prog:	Not reported
Future Prog:	Not reported
Description:	The western boundary of the site begins approximately 300 yards east of the bridge as one proceeds east on the dirt road. A deteriorated barbwire fence serves to mark the western border of the site. Also at this point, next to the dirt road, is a sign indicating the beginning of the border of the City of San Diego. The site therefore, resides in the City of San Diego. From this sign, the remains of Grand Ave. (now a dirt road proceeds east and roughly separates the Lagoon located south of the road, from the site located north the road. The dirt road extends to a fence which is within 100 feet of the Interstate 5 freeway. The property on the other side of the fence is owned by the State of California and is part of the Interstate right-of-way. On the other side of the freeway is an approximately 8 acre parcel of land that was part of NAAF Del Mar. It is accessed from El Camino Real and a series of dirt roads winding through cultivated land. The main portion of the site is bounded on the south by San Dieguito Lagoon and, beyond it, a small residential development in the hills. On the east it is bounded by Interstate 5 and on described above. The Navy acquired a total of 80.04 acres in 1941 for use as an auxiliary airfield and emergency landing strip. In 1942 it was converted into a Naval auxiliary air facility to support dirigibles which were used for anti-submarine warfare off the western coast. Military improvements to the site included 6 buildings, 5 ordnance magazines, a septic tank and sewer lines, a 12,000 gallon gasoline underground storage tank and pump, landing mat and roadways paved with asphalt and concrete, domestic water lines, and electrical services. After WWII, the County opened a municipal airport on the site under a permit from the Navy. In 1947, the Navy quitclaimed the property to the County of San Diego. It is believed that all military improvements were beneficially used by the County, including the 12,000 gasoline UST. The County operated the airport for 14 years until the construction of Interstate 5, which bisected the airport, required its closure in 1959. Currently, 26 acres of the property are owned by the State of California as part of the Interstate 5 right-of-way and 54 acres of it are owned by the San Dieguito River

NAVY DIRIGIBLE BASE (Continued) **1009484357**

Regional Park Joint Powers Authority which plans to begin wetland restoration activities in the next couple of years.

F17 **NAVY DIRIGIBLE** **ENVIROSTOR** **S107736862**
ESE **N/A**
1/2-1 **DEL MAR, CA**
0.513 mi.
2707 ft. **Site 2 of 2 in cluster F**

Relative:
Lower

Actual:
15 ft.

ENVIROSTOR:

Facility ID:	80000918
Status:	Inactive - Needs Evaluation
Status Date:	07/01/2005
Site Code:	Not reported
Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	78
Senate:	39
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	32.9675
Longitude:	-117.2538
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA99799FA06000
Alias Type:	Federal Facility ID
Alias Name:	J09CA7237
Alias Type:	INPR
Alias Name:	80000918
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Inventory Project Report (INPR)
Completed Date:	09/29/1999
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Count: 6 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
DEL MAR	S109118198	SAN DIEGUITO WETLANDS RESTORATION	0 SAN DIEGUITO RD (PALM DR NE)	92014	LUST, SAN DIEGO CO. SAM
SOLANA BEACH	S106915857	JUNE & MILTON ULLMAN	343 HY 101	92075	SAN DIEGO CO. SAM
SOLANA BEACH	S114532190	SAN ELIJO LAGOON GATEWAY	0 SOUTH COAST HIGHWAY 101	92075	SLIC
SOLANA BEACH	S106916381	SOLANA BEACH CHIROPRACTIC	155 S HY 101	92075	SAN DIEGO CO. SAM
SOLANA BEACH	S106915880	THE GAS STATION ETC	435 N HY 101	92075	SAN DIEGO CO. SAM
SOLANA BEACH	U001572313	PHILIP D. SCHOFIELD & MARCIA S	EL MONTEVIDEO BETWEEN SAN ELIJ	92075	HIST UST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/21/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/09/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/09/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 02/28/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/31/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 151

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/10/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 02/28/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/17/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/17/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/20/2013
Date Data Arrived at EDR: 11/21/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 95

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 02/03/2014
Date Data Arrived at EDR: 02/06/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 39

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 02/03/2014
Date Data Arrived at EDR: 02/06/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 39

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/14/2014
Date Data Arrived at EDR: 02/18/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 28

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/16/2014
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 02/21/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/27/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 66
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 07/30/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 129
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 92

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 01/29/2014
Date Data Arrived at EDR: 01/29/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 42

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 271

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 02/03/2014
Date Data Arrived at EDR: 02/06/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 39

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/17/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/24/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/20/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: No Update Planned

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30
Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 02/20/2014
Date Made Active in Reports: 03/27/2014
Number of Days to Update: 35
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/04/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 65
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/04/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 02/03/2014
Date Data Arrived at EDR: 02/06/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 39
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 20
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/04/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 01/17/2014
Date Data Arrived at EDR: 01/21/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 24

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 52

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 10/14/2013
Date Data Arrived at EDR: 10/30/2013
Date Made Active in Reports: 12/03/2013
Number of Days to Update: 34

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 18

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/06/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/24/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 31

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/27/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/25/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/05/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/26/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/28/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/28/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 107

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/28/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/09/2014
Date Data Arrived at EDR: 01/10/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/10/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/18/2013
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 13

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/14/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/01/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/28/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/17/2014
Date Data Arrived at EDR: 02/18/2014
Date Made Active in Reports: 03/27/2014
Number of Days to Update: 37

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/25/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/30/2013
Date Data Arrived at EDR: 12/31/2013
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 42
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 35
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Annually

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 19

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 41

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/17/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 58

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/25/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 11/20/2013
Date Data Arrived at EDR: 12/03/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/14/2014
Date Data Arrived at EDR: 02/18/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 28

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: N/A

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 21
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/25/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/13/2014
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 28
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/14/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Quarterly

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 09/20/2013
Date Data Arrived at EDR: 12/11/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 24
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/28/2014
Date Data Arrived at EDR: 01/30/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 12

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/22/2014
Date Data Arrived at EDR: 01/23/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 19

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/22/2014
Date Data Arrived at EDR: 01/23/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 20

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa Facility List

Date of Government Version: 12/05/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 24

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 20

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 56

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 12/05/2013
Date Data Arrived at EDR: 12/05/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 53

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 21

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 02/05/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/09/2013
Date Data Arrived at EDR: 01/10/2013
Date Made Active in Reports: 02/25/2013
Number of Days to Update: 46

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/20/2014
Date Data Arrived at EDR: 02/21/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 27

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 02/04/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 28

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 14

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 21

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/25/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/06/2013
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 48
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/02/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/20/2014
Date Data Arrived at EDR: 01/21/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 21
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/21/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/07/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/25/2014
Number of Days to Update: 28
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 02/10/2014
Date Data Arrived at EDR: 02/12/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 33
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 33
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/20/2014
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 01/03/2014
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 34

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/25/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 91

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List

CUPA Facility List

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/04/2014
Date Made Active in Reports: 04/01/2014
Number of Days to Update: 28

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 01/09/2014
Date Data Arrived at EDR: 01/10/2014
Date Made Active in Reports: 02/14/2014
Number of Days to Update: 35

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/06/2014
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 27

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/01/2014
Date Data Arrived at EDR: 02/12/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 33

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/03/2014
Date Data Arrived at EDR: 02/13/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 33

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2014
Date Data Arrived at EDR: 02/12/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 34

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

PLACER COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 28
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/14/2014
Date Data Arrived at EDR: 01/15/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 27
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/02/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/14/2014
Date Data Arrived at EDR: 01/15/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 28
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 33
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 33
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/26/2013
Date Data Arrived at EDR: 11/27/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 34

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2013
Date Data Arrived at EDR: 11/19/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 42

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 12/18/2013
Date Data Arrived at EDR: 12/19/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 20

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/26/2014
Date Made Active in Reports: 03/26/2014
Number of Days to Update: 28

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 01/13/2014
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 28

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/12/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 03/04/2014
Date Data Arrived at EDR: 03/06/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 14

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/07/2014
Date Data Arrived at EDR: 02/11/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 34

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 23

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 12/03/2013
Date Data Arrived at EDR: 12/04/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 29

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/18/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 21

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/19/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 20

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/02/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 40

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/03/2014
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 39

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 12/10/2013
Date Data Arrived at EDR: 12/11/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 24

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 48

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 01/28/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 23

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/17/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 10/02/2013
Date Data Arrived at EDR: 10/30/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 28

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 03/21/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/26/2013
Date Data Arrived at EDR: 12/18/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 21

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 12/18/2013
Date Data Arrived at EDR: 12/24/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 15

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 02/11/2014
Date Data Arrived at EDR: 02/13/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 32

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 12/06/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/21/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/17/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/07/2014
Date Made Active in Reports: 03/31/2014
Number of Days to Update: 52

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 03/12/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

2101-2125 JIMMY DURANTE BLVD
2101-2125 JIMMY DURANTE BLVD
DEL MAR, CA 92014

TARGET PROPERTY COORDINATES

Latitude (North):	32.9697 - 32° 58' 10.92''
Longitude (West):	117.2634 - 117° 15' 48.24''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	475385.3
UTM Y (Meters):	3647767.8
Elevation:	17 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	32117-H3 DEL MAR OE W, CA
Most Recent Revision:	0
East Map:	32117-H2 DEL MAR, CA
Most Recent Revision:	1975

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

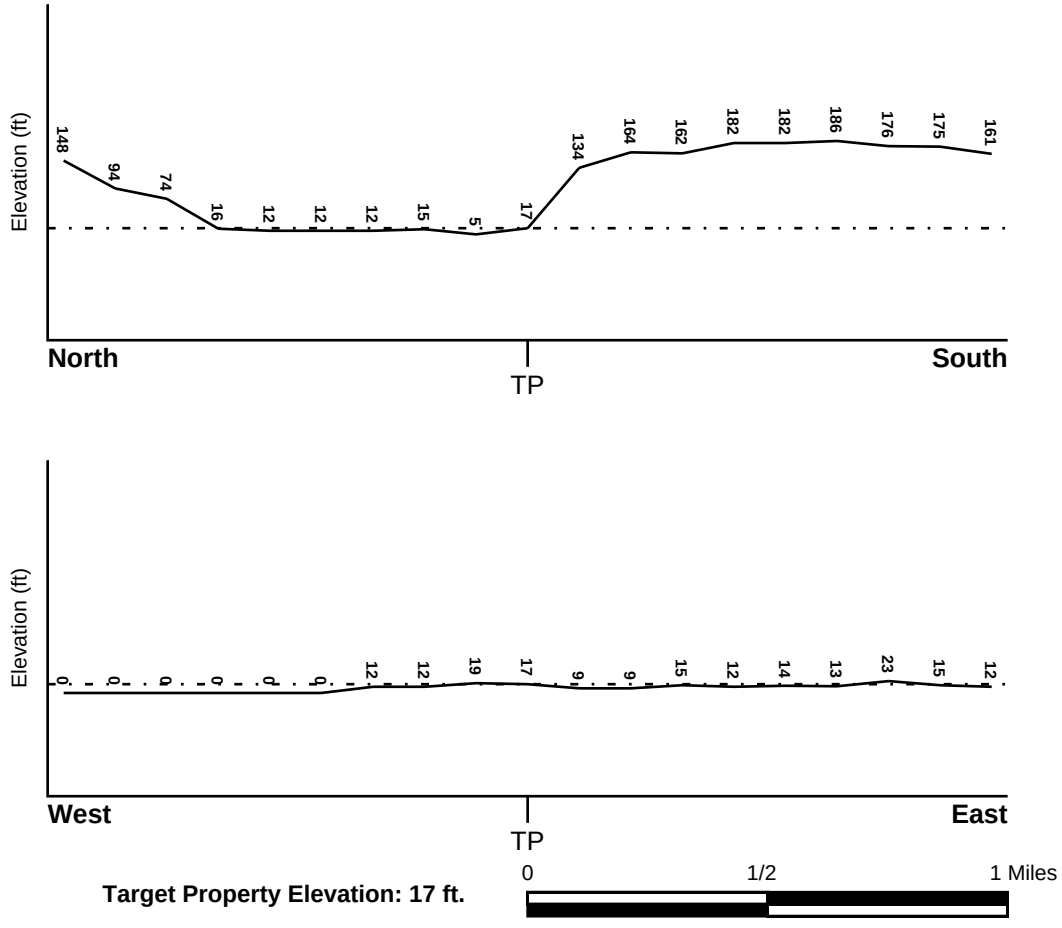
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General North

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 17 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SAN DIEGO, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06073C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WEST DEL MAR (OE)	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/8 - 1/4 Mile NE	WNW
3	1/2 - 1 Mile NNE	SW

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

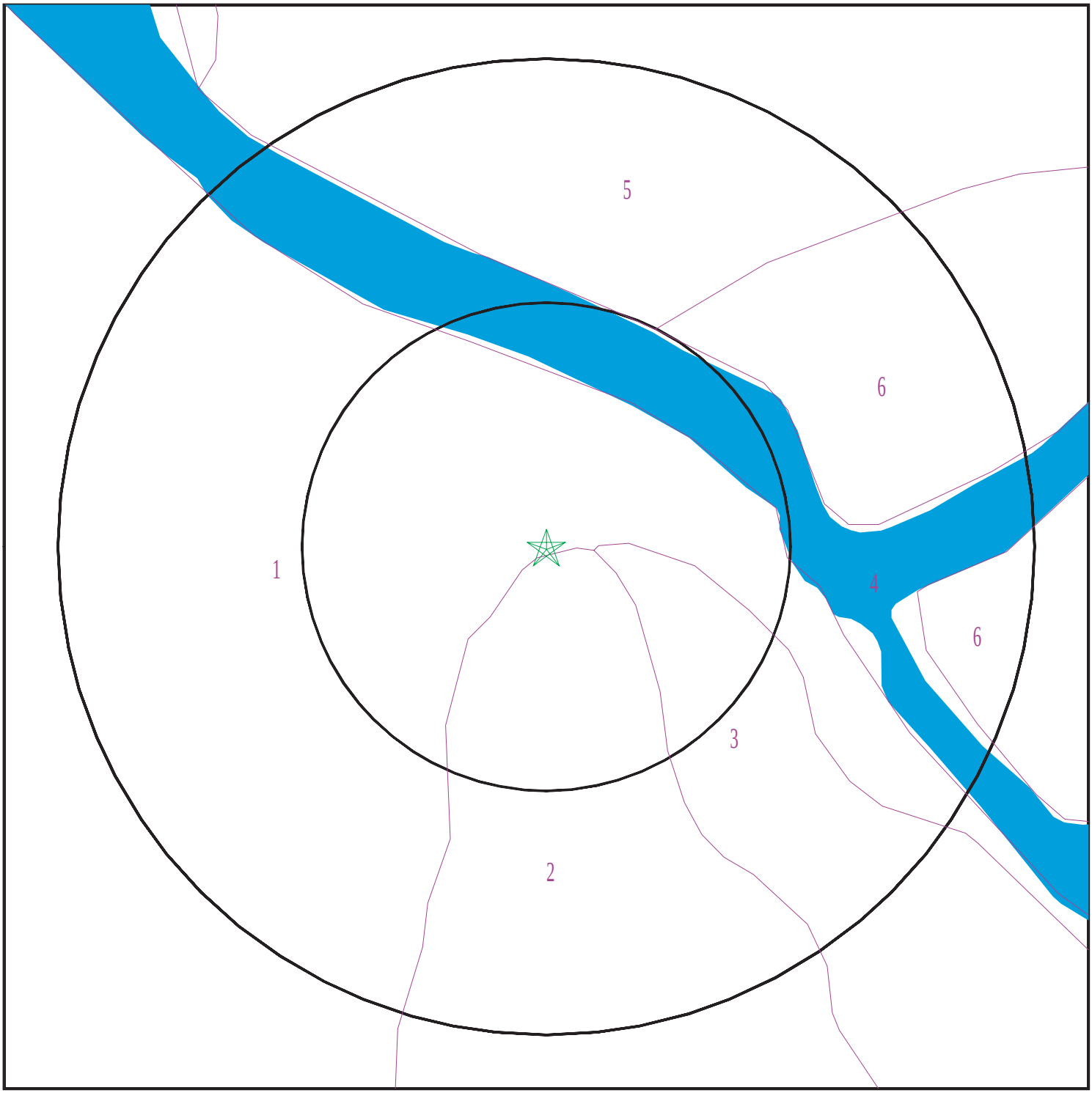
Era:	Cenozoic
System:	Tertiary
Series:	Eocene
Code:	Te *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3906289.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	2101-2125 JIMMY DURANTE BLVD	CLIENT:	Kleinfelder, Inc.
ADDRESS:	2101-2125 JIMMY DURANTE BLVD Del Mar CA 92014	CONTACT:	Margaret Carroll
LAT/LONG:	32.9697 / 117.2634	INQUIRY #:	3906289.2s
		DATE:	April 08, 2014 5:55 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: TUJUNGA

Soil Surface Texture: sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6
2	14 inches	33 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.6
3	33 inches	59 inches	stratified gravelly sand to gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.6

Soil Map ID: 2

Soil Component Name: LOAMY ALLUVIAL LAND

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: TERRACE ESCARPMENTS

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: LAKES AND LAGOONS

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 5

Soil Component Name: MADE LAND

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 6

Soil Component Name: TIDAL FLATS

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Very poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

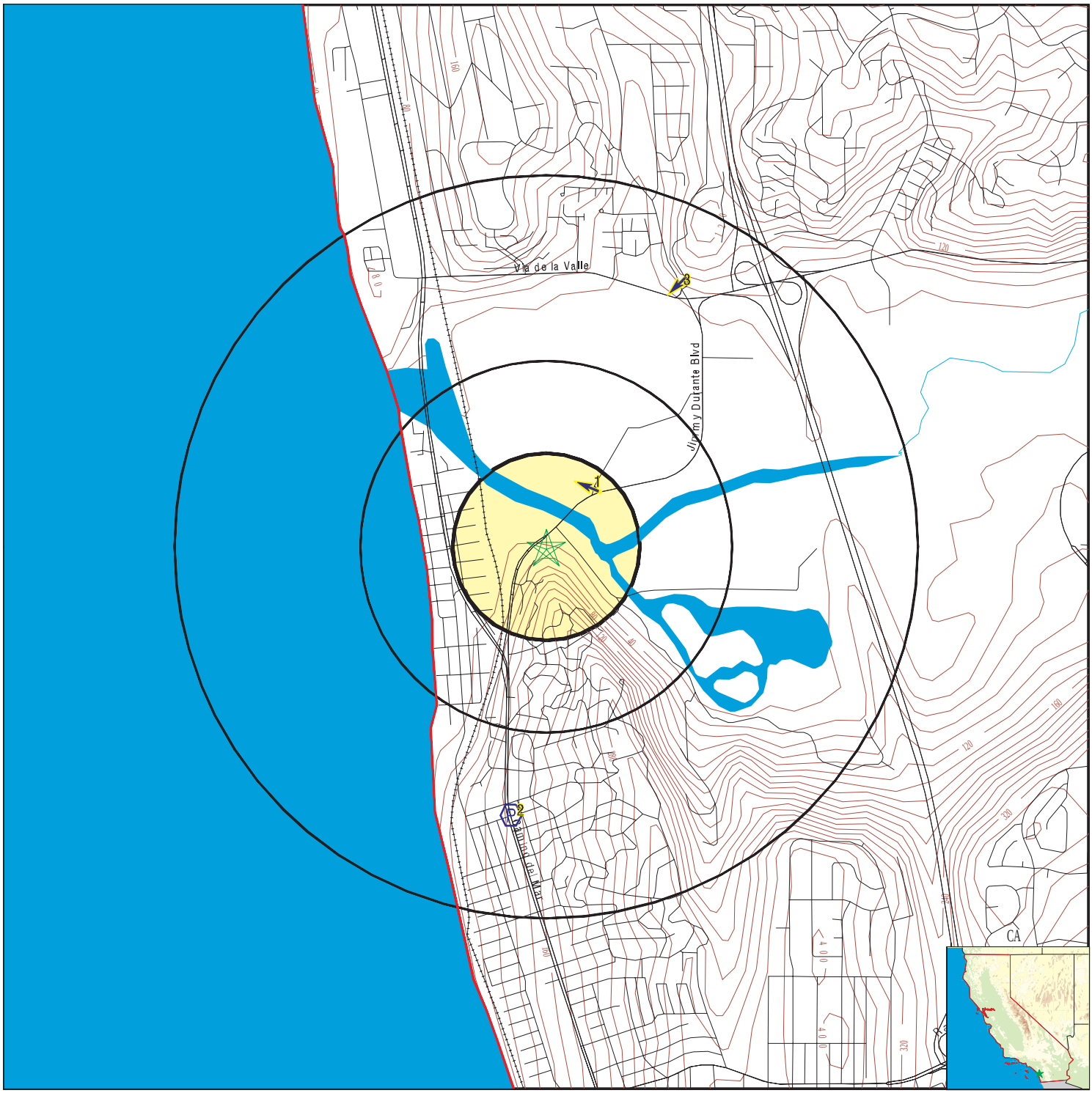
MAP ID	WELL ID	LOCATION FROM TP
2	CA3710004	1/2 - 1 Mile South

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 3906289.2s



0 1/4 1/2 1 Miles

- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	2101-2125 JIMMY DURANTE BLVD	CLIENT:	Kleinfelder, Inc.
ADDRESS:	2101-2125 JIMMY DURANTE BLVD Del Mar CA 92014	CONTACT:	Margaret Carroll
LAT/LONG:	32.9697 / 117.2634	INQUIRY #:	3906289.2s
		DATE:	April 08, 2014 5:55 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

			Database	EDR ID Number
1 **NE** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported WNW Not Reported Not Reported 11 10/15/1991	**AQUIFLOW**	**38677**

2
South
1/2 - 1 Mile
Higher

FRDS PWS **CA3710004**

PWS ID: CA3710004
Date Initiated: Not Reported Date Deactivated: Not Reported
PWS Name: DEL MAR - CITY OF
DEL MAR, CA 920142698

Addressee / Facility: Not Reported

Facility Latitude: 32 57 33 Facility Longitude: 117 15 51
City Served: DEL MAR CITY
Treatment Class: Mixed (treated and untreated) Population: 5211

PWS currently has or had major violation(s) or enforcement: YES

VIOLATIONS INFORMATION:

Violation ID: 9314001 Source ID: Not Reported PWS Phone: Not Reported
Vio. beginning Date: 11/01/92 Vio. end Date: 11/30/92 Vio. Period: 001 Months
Num required Samples: Not Reported Number of Samples Taken: Not Reported
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: MCL, Monthly (TCR)
Contaminant: COLIFORM (TCR)
Vio. Awareness Date: 113092

Violation ID: 94V0001 Source ID: Not Reported PWS Phone: Not Reported
Vio. beginning Date: 06/30/93 Vio. end Date: 12/29/93 Vio. Period: 006 Months
Num required Samples: Not Reported Number of Samples Taken: Not Reported
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: Initial Tap Sampling for Pb and Cu
Contaminant: LEAD & COPPER RULE
Vio. Awareness Date: Not Reported

Violation ID: 94V0002 Source ID: Not Reported PWS Phone: Not Reported
Vio. beginning Date: 12/31/93 Vio. end Date: 06/30/94 Vio. Period: 006 Months
Num required Samples: Not Reported Number of Samples Taken: Not Reported
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: Initial Tap Sampling for Pb and Cu
Contaminant: LEAD & COPPER RULE
Vio. Awareness Date: Not Reported

ENFORCEMENT INFORMATION:

Truedate:	03/31/2009	Pwsid:	CA3710004
Pwsname:	Del Mar - City of		
Retpopsrvd:	4555	Pwstypecod:	C
Vioid:	0314003	Contaminant:	COLIFORM (TCR)
Viol. Type:	Monitoring, Repeat Minor (TCR)		
Complperbe:	11/1/2002 0:00:00		
Complperen:	11/30/2002 0:00:00	Enfdate:	11/13/2002 0:00:00
Enf action:	State Formal NOV Issued		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3710004
Pwsname:	Del Mar - City of		
Retpopsrvd:	4555	Pwstypecod:	C
Vioid:	94V0001	Contaminant:	LEAD & COPPER RULE
Viol. Type:	Initial Tap Sampling for Pb and Cu		
Complperbe:	6/30/1993 0:00:00		
Complperen:	3/1/2000 0:00:00	Enfdate:	3/1/2000 0:00:00
Enf action:	Fed Compliance Achieved		
Violmeasur:	0		

System Name:	DEL MAR - CITY OF		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-11-01 - 1999-11-30		
Violation ID:	0014002		
Enforcement Date:	1999-12-03	Enf. Action:	State Compliance Achieved

System Name:	Del Mar - City of		
Violation Type:	Monitoring, Repeat Minor (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	11/01/02 - 11/30/02		
Violation ID:	0314003		
Enforcement Date:	11/13/02	Enf. Action:	State Formal NOV Issued

System Name:	Del Mar - City of		
Violation Type:	Monitoring, Repeat Minor (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	11/1/2002 0:00:00 - 11/30/2002 0:00:00		
Violation ID:	0314003		
Enforcement Date:	11/13/2002 0:00:00	Enf. Action:	State Formal NOV Issued

System Name:	DEL MAR - CITY OF		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-06-30 - 2000-03-01		
Violation ID:	94V0001		
Enforcement Date:	2000-03-01	Enf. Action:	Fed Compliance Achieved

System Name:	Del Mar - City of		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	06/30/93 - 03/01/00		
Violation ID:	94V0001		
Enforcement Date:	03/01/00	Enf. Action:	Fed Compliance Achieved

ENFORCEMENT INFORMATION:

System Name:	Del Mar - City of		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	6/30/1993 0:00:00 - 3/1/2000 0:00:00		
Violation ID:	94V0001		
Enforcement Date:	3/1/2000 0:00:00	Enf. Action:	Fed Compliance Achieved
System Name:	DEL MAR - CITY OF		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-06-30 - 2015-12-31		
Violation ID:	94V0001		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	DEL MAR - CITY OF		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-12-31 - 2000-03-01		
Violation ID:	94V0002		
Enforcement Date:	2000-03-01	Enf. Action:	Fed Compliance Achieved
System Name:	DEL MAR - CITY OF		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-12-31 - 2015-12-31		
Violation ID:	94V0002		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	Del Mar - City of		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	12/31/1993 0:00:00 - 3/1/2000 0:00:00		
Violation ID:	94V0002		
Enforcement Date:	3/1/2000 0:00:00	Enf. Action:	Fed Compliance Achieved
System Name:	Del Mar - City of		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	12/31/93 - 03/01/00		
Violation ID:	94V0002		
Enforcement Date:	03/01/00	Enf. Action:	Fed Compliance Achieved

CONTACT INFORMATION:

Name:	Del Mar - City of	Population:	4555
Contact:	David Scherer	Phone:	8587553294
Address:	1050 Camino del Mar		
Address 2:	2240 Jimmy Durante Blvd. Del Mar, CA 92014		

3
NNE
1/2 - 1 Mile
Higher

Site ID:	Not Reported
Groundwater Flow:	SW
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	9
Date:	01/16/1991

AQUIFLOW **38804**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92014	13	0

Federal EPA Radon Zone for SAN DIEGO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 92014

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.250 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX C

USER PROVIDED AND REGULATORY AGENCY DOCUMENTATION

Interview Documentation

User Questionnaire
Jimmy Durante Boulevard and San Dieguito Road
Del Mar, California 92014
APNs: 299-100-47 and 299-100-48

Only the client ("user") needs to respond to the following questions:

1) Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law?
   a) NO.

2) Are you aware of any Activity and Use Limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?
   a) NO

3) As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
   a) NO

4) Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?
   a) Purchase price reflects fair value.

5) Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

   i) Do you know the past uses of the property?
      (1) Property is vacant. Property has been used in the past as an overflow parking lot for the seasonal Fair at the Del Mar Fairgrounds.
   ii) Do you know of specific chemicals that are present or once were present at the property?
      (1) NO.
   iii) Do you know of spills or other chemical releases that have taken place at the property?
      (1) NO.
   iv) Do you know of any environmental cleanups that have taken place at the property?
      (1) NO.

INTERVIEW QUESTIONNAIRE
PHASE I ENVIRONMENTAL SITE ASSESSMENT
Compatible with ASTM Standard E 1527-13

Prepared by Kleinfelder Environmental Site Characterization Practice Group
Version 1: February 20, 2006

Site Name: APNs 299-100-47 and 299-100-48

Site Address: South of intersection of Jimmy Durante Boulevard and San Dieguito Road

Date: April 10, 2014

Interviewer: Margaret Carroll, Kleinfelder

Interviewee: MICHAEL BAKER

Site Association: owner (current)

Years Associated: 2003 -

Please answer the following questions to the best of your knowledge.

1. Was the property or adjoining property ever used for industrial purposes (e.g. manufacturing) or as a gas station, dry cleaners, waste treatment, processing facility, motor repair facility, photo lab, commercial printing facility, junkyard/disposal/recycling/ landfill? If yes, please list the activity, hazardous substances used, and approximate dates when the activity occurred. NO

   Prior land use, hazardous substances used, and dates:
   Not to our knowledge.

   Prior owners, key site managers/operators, occupants and dates:
   Philip Jefferson before 2003

   Existing or prior structures used for what purposes and duration:
   N/A

2. Do any of the following documents exist for the site or any portion of the site? If so, can you provide Kleinfelder with a copy? (This question to be asked before site visit).

- [x] Environmental site assessment reports
- [x] Environmental compliance audit reports
- [ ] Environmental permits
- [ ] Underground Storage Tank registration
- [ ] Underground Injection System registration
- [ ] Material Safety Data Sheets
- [ ] Community Right-To-Know Plan
- [ ] Safety plans: preparedness and prevention plans; spill prevention; countermeasure; and control plans, etc.
- [ ] Reports regarding hydrogeologic conditions on the property or surrounding area;
- [ ] Correspondence from any government agency relating to past or current violations of environmental laws with regard to the property or relating to environmental liens encumbering the property
- [ ] Hazardous waste generator notices or reports
- [x] Geotechnical studies
- [ ] Risk assessments
- [ ] Recorded Activity and Use Limitations (AULs)

3. Have you ever observed evidence of or do you have prior knowledge of any of the following items being used, stored, discarded, dumped above grade, buried, or burned onsite? Circle all that apply and indicate amount and approximate dates.

MATERIAL	QUANTITY	DATE(S) OBSERVED	COMMENTS
Above ground storage tank (AST)*			Size: Contents: Condition:
Automotive batteries			
Industrial batteries			
Pesticides (>5 gallon)		2013	Tony Cassolato
Paints (> 5 gallon)			
Chemicals/Hazardous Substances (> 5 gallon liquid)			

MATERIAL	QUANTITY	DATE(S) OBSERVED	COMMENTS
Chemicals/Hazardous Substances (dry sacks, containers, etc.)			
Industrial drums (typically 55 gallons)			Contents: Condition:
Transformer or other equipment that may contain PCBs (e.g. hydraulic equipment)*			Installation date:
Underground storage tank*			Size: Contents: Condition:
Unknown materials you suspect may be hazardous substances			Describe:

*Please provide records if available.

4. What method(s) is used to contain spills of hazardous waste?

N/A

5. What method(s) is used to dispose of hazardous waste?

N/A

6. Are there any permits for handling, use, storage, or disposal of hazardous waste?

No

7. Have you observed evidence of or have prior knowledge of the following onsite?

MATERIAL	QUANTITY	DATE(S) OBSERVED	COMMENTS
Equipment Maintenance Areas			
Accidental spills or releases of chemicals or petroleum products			

MATERIAL	QUANTITY	DATE(S) OBSERVED	COMMENTS
Possible asbestos containing materials (e.g. pipe, building, etc.)			Describe material:
Fill dirt originating from an unknown or contaminated site?			Source:
Pits, ponds, or lagoons associated with waste treatment or waste disposal?			Location:
Stained soil or odiferous soil? (e.g. oily black)			Location:
Sumps or dry wells*			Size : Contents : Condition :
Vent pipes, fill pipes, access ways to a fill pipe protruding from the ground or adjacent to a structure onsite?			Location:
Heating and cooling systems (include fuel source)			Source:
Flooring, drains, walls that are stained or emitting a foul odor (do NOT include water damage)?			Location:

*Please provide records if available.

8. Is the property served by a private well or non-public water system? If so, please answer the following: NO

   a. Was the well used for domestic (D), agricultural irrigation (I), or monitoring (M) purposes? Are the wells currently operational and if not, when were they last used? When was the well drilled? How deep is the well? What is the approximate discharge rate?

Well No.	Type	Operating?	Last Used	Date Drilled	Depth	Discharge Rate	Location
1-							
2-							

b. Have the wells been sampled for contaminants that exceed applicable requirements for the designated use (e.g. Drinking Water Standards)? If so, please provide the dates and copies of well records.

c. Has the well or water system been designated by any governmental environmental/health agency as contaminated?

9. Is there an oil/gas well or oil/gas vent located onsite? If so, please indicate the location. Please supply any documents available.

NO

10. Is the property or has the property to your knowledge been previously served by a septic system? If so, please indicate the location of the tank and leach lines (if applicable) and list any hazardous materials disposed.

NA

11. Does the property discharge waste water into a storm water sewer system or a sanitary sewer system onto or adjacent to the property? If so, please describe location, piping flow, quantity discharged, and water quality.

NO

12. Do you have knowledge of the following with respect to the property? Circle and explain all that apply.

a. Environmental clean-up, ongoing or pending.

b. Environmental liens

c. Governmental notifications regarding any possible past or present violations of environmental laws.

d. Past, threatened, pending lawsuits or administrative proceedings relevant to a release of a hazardous substance or petroleum product, in, on, or from the property.

e. Prior environmental assessment that indicated the presence of hazardous substances, petroleum hydrocarbons, contaminants, or recommended further assessment.

f. Deed Restrictions

g. Citizen complaints regarding activities onsite

AGRICULTURAL SITES:

13. What crops have been grown onsite, currently and in the past?

CROP	DATE	LOCATION
old Aerial Views shown agriculture on site	before 50'	

If crops are present or have been grown, please answer questions 14 through 16 below:

14. Have pesticides been applied to fields or other portions of the site? If so, please answer the following questions:

a. List the names of pesticides (includes herbicides, fungicides, insecticides, rodenticide) used and dates applied.

PESTICIDE AND BRAND NAME	DATE	CROP OR ANIMAL USE
have no knowledge sprayed	2013	native vegetation

b. Have you been notified of any violation of environmental law with respect to application or storage of pesticides?

NO

c. Location of pesticide mixing areas, if any (past or present)?

no knowledge

d. Method of pesticide application?

Spray

15. Have fertilizers been applied to the site? What type and method of application?

No knowledge

~~Why were I been - don't know type spray application~~

16. Are there any buried pipelines for irrigation or other purposes onsite? If so, what materials is the piping constructed of? Asbestos containing material, PVC, other? Describe the location of buried piping.

We have no knowledge.

User Questionnaire
Jimmy Durante Boulevard and San Dieguito Road
Del Mar, California 92014
APNs: 299-100-47 and 299-100-48

Only the client ("user") needs to respond to the following questions:

6) As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?
   a) No.

Name:

Marne Bouillon
Director of Design and Construction
Kitchell Development Company
853 Camino Del Mar, Suite 200
Del Mar, CA 92014

Date: April 14, 2014

Property Tax Map Report (Assessor’s Maps)

2101-2125 JIMMY DURANTE BLVD
2101-2125 JIMMY DURANTE BLVD
Del Mar, CA 92014

Inquiry Number: 3906289.6
April 08, 2014

The EDR Property Tax Map Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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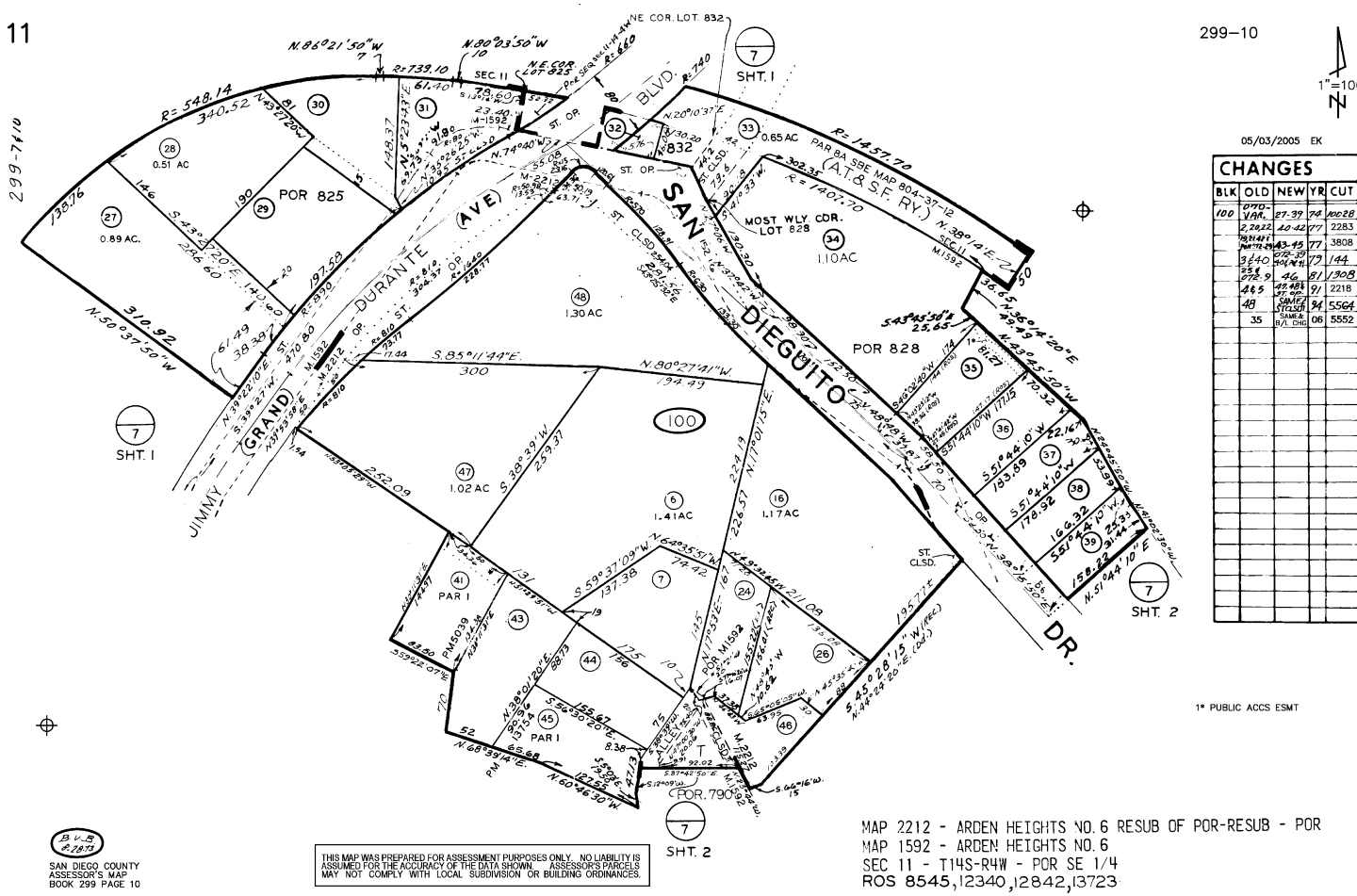
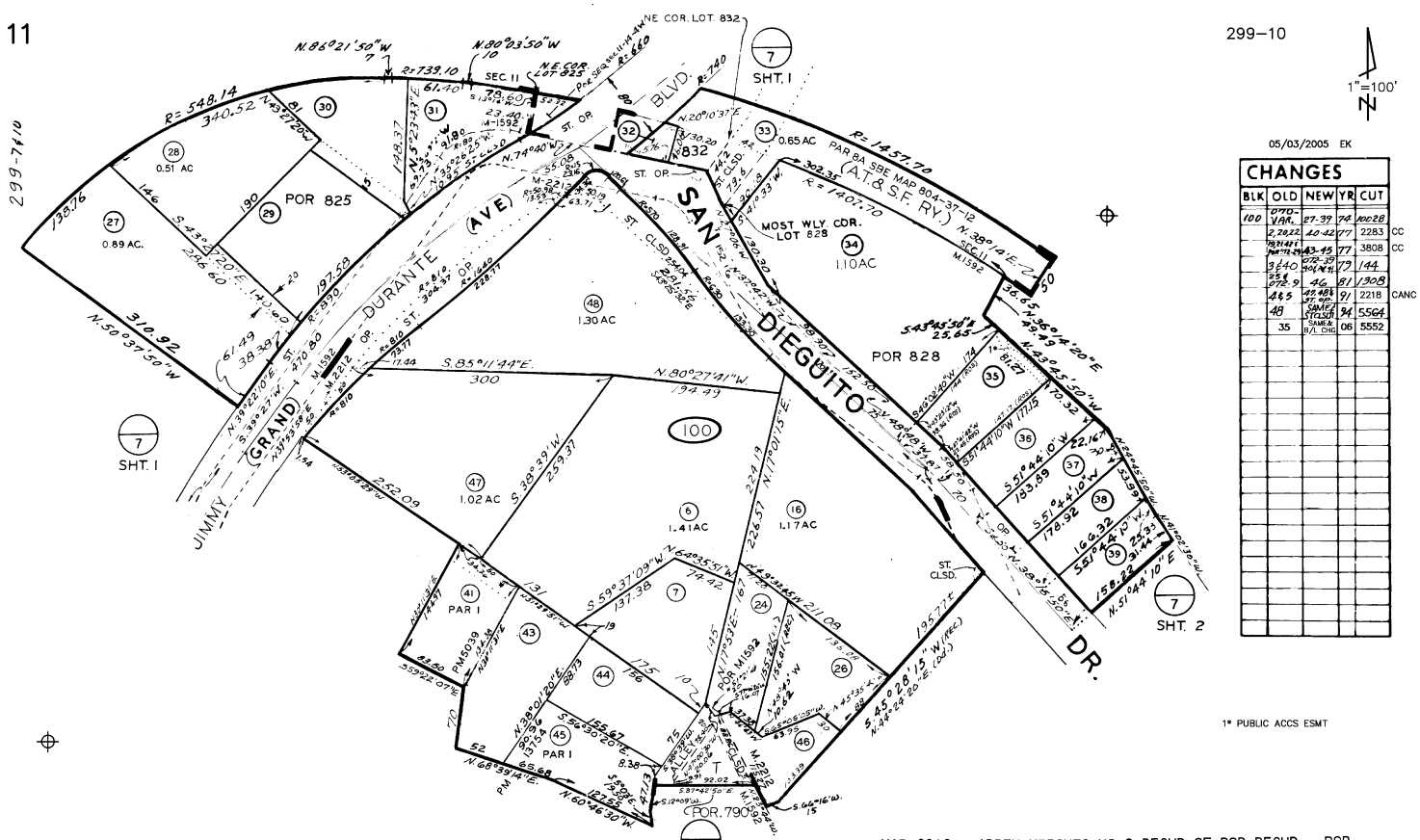

11
299-10
1"=100'
05/03/2005 EK
CHANGES
BLK OLD NEW YR CUT
100 070-VAR. 27-39 74 10028
2,2022 40-42 77 2283 CC
3&40 070-39 79 144
258 070-9 46 81 1308
465 81 2218 CANC
48 SAME & STRIKE 84 5564
35 SAME & B/L CHG 06 5552
299-7&10
SEC 11
NE COR. LOT 832
N.E. COR LOT 833
N.85°21'50"W
N.89°03'50"W
R=739.10
R=548.14
340.52
N45°27'20"W
R=660
R=740
LA JOLLA BLVD.
SAN DIEGUITO DR.
DURANTE (AVE)
GRAND (AVE)
JIMMY
832
833
POR 825
POR 828
MOST WLY CDR. LOT 828
0.51 AC
0.89 AC.
1.10AC
1.30 AC
1.02 AC
1.41AC
1.17AC
0.65 AC
PAR 8A SBE MAP 804-37-12
(AT & S.F. RY.)
R=1407.70
R=1457.70
N.39°14'E.
N.39°14'20"E
N.23°45'50"W
S.23°45'50"E
25.65
N.50°37'50"W
310.92
S.85°11'44"E.
300
N.90°27'41"W.
194.49
S.38°39'W
259.37
N.17°00'15"E.
226.37
N.51°04'10"E
158.22
S.51°04'10"W
183.89
178.92
166.32
S.45°28'15"W
N.44°24'20"E
POR. 790.92
PAR I
PAR II
ST. CL.SD.
ST. OP.
1* PUBLIC ACCS ESMT
7
SHT. 1
SHT. 2
100
B.V.S. 2.28.74
SAN DIEGO COUNTY ASSESSOR'S MAP BOOK 299 PAGE 10
THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.
MAP 2212 - ARDEN HEIGHTS NO. 6 RESUB OF POR-RESUB - POR
MAP 1592 - ARDEN HEIGHTS NO. 6
SEC 11 - T14S-R4W - POR SE 1/4
ROS 8545,12340,12842,13723



B.V.S. 2.28.73

SAN DIEGO COUNTY
ASSESSOR'S MAP
BOOK 299 PAGE 10

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

MAP 2212 - ARDEN HEIGHTS NO. 6 RESUB OF POR-RESUB - POR
MAP 1592 - ARDEN HEIGHTS NO. 6
SEC 11 - T14S-R4W - POR SE 1/4
ROS 8545,12340,12842,13723

EDR Environmental Lien and AUL Search

2101-2125 JIMMY DURANTE BLVD
2101-2125 JIMMY DURANTE BLVD
Del Mar, CA 92014

Inquiry Number: 3906289.7
April 09, 2014

EDR Environmental Lien and AUL Search

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

2101-2125 JIMMY DURANTE BLVD
2101-2125 JIMMY DURANTE BLVD
Del Mar, CA 92014

RESEARCH SOURCE

Source 1:

San Diego Recorder
San Diego, CA

PROPERTY INFORMATION

Deed 1:

Type of Deed:	deed
Title is vested in:	Del Mar Charrette
Title received from:	Mary Lou Ludwig Jefferson Trustee
Deed Dated	2/24/2004
Deed Recorded:	5/17/2004
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	
Miscellaneous Comments:	
Legal Description:	See Exhibit
Legal Current Owner:	Del Mar Charrette
Parcel # / Property Identifier:	299-100-47-00, 299-100-48-00
Comments:	See Exhibit

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found ☐ Not Found ☒

Deed Exhibit 1

RECORDING REQUESTED BY:
Fidelity National Title Company
Escrow No. 13138436-LS
Title Order No. 01895164

When Recorded Mail Document and Tax Statement To:
Michael Batter
2195 San Dieguito Drive
Del Mar, CA 92014

14077 DOC # 2004-0447938

MAY 17, 2004 3:00 PM

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 2883.00
DC: DC

2004-0447938

APN: 299-100-47-00 & 299-100-48-00

GRANT DEED

SPACE ABOVE THIS LINE FOR RECORDER'S USE

The undersigned grantor(s) declare(s)
Documentary transfer tax is $2,860.00
[X] computed on full value of property conveyed, or
[ ] computed on full value less value of liens or encumbrances remaining at time of sale,
[ ] Unincorporated Area City of Del Mar

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Mary Lou Ludwig Jefferson, Trustee under the Jefferson Family Trust dated September 25, 1978

hereby GRANT(S) to DEL MAR CHARRETTE, A CALIFORNIA CORPORATION

the following described real property in the City of Del Mar
County of San Diego, **State of** California:
SEE EXHIBIT ONE ATTACHED HERETO AND MADE A PART HEREOF

DATED: February 24, 2004

STATE OF CALIFORNIA
COUNTY OF SAN DIEGO
ON MARCH 25, 2004 before me, ROSLYN J. BREMAN personally appeared MARY LOU LUDWIG JEFFERSON, Trustee
personally known to me ~~(or proved to me on the basis of satisfactory evidence)~~ to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

Witness my hand and official seal.

Signature Roslyn J Breman

Mary ~~Lou~~ Ludwig Jefferson, Trustee under the Jefferson Family Trust dated September 25, 1978

By: Mary Lou Ludwig Jefferson

Mary Lou Ludwig Jefferson, Trustee

ROSLYN J. BREMAN
Commission # 1333261
Notary Public - California
San Diego County
My Comm. Expires Jan 1, 2006

MAIL TAX STATEMENTS AS DIRECTED ABOVE

EXHIBIT "ONE"

Parcel 1:

All that portion of the Resubdivision of Arden Heights No. 6, in the City of Del Mar, County of San Diego, State of California, according to the Map thereof No. 2212, filed in the Office of the County Recorder of San Diego County, February 19, 1937, described as follows:

Commencing at the intersection of the Northerly line of Lot "H" of Arden Heights No. 4, in the County of San Diego, according to the Map thereof No. 1343, filed in the Office of the County Recorder, June 8, 1911 with the Easterly line of Road Survey No. 470; thence North 7°15'40" East along the Easterly line of said Road Survey No. 470, a distance of 403.06 feet to the beginning of a curve, concave Southeasterly, whose center bears South 82°44'20" East 810 feet; thence Northeasterly along said curve a distance of 453.92 feet; thence tangent to said curve North 39°22'10" East 49.85 feet to the True Point of Beginning; thence continuing North 39°22'10" East 50.00 feet to the beginning of a curve, concave Southeasterly whose center bears South 50°37'50" East 810 feet; thence Northeasterly along said curve a distance of 50.00 feet; thence South 85°11'44" East 300.00 feet; thence South 38°39' West 259.37 feet; thence North 53°05'29" West 252.99 feet to the True Point of Beginning.

Excepting therefrom that portion as described in deed to the City of Del Mar recorded February 14, 1991 as File No. 1991-0069994in the Office of the County Recorder of San Diego County.

Parcel 2:

That portion of the Resubdivision of Arden Heights No. 6, in the City of Del Mar, County of San Diego, State of California, according to Map thereof No. 2212, filed in the Office of Recorder of San Diego County February 19, 1937, and that portion of the Southwesterly half of San Dieguito Drive of Arden Heights No. 6, according to Map No. 1592, filed in the Office of the Recorder of said San Diego County July 18, 1913 adjoining said Resubdivision of Arden Heights No. 6 on the Northeast; all in the City of Del Mar, County of San Diego, State of California, described as follows:

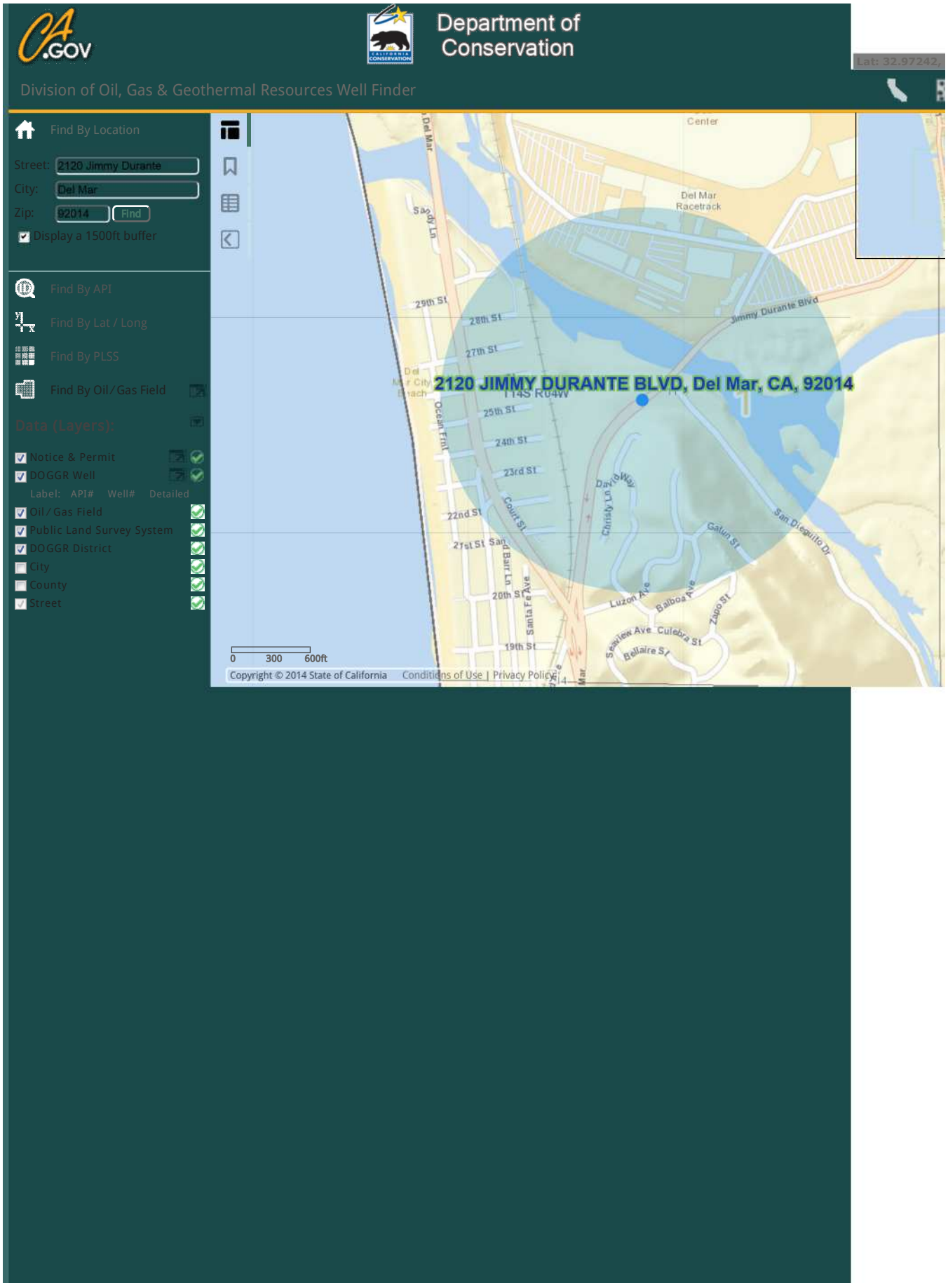
Beginning at the Southern extremity of the most Northerly 810 foot radius curve concave Southeasterly of the Southeasterly line of Grand Avenue (Road Survey No. 470) and the Northwesterly line of the Resubdivision of Arden Heights as shown on Map No. 2212; thence Northeasterly along said curve 50.0 feet to the most Northerly corner of that parcel of land conveyed to James Wilbur Gooding et ux by deed recorded March 8, 1946, File No. 25381 in Book 2077, Page 45 of Official Records and the True Point of Beginning; thence continuing Northeasterly along said curve of said Northwesterly line of said Resubdivision an arc distance of 304.57 feet to a point of reverse curvature with a 740.0 foot radius curve concave Northwesterly; thence Northeasterly along said curve 41.76 feet to the most Northerly corner of said Resubdivision of Arden Heights No. 6, said point being also the intersection with the Southwesterly line of San Dieguito Drive as shown on said Map No. 1592; thence leaving said boundary of said resubdivision and continuing Northeasterly along said 740.00 foot radius curve of the Southeasterly line of Grand Avenue (Road Survey 470) an arc distance of 25.69 feet to an intersection with the center line of that 60.0 foot strip of right of way for County Road known as Road Survey No. 923 as conveyed by William G. Kerckhoff Company, a Corporation, to the County of San Diego by deed recorded April 8, 1943 in Book 1472, Page 485 of Official Records; thence along said center line of Road Survey No. 923 South 43°57'20" East 292.0 feet more or less to a point which bears South 85°11'44" East 300 feet, South 80°27'41" East 194.49 feet and North 17°01'15" East 58.69 feet from the True Point of Beginning; thence South 17°01'15" West 58.69 feet; thence North 80°27'41" West 194.49 feet to the most

Easterly corner of said Gooding land; thence along the Northerly line of said Gooding land North 85°11'44" West 300.0 feet to the True Point of Beginning.

Excepting therefrom that portion as described in deed to the City of Del Mar recorded February 14, 1991 as File No. 1991-0069994 in the Office of the County Recorder of San Diego County.

Assessor's Parcel No: 299-100-47 & 299-100-48

State of California
Division of Oil, Gas, and Geothermal Resources
(DOGGR)


CA.GOV
Department of Conservation
Division of Oil, Gas & Geothermal Resources Well Finder
Find By Location
Street: 2120 Jimmy Durante
City: Del Mar
Zip: 92014
Find
Display a 1500ft buffer
Find By API
Find By Lat / Long
Find By PLSS
Find By Oil / Gas Field
Data (Layers):
Notice & Permit
DOGGR Well
Label: API# Well# Detailed
Oil / Gas Field
Public Land Survey System
DOGGR District
City
County
Street
2120 JIMMY DURANTE BLVD, Del Mar, CA, 92014
T14S R04W
Del Mar Racetrack
Jimmy Durante Blvd
29th St
28th St
27th St
25th St
24th St
23rd St
22nd St
21st St
20th St
19th St
Ocean Front
Court St
Chrisaly Ln
David Way
Galun St
San Dieguito Dr
Luzon Ave
Balboa Ave
Zapo St
Seaview Ave
Culebra St
Bellaire St
Santa Fe Ave
0 300 600ft
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City of Del Mar, Building Services, Planning and Community Development Department

Margaret Carroll

From: City Clerk <do_not_reply@civicplus.com>
Sent: Thursday, April 10, 2014 9:21 AM
To: Margaret Carroll
Subject: Update for request ID 25: Public Records Request

Recent Activity for Your Request

Comment added by *City Clerk* on April 10, 2014 9:20 AM

Good Morning - There are no building permits for the property APN's you provided. There was discretionary review for the properties, but no implementation of any building permits.

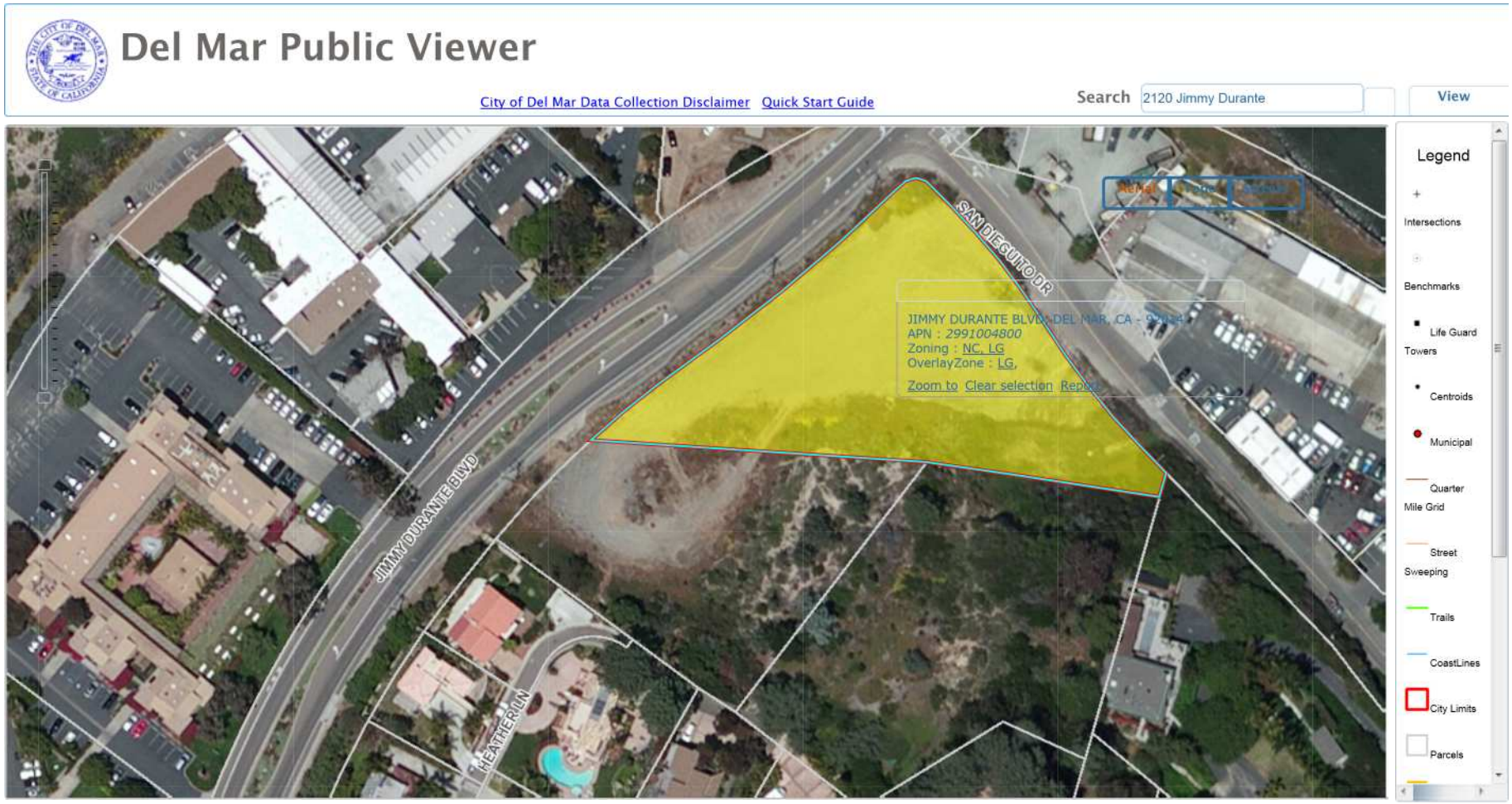
Public Records Request

#25

Request historical and current address information for the following APNs: 299-100-047-00 and 299-100-048-00.
Request a review of, or copies of, building permit information for these properties. Building permits to include original construction permits, demolition permits, septic tank/sewer permits, underground tank permits and major construction (building additions).
Thank you.

Log In To Request Tracker

Del Mar Public Viewer
City of Del Mar Data Collection Disclaimer
Quick Start Guide
Search
2120 Jimmy Durante
View
Aerial
Topo
Streets
SAN DIEGUITO DR
JIMMY DURANTE BLVD
HEATHERLIN
Legend
Intersections
Benchmarks
Life Guard Towers
Centroids
Municipal
Quarter Mile Grid
Street Sweeping
Trails
CoastLines
City Limits
Parcels


Del Mar Public Viewer
City of Del Mar Data Collection Disclaimer
Quick Start Guide
Search
2120 Jimmy Durante
View
SAN DIEGUITO DR
JIMMY DURANTE BLVD
HEATHER RUN
APN : 2991004800
Zoning : NC, LG
OverlayZone : LG,
Zoom to
Clear selection
Legend
Intersections
Benchmarks
Life Guard Towers
Centroids
Municipal
Quarter Mile Grid
Street Sweeping
Trails
CoastLines
City Limits
Parcels

FINAL
ENVIRONMENTAL IMPACT REPORT
and
APPENDICES
for
RIVERVIEW OFFICE PROJECT

SCH NO. 2005061143

Volume I of I

Prepared for:

City of Del Mar
1050 Camino del Mar
Del Mar, California 92014

Prepared by:

Dudek
605 Third Street
Encinitas, California 92024

Third Party Review by:

PBS&J
9275 Sky Park Court, Suite 200
San Diego, California 92123

April 2008

San Diego County, Department of Environmental Health

Margaret Carroll

From: Margaret Carroll
Sent: Tuesday, April 08, 2014 2:41 PM
To: Ellman, Joyce (Joyce.Ellman@sdcounty.ca.gov)
Subject: Request for Public Information

Good afternoon,

I would like to request a review of *all* records at the San Diego County Department of Environmental Health associated with the following property:

Del Mar Dump
San Dieguito Rvr @ Jimmy Durante Boulevard
Del Mar, California 92014
San Diego County
Land Disposal Site

San Diego RWQCB (Region 9) (Lead) – Case #: 9 000475N02
Case Worker: John R. Odermatt

Assessor's Parcel Numbers: 299-100-47-00 and 299-100-48-00

Assessor's Information/San Diego County GIS information does not show addresses associated with this Site. If you are aware of addresses associated with these parcels, please let me know.

Please contact me at your earliest convenience so I may schedule a time to review the records.

Thank you.

Sincerely,

Margaret R. Carroll
Project Professional
620 West 16th Street, #F
Long Beach, CA 90813
o: 562.432.1696, ext. 210
f: 562.432.1796
c: 949.337.5582

Pipeline and Hazardous Materials Safety Administration, National Pipeline Mapping System

Pipeline and Ha

NATIONAL PIPELINE MAPPING SYSTEM

Legend

- Gas Transmission Pipelines
- Hazardous Liquid Pipelines

0 0.06 Miles

Pipelines depicted on this map represent gas transmission and hazardous liquid lines only. Gas gathering and gas distribution systems are not represented.

This map should never be used as a substitute for contacting a one-call center prior to excavation activities. Please call 811 before any digging occurs.

Questions regarding this map or its contents can be directed to npms-nr@mbakercorp.com.

Projection: Geographic

Datum: NAD83

Map produced by the NPMS Public Viewer at www.npms.phmsa.dot.gov

Date Printed: Apr 16, 2014

State Water Resources Control Board GeoTracker™ /
San Diego Regional Water Quality Control Board

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

DEL MAR DUMP (L10009425853) - (MAP)

SIGN UP FOR EMAIL ALERTS

SAN DIEGUITO RVR@JIMMY DURANTE
DEL MAR, CA 92014
SAN DIEGO COUNTY
LAND DISPOSAL SITE
PRINTABLE CASE SUMMARY

CLEANUP OVERSIGHT AGENCIES
SAN DIEGO RWQCB (REGION 9) *(LEAD)* - *CASE #: 9 000475N02*
CASEWORKER: *JOHN R. ODERMATT*

Regulatory Profile

CLEANUP STATUS - DEFINITIONS
OPEN - CLOSING/WITH MONITORING AS OF 1/13/2014 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
NONE SPECIFIED

POTENTIAL MEDIA AFFECTED
NONE SPECIFIED

FILE LOCATION
REGIONAL BOARD

BENEFICIAL USE
NONE SPECIFIED

Site History

No site history available

Cleanup Action Report

NO CLEANUP ACTIONS EXIST

PUBLIC PARTICIPATION

CATEGORY	DATE
CATEGORY 1 - INFO	10/30/2009

COMMUNITY INVOLVEMENT DOCUMENTS

NO COMMUNITY INVOLVEMENT DOCUMENTS HAVE BEEN UPLOADED

Copyright © 2014 State of California

0.2226563 seconds

Margaret Carroll

From: Mitchell, Roger@Waterboards <Roger.Mitchell@waterboards.ca.gov>
Sent: Monday, April 14, 2014 2:45 PM
To: Margaret Carroll
Cc: Odermatt, John@Waterboards; ODonovan, Rachel@Waterboards; Chan, Julie@Waterboards
Subject: Request to Review Records
Attachments: Staff File Notes_1973 August 1373870.pdf; Staff File Notes_1973 March 1373871.pdf; Staff File Notes_1973 October 1373872.pdf; Del Mar Dump Map circa 1974 1373880.pdf; Del Mar Dump Site Maps_1973 March 1373873.pdf; Inspection Form_1974 July 1373874.pdf; Inspection Form_1974 Sept 1373875.pdf; San Diego County Solid Waste Facility List_1995 1373876.pdf; Sandor Sharpery Letter_1974 1373877.pdf; Staff File Notes_1971 July 1373866.pdf; Staff File Notes_1972 August 1373867.pdf; Staff File Notes_1973 April 1373868.pdf

Ms. Carroll,

It is my understanding the your were requesting a review of all records at the San Diego Water Board office associated with the Del Mar Dump. I spent some time looking for this information and was able to find the attached files. To our knowledge, this constitutes the extent of the documents in our office associated with the Del Mar Dump.

I attempted to contact on your cell phone, but the call could not be completed due to the mailbox had not be setup. I did however, leave you a voicemail on your office phone. If you have any further questions, please feel free to contact me at your earliest convenience. My contact information is provided below.

Roger N. Mitchell, P.G.
Engineering Geologist
San Diego Regional Water Quality Control Board
Groundwater Protection Branch
2375 Northside Drive, Suite 100
San Diego, CA 92108
Roger.Mitchell@waterboards.ca.gov
Phone 619-521-5898

Margaret Carroll

From: Odermatt, John@Waterboards <John.Odermatt@waterboards.ca.gov>
Sent: Monday, April 14, 2014 3:00 PM
To: Margaret Carroll
Subject: Automatic reply: Request to Review Records

THIS IS AN AUTOMATIC RESPONSE - WE HAVE MOVED!

I am out of the office. Please note that our new address will be: California Regional Water Quality Control Board, San Diego Region- 2375 Northside Drive, Suite 100, San Diego, California 92108. Our General Phone number is 619-516-1990 at our new office.

While I am out of the office, you may also want to contact the following Land Discharge Unit staff for site-specific issues:

Landfills: Ms. Amy Grove (TEL 619-521-3920 or agrove@waterboards.ca.gov)

Septic systems/Wastewater/Recycled Water: Mr. Fisayo Osibodu (TEL 619-521-8036 oosibodu@waterboards.ca.gov)

Conditional Waiver Renewals: Mr. Roger Mitchell (TEL 619-521-5898 or rmitchell@waterboards.ca.gov)

or you can contact my supervisor Julie Chan (TEL 619-516-1990 or jchan@waterboards.ca.gov)

Regards,

John R. Odermatt, PG, M.Sc. B.Sc.
Senior Engineering Geologist
Cleanup and Land Discharge Branch
TEL 619-521-5906

Also, see our San Diego Water Board web page at: http//www.waterboards.ca.gov/sandiego/

SOLANA BEACH BURNSITE

Type: SOLID WASTE BURNSITE
Status: PRE-88 CLOSURE

SWIS #
Estab #
REC # 098
Incorporated: Yes

Site Location: SUN VALLEY RD., SOLANA BEACH

Operator Information
COUNTY OF SAN DIEGO - DPW ( ) 974-2600
9621 RIDGEHAVEN CT

Owner Information
DAVID G. PRICE
1633 26TH ST SANTA MONICA

TOURMALINE BEACH BURNSITE

Type: SOLID WASTE BURNSITE
Status: PRE-88 CLOSURE

SWIS #
Estab #
REC # 099
Incorporated: Yes

Site Location: TOURMALINE ST, SAN DIEGO

Operator Information
CITY OF SAN DIEGO (619) 492-5020
4950 MURPHY CANYON RD

Owner Information
UNKNOWN

VISTA BURNSITE

Type: SOLID WASTE BURNSITE
Status: PRE-88 CLOSURE

SWIS #
Estab #
REC # 100
Incorporated: Yes

Site Location: NORTH AV/OCEANSIDE B, OCEANSIDE

Operator Information
VISTA SAN. DISTRICT/COUNTY ( ) 974-2661
5555 OVERLAND AV

Owner Information
CITY OF OCEANSIDE ( ) 966-4460
300 N HILL OCEANSIDE

WARNER SPRINGS RANCH

Type: SOLID WASTE BURNSITE
Status: PRE-88 CLOSURE

SWIS #
Estab #
REC # 101
Incorporated: No

Site Location: OFF HWY 79, WARNER SPRINGS

Operator Information
WARNER SPRINGS RANCH ( ) 782-3555
OFF HWY 79

Owner Information
WARNER SPRINGS RANCH ( ) 782-3555
OFF HWY 79 WARNER SPRIN,

DEL MAR DUMP

Type: SOLID WASTE BURNSITE
Status: HISTORICAL RECORD

SWIS #
Estab #
REC # 111
Incorporated: No

Site Location: NEAR FAIRGROUNDS, DEL MAR

Operator Information

Owner Information

file 06-0475.02

OFFICE MEMO

D. 7-15-71

To: file

From: afl

Subject: Del Mar Fairgrounds Dumpsite

on 7-13-71 I talk'd with W. M. Dumond Secy.-Mgr. of Del Mar Fair RE illegal dumpsite @ edge of San Dieguito slough. Dumond said the 22'nd. Ag. Dist. didn't own the property & he didn't know who did. He also said that all mat'ls were hauled to an approved dumpsite for disp. On 7-14-71 I talked with Ted Donvillier at the fair (297-0338). He said 22'nd. Ag. Dist. owned the property & that rubbish had been placed @ pk. lot. boundry by fair people to prevent "lot rodders" from racing through lot. The rest of the dumpsite may be owned by the 22'nd Ag. Dist. or by the Baptist Church (nath.).

To: LB & Dist

From: afe

RE Close of Jan
a pro

see note: RBR

Subj.: Del Mar 9 Mile dumpsites

On 8-14-72 I accompanied ~~Nick Damian~~ Nick 236-5660
& Bud Neal of City of S.D. Sanitation Dept.
to observe 2 illegal dumpsites.

One site was located in a ravine tributary to the San Dieguito River. It was being operated as a landfill. A portion of the area was covered w/ drainage ditches surrounding. Some garbage was dumped in the active portion of the fill.

Mick Damian reported that on 8-13 he had intercepted a truck hauling material to the dump & the driver reported he had paid the landowner for the privilege of dumping.

A second site was discovered on a bluff overlooking the old Del Mar airport. It was similar in informal dump with mixed construction refuse and some garbage. Most of the refuse was from Pardee Homes Del Mar Heights subdivision. The city of SD will initiate their own enforcement activity. They seemed unwilling to ask the Co. Health Dept. for backing until necessary.

After consultation with Paul Peterson, LB decided we should treat as a routine matter.

NOTE: I checked with City Sanitation on 4-16-73. 236-5660 They have since found several more small dumps that are being cleaned up. the two in question have been cleaned up. RDD

File 06-C475.02

To: Files
From: D. L. Salisbury

Date: 3/7/73
Subj: Del Mar dump near Fairgrounds

On February 27, 1973, during staff field inspection near Del Mar, a new dump area was noted in the San Dieguito River Course. This new area is located East of a parking lot on the East side of Jimmy Durante Road and appears to be an extention of the dump area previously noted, which is located on the North side of the San Dieguito River and South of the Del Mar Fairgrounds parking lot. (See Map) The material being deposited consists primarily of asphalt pavement, concrete, and rock; however, lumber, old roofing material, and yard trimmings as well as trash is also being dumped. The dumping of the solid refuse

File 0475.02

is ~~creating a~~ prohibited by the Water Quality Control Plan (Interim), San Diego Basin 9. An excerpt from the plan is as follows:

.....

PROHIBITIONS

The discharge prohibitions contained herein are applicable to any person as defined by Section 13050(c) of the California Water Code and to any person who is a citizen, domiciliary, or political agency or entity of California whose activities in California affect the quality of the waters in the San Diego Basin.

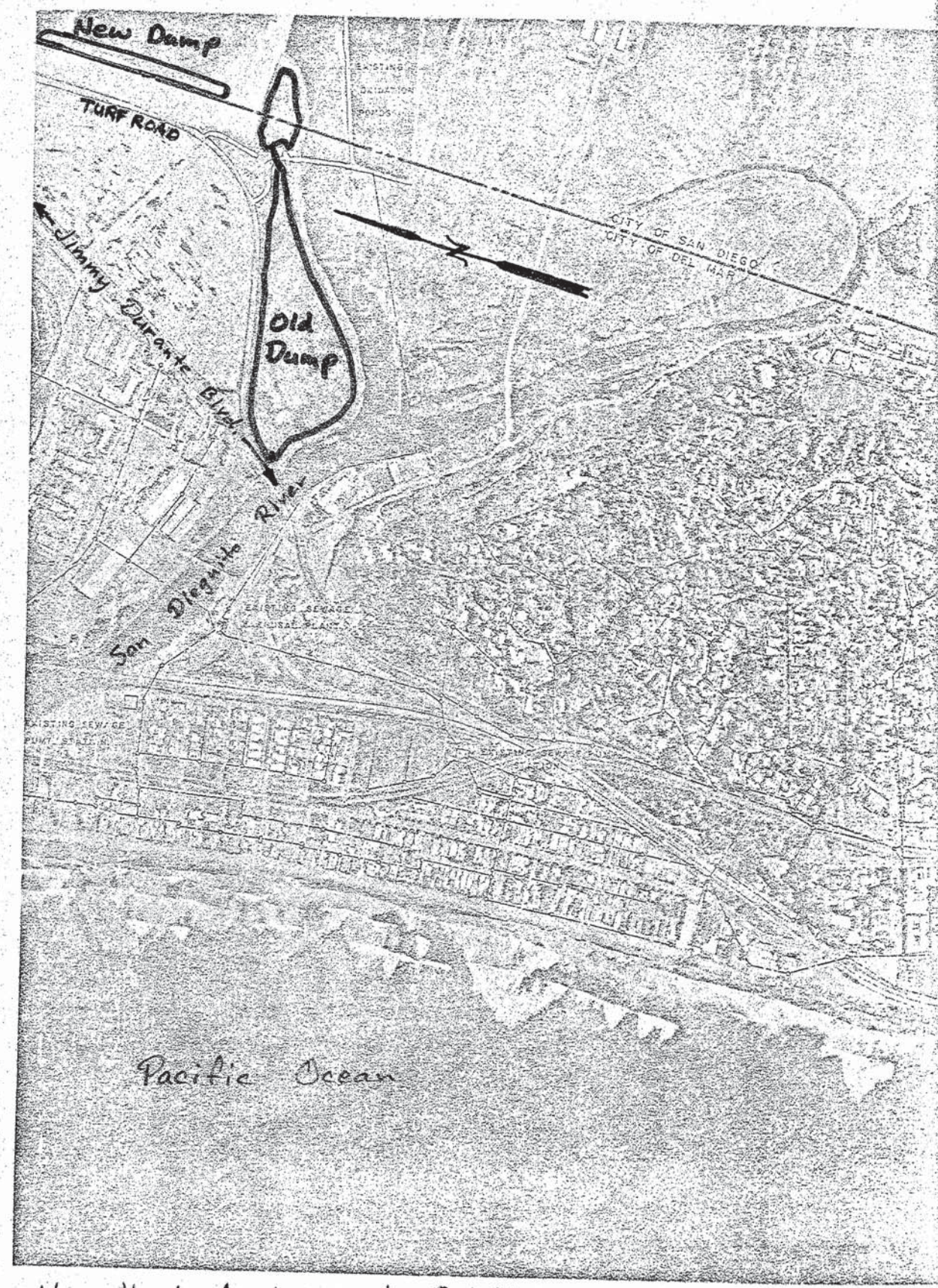
INLAND WATERS

.....

4. The dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste directly into inland waters or watercourses or adjacent to the watercourses in any manner which may permit its being washed into the watercourse is prohibited.

.....

To eliminate this problem I suggest that the attached letter be sent to the Baptist Church Loan Corporation for clean up of the site.



Unauthorized dump at Del Mar

EXISTING SEWERS

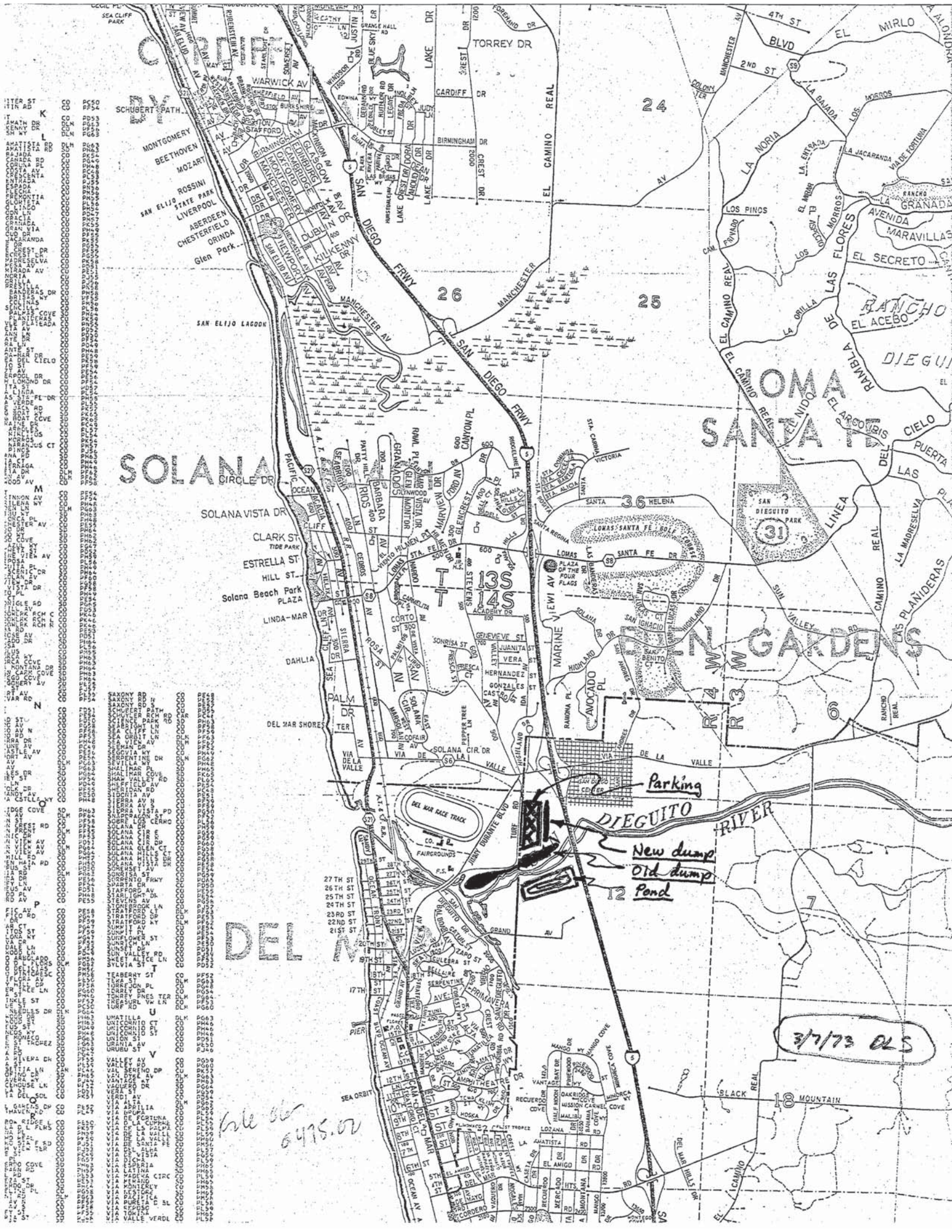
file 06-0475.02

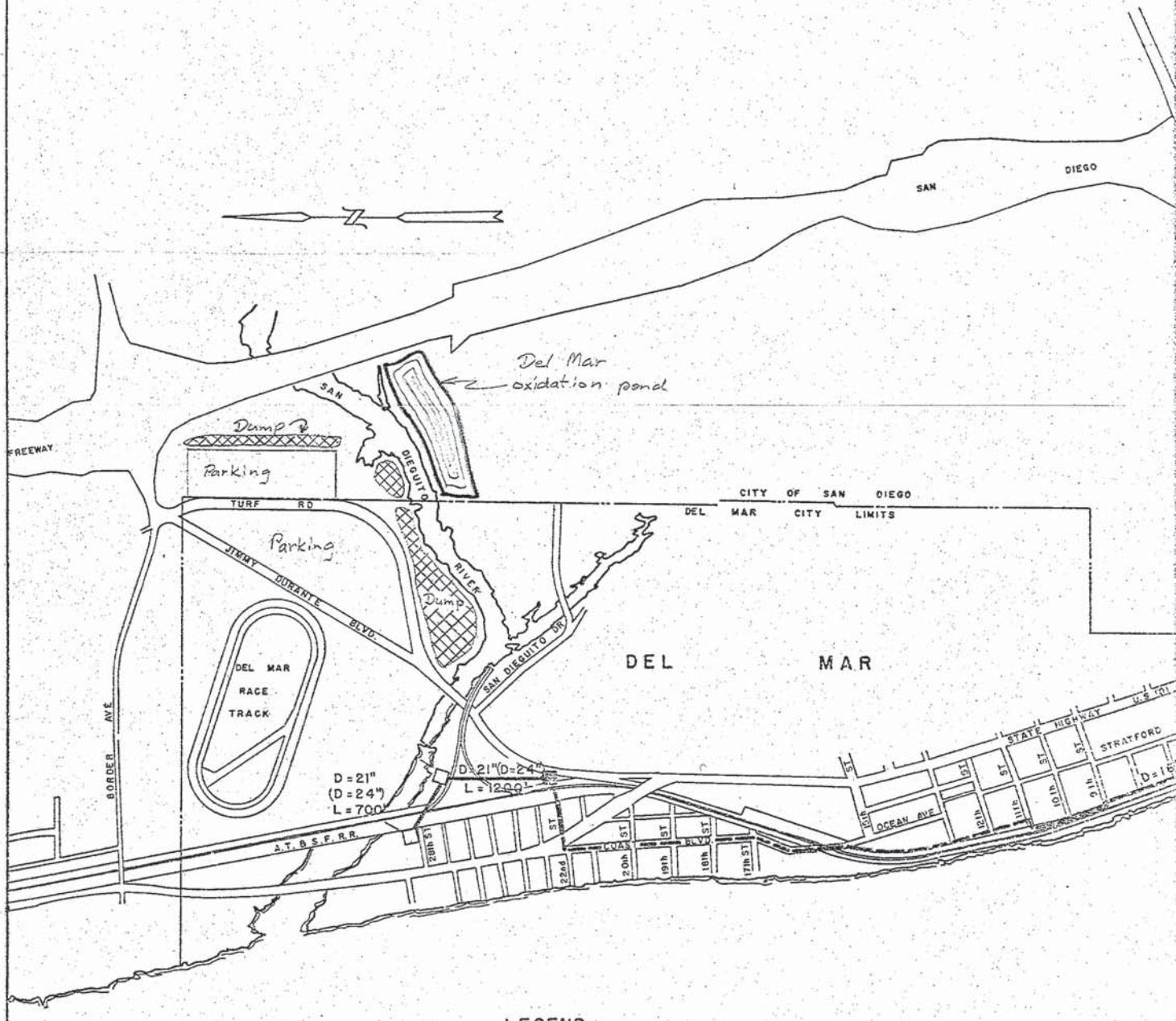
3/7/73 DLS

The regulations forbid most types of open fires and incinerator burning in the basin, designated generally as all land west of the mountains and less than

for the last two years.

File 06-0475.02


SOLANA
DEL MAR
SOLANA BEACH
SANTA FE
Parking
DIEGUITO RIVER
New dump
Old dump
Pond
3/7/73 OLS
TORREY DR
SAN DIEGO FRWY
EL CAMINO REAL
MANCHESTER AV
LA NORIA
LOS PINOS
RANCHO EL ACEBO
LOMAS SANTA FE DR
SOLANA VISTA DR
CLARK ST
ESTRELLA ST
HILL ST
Solana Beach Park PLAZA
LINDA-MAR
DAHLIA
DEL MAR SHORES
VIA DE LA VALLE
SOLANA CIR DR
DEL MAR RACE TRACK
FAIRGROUNDS
JIMMY DURANTE BLVD
TURF
SAN ELIJO LAGOON
SAN ELIJO STATE PARK
Glen Park
SCHUBERT PATH
MONTGOMERY
BEETHOVEN
MOZART
ROSSINI
LIVERPOOL
ABERDEEN
CHESTERFIELD
ORINDA
WARWICK AV
SHEFFIELD AV
STAFFORD
BIRMINGHAM
CANTERBURY
GLASGOW
EDINBURGH
CAMBRIDGE
OXFORD
MANCHESTER
MONTGOMERY
NORFOLK
DUBLIN DR
KILKENNY
NEWPORT
SAN ELIJO AV
CARDIFF DR
BIRMINGHAM DR
LAKE DR
CREST DR
LAKE CREST DR
DORA
CAROLINE
EDWINA
DEBDAN RD
KUTTLER DR
LEGOE
FRESA
JUDY
BLUE SKY
GRANGE HALL RD
JUSTIN
CATHY
LA CATHY LN
MONTE VAR RD
ROSENSTEIN AV
SOMERSET AV
STARLIGHT DR
CLIFF ST
OCEAN AV
PACIFIC
CIRCLE DR
SEABRIGHT
PATTY HILL DR
RIOS
BARBARA
GRANDVIEW
GLENMARK
SYLVANWOOD
RANCHO PL
CANYON PL
RIDGELINE
FORD AV
MARVIEW DR
GLENCREST
HELEN PL
HELEN DR
VIENTO
GEORGS
SIERRA
CLIFF
ROSA
CORTO
SONRISA ST
GENEVIEVE ST
JUANITA ST
VERA
HERNANDEZ ST
GONZALES ST
CASTRO
IDA
PALM DR
SOLANA CIR EAST
COFAIR
PEPPER TREE LN
HARBISON
PASCO
FRESCA
PALMETTO
LINDO
ACADEMY DR
STEVENS
LOMAS SANTA FE GOLF COURSE
PLAZA OF THE FOUR FLAGS
LOMAS LAS PALMAS
LOMAS DEL MAR
LOMAS DEL SOL
LOMAS DEL CAMPO
LOMAS DEL CIELO
LOMAS DEL ARCOIRIS
LOMAS DEL NIDO
LOMAS DE LAS FLORES
LOMAS DE LA ORILLA
LOMAS DE LA CUMBRE
LOMAS DE LA CRESTA
LOMAS DE LA COSTA
LOMAS DE LA CIMA
LOMAS DE LA CASA
LOMAS DE LA CANADA
LOMAS DE LA CAMPANA
LOMAS DE LA CALLE
LOMAS DE LA CALETA
LOMAS DE LA CAMINO
LOMAS DE LA CAMPO
LOMAS DE LA CAMPAN



3/7/73 DLS

File 60-6775.02

4/13/73

Del Mar Fair - see attached map

new Dump area

Area between paved parking and freeway where dump was is being graded for use as additional parking.

Operator of bulldozer says that all he saw was the concrete when he started working. No evidence of trash dumping in large quantities. Some class III stuff in piles; other class III has been worked into grading with soil fill trucked in.

Area marked old Dump is still full of trash, old trees & plant cuttings & class III materials. This area is adjacent to the lagoon and is behind a dirt wall. There is no evidence of any effort to clean up area.

AAK

file 06-0475.02

RDR - pull out old correspondence
Review & keep clamp order
retain for Clam Energy

MEMO

8/30/73

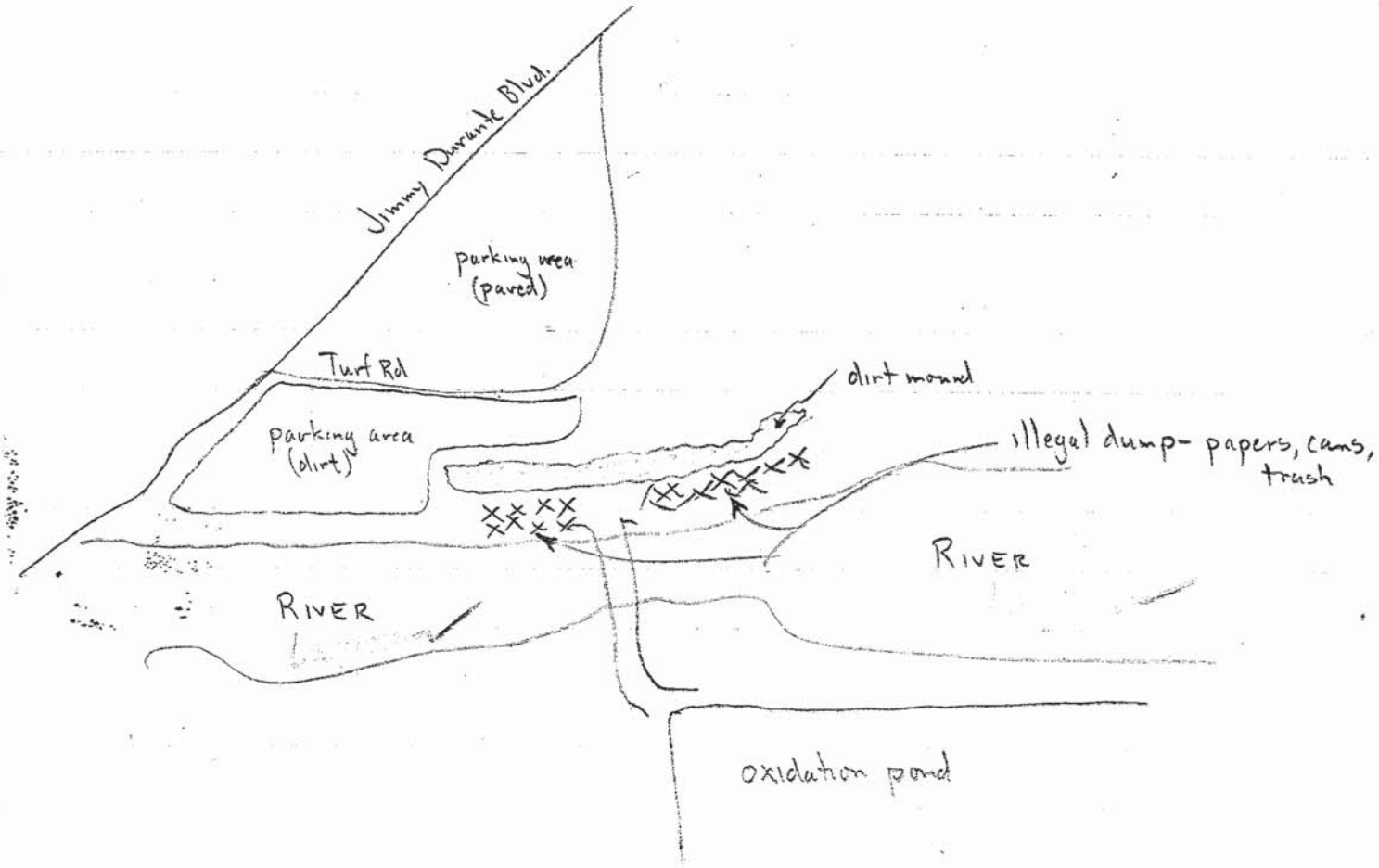
TO: File - Dumpsite (Misc.)

File 06-0435.02

FROM: TRP

SUBJECT: Unauthorized dumpsite at Del Mar

Investigation was conducted on Tues. Aug. 28, 1973, of unauthorized dumpsite located as shown at Del Mar Race Course



photos were taken for documentation

TRP

10-11-73

TO: File

FROM: CARL ASTEGNEI

File 04-0425.02

CONCERNING: UNAUTHORIZED Dumpsite - DEL MAR
MEMO - TRP 8-30-73

DUMPSITE STILL BEING USED. WASTES
CONSIST OF CONCRETE AND SALVAGE OR
DEMOLITION WASTE AND CUT BRUSH, TREES, AND GRASS.

Photos? NO

STATE OF CALIFORNIA—RESOURCES AGENCY

RONALD REAGAN, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

6154 MISSION GORGE ROAD, SUITE 205
SAN DIEGO, CALIFORNIA 92120

JANUARY 22, 1974

File: 06-0475.02
MISC
Landfills

MR. SANDOR SHAPERY
SUITE 108 EL PATIO BUILDING
7446 IVANHOE AVENUE
LA JOLLA, CALIFORNIA 92037

DEAR MR. SHAPERY:

THIS IS A LOCATION SKETCH OF THE REFUSE THAT IS TO BE REMOVED AND HAULED TO A CLASS II DUMPSITE (THE CLOSEST COUNTY DUMP WILL QUALIFY).

WE WILL CHECK THE PROGRESS OF THE CLEANUP IN A WEEK TO TEN DAYS.

THANK YOU FOR YOUR COOPERATION.

VERY TRULY YOURS,

ROLAND D. ROSSMILLER
ASSOCIATE ENGINEER

RDR: HMD

ENCL.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

INSPECTION FORM - INDUSTRIAL DISCHARGER File 66-0475.02

NAME OF FACILITY: Del Mar Dumpsite SUP./MGR.:

ADDRESS: Del Mar Lagoon PHONE:

PARENT ORG.:

WDR: Y N # INSPECTED BY: CLE DATE: 7-22-74 TIME: 1500 ROUTE #

TYPE OF FACILITY: Dump

WHERE WATER USED: NATURE OF WASTE:

TYPE OF TREATMENT:

__ SOURCE WATER: MUN. WELL SURF. METERED: Y N AVE. USE: MAKE UP:

__ PROD. VOLUME:

__ WASTE FLOW: METERED: Y N AVE. RATE:

__ EFFLUENT: FROM: COLOR: SS: TURB: ODOR:

GEN-COMP: DISPOSITION:

__ PONDS: TYPE: DRY: Y N CAP. REM.: USE ALT. Y N NUMBER __

COLOR: ODOR: INSECTS: Y N TYPE: DENS:

LEAKAGE: BERM. COND: FLOOD PROT: Y N

OTHER:

X SOLIDS: FROM: ? STORAGE: at Lagoon DISPOSAL: at Lagoon

RUNOFF PROT.: Y (N) OTHER:

__ DOMESTIC SEWAGE: SEWER SEPTIC TANK LOCATION: OTHER:

__ SITE BOUNDARY: ODORS Y N TYPE: WHERE:

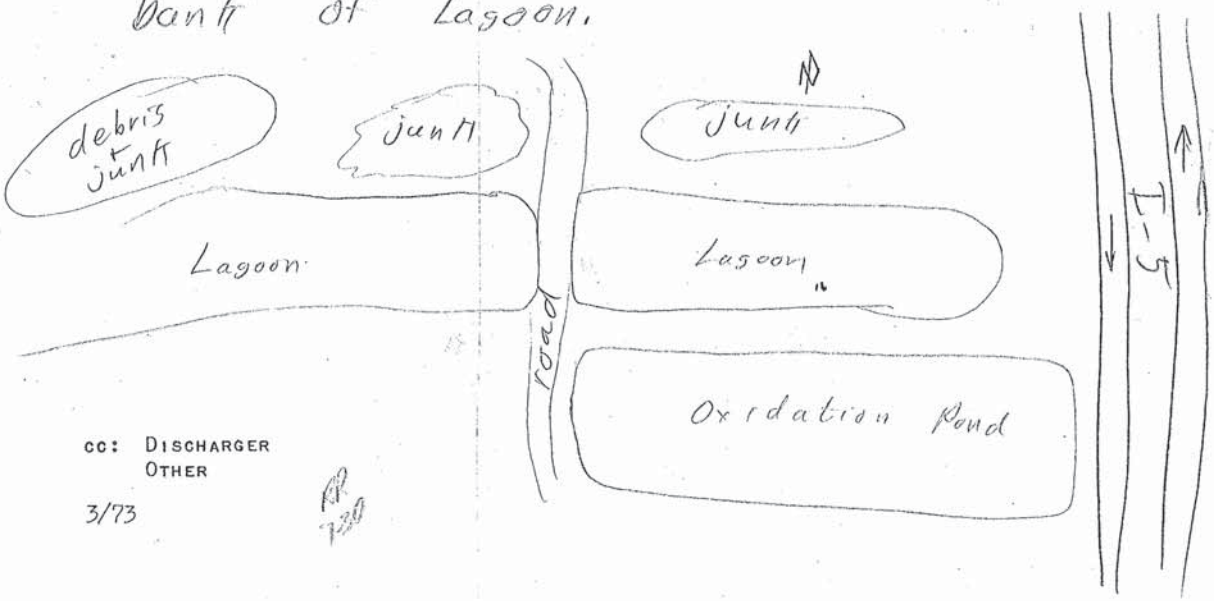
X NUISANCE COND: possible washout WHERE:

__ OTHER: PHOTOS TAKEN: (Y) N

__ SAMPLES TAKEN: SAMPLE #:

SKETCH/REMARKS AND REC. FOR FUTURE ACTION:

- much debris & junk scattered along bank of Lagoon.



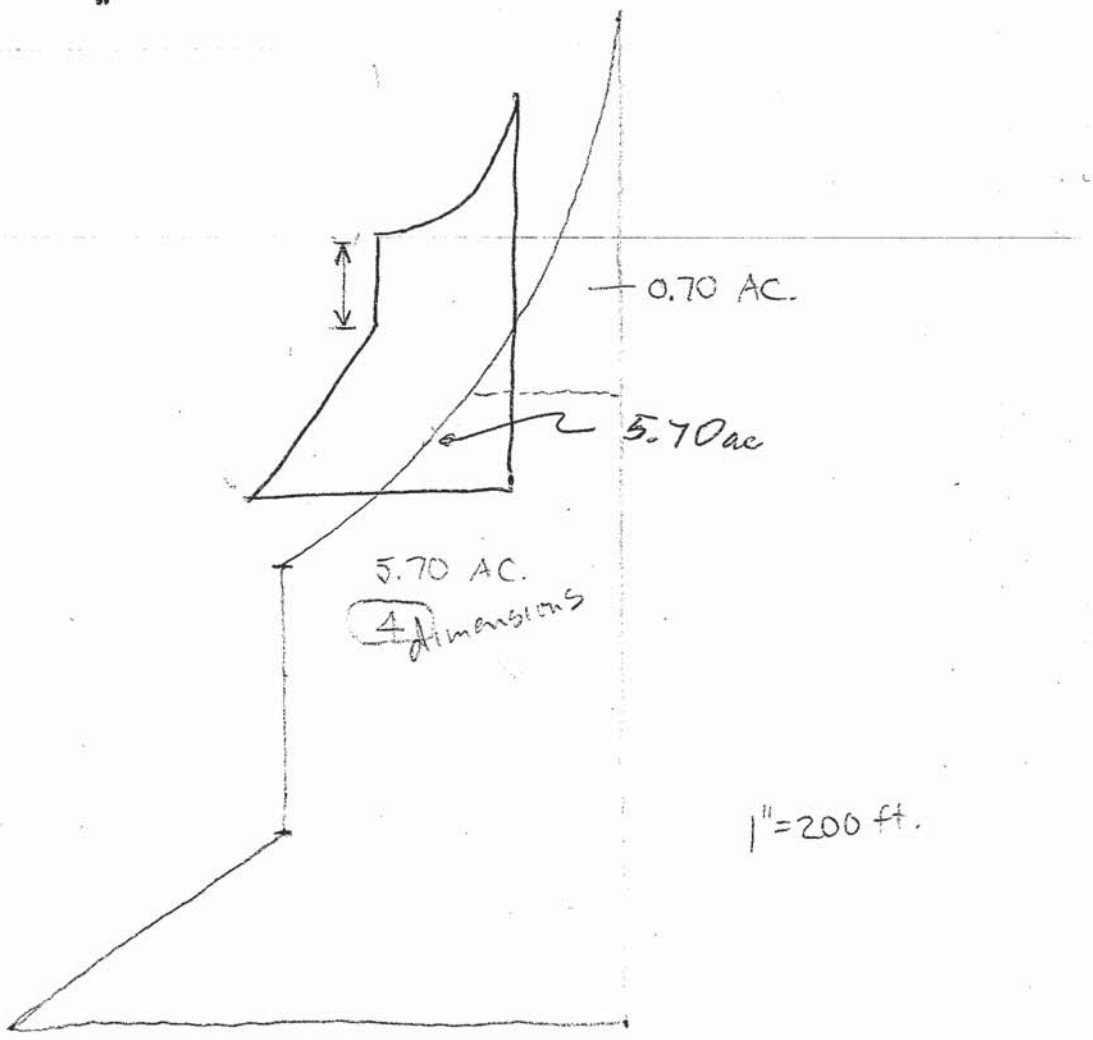
cc: DISCHARGER
OTHER

3/73

Fil: Baptist church Dmmp

Map Book 299 page 3 (Del Mar)

parcel 4



CALI NIA REGIONAL WATER QUALITY CON L BOARD
SAN DIEGO REGION

INSPECTION FORM - INDUSTRIAL DISCHARGER

NAME OF FACILITY: Del Mar Dump SUP./MGR.: _____

ADDRESS: _____ PHONE: _____

PARENT ORG.: _____

WDR: Y (N) # _____ INSPECTED BY: C.F. DATE: 9-23-74 TIME: 1600 ROUTE # _____

TYPE OF FACILITY: Illegal Dumpsite

WHERE WATER USED: _____ NATURE OF WASTE: garbage

TYPE OF TREATMENT: _____

__ SOURCE WATER: MUN. WELL SURF. METERED: Y N AVE. USE: _____ MAKE UP: _____

__ PROD. VOLUME: _____

__ WASTE FLOW: METERED: Y N AVE. RATE: _____

__ EFFLUENT: FROM: _____ COLOR: _____ SS: _____ TURB: _____ ODOR: _____

GEN.-COMP: _____ DISPOSITION: _____

__ PONDS: TYPE: _____ DRY: Y N CAP. REM.: _____ USE ALT. Y N NUMBER __

COLOR: _____ ODOR: _____ INSECTS: Y N TYPE: _____ DENS: _____

LEAKAGE: _____ BERM. COND: _____ FLOOD PROT: Y N

OTHER: _____

X SOLIDS: FROM: _____ STORAGE: at lagoon DISPOSAL: _____

RUNOFF PROT.: Y (N) OTHER: dump hasn't been closed as yet.

__ DOMESTIC SEWAGE: SEWER SEPTIC TANK LOCATION: _____ OTHER: _____

__ SITE BOUNDARY: ODORS Y N TYPE: _____ WHERE: _____

__ NUISANCE COND: _____ WHERE: _____

__ OTHER: _____ PHOTOS TAKEN: (Y) N

__ SAMPLES TAKEN: _____ SAMPLE #: _____

SKETCH/REMARKS AND REC. FOR FUTURE ACTION:

File 06-0475.02

WRR
9-26

cc: DISCHARGER
OTHER

3/73

APPENDIX D

HISTORICAL RESEARCH DOCUMENTATION

2101-2125 JIMMY DURANTE BLVD
2101-2125 JIMMY DURANTE BLVD
Del Mar, CA 92014

Inquiry Number: 3906289.3
April 08, 2014

Certified Sanborn® Map Report

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

4/08/14

Site Name:
2101-2125 JIMMY DURANTE
2101-2125 JIMMY DURANTE
Del Mar, CA 92014

Client Name:
Kleinfelder, Inc.
620 West 16th Street
Long Beach, CA 90813

EDR Inquiry # 3906289.3

Contact: Margaret Carroll

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Kleinfelder, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Site Name: 2101-2125 JIMMY DURANTE BLVD
Address: 2101-2125 JIMMY DURANTE BLVD
City, State, Zip: Del Mar, CA 92014
Cross Street:
P.O. # MF150334.001P
Project: NA
Certification # 744E-4A35-ACA3

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results
Certification # 744E-4A35-ACA3

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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2101-2125 JIMMY DURANTE BLVD
2101-2125 JIMMY DURANTE BLVD
Del Mar, CA 92014

Inquiry Number: 3906289.12
April 11, 2014

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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Date EDR Searched Historical Sources:

Aerial Photography April 11, 2014

Target Property:

2101-2125 JIMMY DURANTE BLVD

Del Mar, CA 92014

Year	***Scale***	***Details***	***Source***
1939	Aerial Photograph. Scale: 1"=500'	Flight Year: 1939	Fairchild
1953	Aerial Photograph. Scale: 1"=500'	Flight Year: 1953	Park
1966	Aerial Photograph. Scale: 1"=500'	Flight Year: 1966 Best Copy Available from original source	USGS
1974	Aerial Photograph. Scale: 1"=500'	Flight Year: 1974 Best Copy Available from original source	AMI
1980	Aerial Photograph. Scale: 1"=500'	Flight Year: 1980 Best Copy Available from original source	AMI
1990	Aerial Photograph. Scale: 1"=500'	Flight Year: 1990	AMI
1994	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1994	EDR
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	EDR
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	EDR
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	EDR

INQUIRY #: 3906289.12

YEAR: 1939

= 500'

N

EDR

INQUIRY #: 3906289.12
YEAR: 1953
= 500'
N
EDR

INQUIRY #: 3906289.12
YEAR: 1966
= 500'
N
EDR

INQUIRY #: 3906289.12

YEAR: 1974

= 500'

N

EDR

INQUIRY #: 3906289.12
YEAR: 1980
= 500'
N
EDR

INQUIRY #: 3906289.12
YEAR: 1990
= 500'
N
EDR

INQUIRY #: 3906289.12
YEAR: 1994
= 500'
N
EDR

INQUIRY #: 3906289.12
YEAR: 2005
= 500'
N
EDR

INQUIRY #: 3906289.12
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 3906289.12
YEAR: 2010
= 500'
N
EDR

INQUIRY #: 3906289.12
YEAR: 2012
= 500'
N
EDR

2101-2125 JIMMY DURANTE BLVD
2101-2125 JIMMY DURANTE BLVD
Del Mar, CA 92014

Inquiry Number: 3906289.5
April 10, 2014

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2013	☑	☑	Cole Information Services
2008	☑	☑	Cole Information Services
2003	☑	☑	Cole Information Services
1999	☑	☑	Cole Information Services
1995	☑	☑	Haines Criss-Cross Directory
1990	☑	☑	Haines Criss-Cross Directory
1985	☑	☑	Haines Criss-Cross Directory
1980	☑	☑	Haines Criss-Cross Directory
1976	☑	☑	Haines Criss-Cross Directory
1970	☑	☑	Haines Criss-Cross Directory

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FINDINGS

TARGET PROPERTY STREET

2101-2125 JIMMY DURANTE BLVD
Del Mar, CA 92014

Year	*CD Image*	*Source*
JIMMY DURANTE BLVD		
2013	pg A1	Cole Information Services
2008	pg A4	Cole Information Services
2003	pg A8	Cole Information Services
1999	pg A11	Cole Information Services
1995	pg A14	Haines Criss-Cross Directory
1990	pg A17	Haines Criss-Cross Directory
1985	pg A19	Haines Criss-Cross Directory
1985	pg A20	Haines Criss-Cross Directory
1980	pg A22	Haines Criss-Cross Directory
1976	pg A24	Haines Criss-Cross Directory
1970	pg A26	Haines Criss-Cross Directory

FINDINGS

CROSS STREETS

SAN DIEGUITO DR

Year	*CD Image*	*Source*
2013	pg. A3	Cole Information Services
2008	pg. A7	Cole Information Services
2003	pg. A10	Cole Information Services
1999	pg. A13	Cole Information Services
1995	pg. A15	Haines Criss-Cross Directory
1995	pg. A16	Haines Criss-Cross Directory
1990	pg. A18	Haines Criss-Cross Directory
1985	pg. A21	Haines Criss-Cross Directory
1980	pg. A23	Haines Criss-Cross Directory
1976	pg. A25	Haines Criss-Cross Directory
1970	pg. A27	Haines Criss-Cross Directory

City Directory Images

Target Street	Cross Street	Source
✓	-	Cole Information Services

JIMMY DURANTE BLVD 2013

1955	ALBERT CORTI
1967	PHILIP TENCER
2002	A T P LLC
	CHUCK ROSS
	CORALLO CARMELA JACKSON PHD INFINITE
	DEL MAR LAW GROUP LLP
	DRASNIN COMMUNICATIONS
	E D HOLDINGS LLC
	INTRODUCTIONS SAN DIEGO LLC
	KARINA EUROPEAN SKIN CARE
	KOHLBERG KAREN
	MELLMO
	PARISI
	SKIN REJUVENATION CENTER
	SPEAK FOR SUCCESS
2010	A A VAN SLYKE
	AMYS HAIR SALON
	BECKY WALKER & ASSOCIATES INC
	COLLEGE OF MY CHOICE
	COLORPOPS INTERNATIONAL
	DEL MAR PACIFIC CHIROPRACTIC DC
	DUCKETT WILSON DEVELOPMENT
	DURANTES SPORTS RESTAURANT
	GREAT AMERICAN HOMES & LOANS
	GYM IN DEL MAR THE
	IN RHYTHM MASSAGE & CRANIOSACRAL THE
	INTERACTIVE BUSINESS ALLIANCE
	JEANETTE SUSAN
	JOANNE PILGRIM
	LANCASTER NORA L INS
	M 2 M DATASMART INC
	NETTLE CREEK INTERIORS
	PILGRIM JOANNE ATTY AT LAW
	STATE FARM INSURANCE
	VAN SLYKE AL ATTY
	WILBURN KIMBERLY K CPA
2032	AWY ANDERSON
2120	ALEXANDER FAULKNER DESIGN
	ALL DIGITAL HOME THEATER
	BACK TO PERFECTION
	COMPLIANCE WEST USA
	DEBORA WAYNE DESIGN INC
	DEL MAR GLASS INC
	FERANDELL TENNIS COURTS INC
	GRACIE DEL MAR
	HUSTON PAUL INSURANCE AGENCY
	MULVEY DOUGLAS CONTRACTORS
	NANCY M GERVASI ALLSTATE AGENT
	NOVAK & CO
	TORRE FINANCIAL SERVICES

Target Street	Cross Street	Source
✓	-	Cole Information Services

JIMMY DURANTE BLVD 2013 (Cont'd)

2120	TRIMBLE APRIL & LLOYD
	WESTWARD EXPOS
2126	CCS CABINETS
	DEL MAR GLAZING & CONSTRUCTION
	JOHN C READ CONSTRUCTION
2132	ANIMAL & BIRD
	FREEFLIGHT
2200	DEL MAR FIRE DEPARTMENT
	FIRE DEPARTMENT
2260	ABC CHRISTMAS TREE FARM
	DEL MAR FAIRGROUNDS
	DEL MAR SURFSIDE RACE PLACE AT DEL M
	DEL MAR THOROUGHBRED CLUB
	H P I INC
	PREMIER FOOD SERVICES INC
	SCRATCH & RESULTS LINE
	THOROUGHBRED OWNERS OF CALIFORNIA

Target Street	Cross Street	Source
-	✓	Cole Information Services

SAN DIEGUITO DR 2013

1441 ERIC CLARK
1505 MARC INTRAVAIA
1525 ROCKY LABOSSIERE
1535 OCCUPANT UNKNOWN
1555 JOSE GOMEZ
1557 GREGORY LOREN
1561 PAUL HAYDU
1567 KARLA HAYWARD
1569 JENNIFER VAUGHAN
1601 ERIC FROM
1604 JOHN GROSS
1810 STEVEN NEELY
2136 GILLIES JOHN K ARCHITECT
OCCUPANT UNKNOWN
2168 OCCUPANT UNKNOWN
2186 OCCUPANT UNKNOWN
2194 RICHARD EARNEST
2195 BATTER KAY ASSOCIATES ARCHITECTS
CHARRETTE CORP THE
CHARRETTE DELMAR
2201 ARMSTRONG & MCHUGH CORP
DEL MAR AUTOMOTIVE
DEL MAR BLUE PRINT INC
EUCALYPTUS STONEWARE
KEVIN MCHUGH
ROSE TOWING
VINT KEVIN MASONRY & CONCRETE

Target Street	Cross Street	Source
✓	-	Cole Information Services

JIMMY DURANTE BLVD 2008

2002	A PARISI CALIFORNIA CORP
	ANANDA STEVENSON
	CARMELA JACKSON
	CHARI CENTER OF HEALTH
	CHILD THERAPY TRAINING INST
	CORBIN JUDITH DR MFT
	DEL MAR SCULPTURE GARDENS
	DESIGN STUDIO DEL MAR
	DRASNIN COMMUNICATIONS
	DYNASTY CONSULTANTS
	EDWARDS SUE ANN MFT
	EROWE DESIGN
	FINECORP
	GARRETT PHOTOGRAPHY
	GENERAL OUTSOURCING SERVICES
	GRAVITY DESIGN
	IMAGINE
	IN RHYTHM MASSAGE & CRANIOSACRAL THE
	JENNINGS & DRAKULICH LLP
	JUDITH CORBIN
	LAURA BIRNS
	OCEAN VILLAGE APARTMENTS
	OFFICE OF CARMELA CORALLO JACKSON PH
	PARISI SCULPTURE GARDEN & GALLERY
	SCHUCARD ASSOCIATES INC
	SHIHO
	SKIN REJUVENATION CENTER
2010	APRIL & PARIS HAIR STUDIO
	BIG BANG IDEA ENGINEERING INC
	CAMPUS LOAN GROUP
	CARABELLA GROUP
	COLORPOPS INTERNATIONAL
	DEJONG SHERRY
	DEL MAR WORKOUT
	FINLEY DESIGN
	GATEWAY TELECOMMUNICATION
	GREAT AMERICAN HOMES & LOANS
	HORNING INTERESTS INC
	JOANNE PILGRIM
	JODIE K SCHULLER ASSOCIATES
	KEVIN TRACY
	LENNON ASSOCIATES INC
	LORRI JAMES INTERNATIONAL INTERIOR D
	LYNCH NORA LANCASTER INSURANCE
	NCLS
	NORA LANCASTER
	NORCON LEGALIZATON SERVICE
	ONE WORLD ENTERPRISES
	PACIFIC CHIROPRACTIC
	PEARL SUSHI RESTAURANT & CHAMPAGNE L

Target Street	Cross Street	Source
✓	-	Cole Information Services

JIMMY DURANTE BLVD 2008 (Cont'd)

2010	ROBIN ESTHETIQUE
	ROSEMARYS SKIN CARE
	SAN DIEGO WORKOUT
	SEAMON ROBERT DC
	SHAOLIN KEMPO ARTS
	SHILO DESIGN INC
	SNOW PROPERTIES INC
	THE ARDELL GROUP
	TRACY KEVIN ESQ
	TURNER THOMAS DESIGN BUILD INC
	ZEN
2032	AWY ANDERSON
2120	ALL DIGITAL SATELLITE
	BACK TO PERFECTION
	CHINN JAMES ARCHITECT
	COMPLIANCE WEST USA INC
	DEL MAR APPRAISAL GROUP
	DEL MAR GLASS INC
	DESIGN BUILD PARTNERS INC
	DOMESTIC & MORE DOMESTIC STAFFING
	FARMERS INSURANCE GROUP
	FERANDELL TENNIS COURTS INC
	HOUSE & YARD SHOW
	INTERNATIONAL MATERIALS INC
	ITZ FIXED COMPUTERS INC
	NANCY GERVASI INSURANCE AGENCY
	NOVAK CO INSURANCE
	PEREIRA BRAZILIAN JIU JITSU
	SEAMS FASHIONABLE
	SEDONA PACIFIC CORP
	TORRE MORTGAGE
	WESTWARD EXPOS LP
2126	JOHN C READ CONSTRUCTION CO
2132	FREE FLIGHT
	MOBILE VETERINARY SERVICE
	STONEBREAKER ROBERT F DVM
	THE ANIMAL & BIRD HOSPITAL
2200	DEL MAR CITY OF
	DEL MAR FIRE DEPARTMENT
	NORTH COUNTY EMERGENCY VEH
2240	CITY OF DEL MAR
2260	ABC CHRISTMAS TREE FARM
	CAL DEPT FOOD & AGRICULTURE
	DEL MAR FAIRGROUNDS
	DEL MAR SURFSIDE RACE PLACE
	FAIREST OF THE FAIR
	PREMIER FOOD SERVICES INC
	ROSES FOOD CONCESSION
	THOROUGHBRED OWNERS CALIFORNIA
2265	LIBERTY RECYCLING

Target Street	Cross Street	Source
✓	-	Cole Information Services

JIMMY DURANTE BLVD 2008 (Cont'd)

2265 WASTE MGMT OF ALAMEDA CNTY

Target Street	Cross Street	Source
-	✓	Cole Information Services

SAN DIEGUITO DR 2008

1441 ERIC CLARK
1505 GEORGE LAFRICAIN
1515 OCCUPANT UNKNOWN
1525 ROCKY LABOSSIERE
1535 JUAN PEREZ
1555 MICHAEL QUINN
1557 GREGORY LOREN
1561 PAUL HAYDU
PAUL J HAYDU A MEDICAL CORP
1567 ROBERT HAYWARD
1569 GEORGE JONILONIS
1601 ERIC FROM
1604 MARK PATTI
1810 STEVEN NEELY
2124 JOHNNY MAROTTA
2136 GILLIES JOHN K ARCHITECT
JOHN GILLIES
2186 LEWIS HOLSTON
2194 RICHARD EARNEST
2195 BIOTRAK CONSULTING GROUP
CHARRETTE DELMAR
CHARRETTE INC
KAY BATTER ASSOCIATES INC
PRO STAR INC
2201 ARMSTRONG & MCHUGH CORP
CO S TRAFFIC CONTROL
DEL MAR AUTOMOTIVE
DEL MAR BLUE PRINT CO INC
EUCALYPTUS STONEWARE INC
KEVIN VINT MASONRY
LINDALLEN CORP
ROSE TOWING INC

Target Street	Cross Street	Source
✓	-	Cole Information Services

JIMMY DURANTE BLVD 2003

2002	AMERICAN MARBLE
	CHILD THERAPY TRAINING INST
	CLAYESSENCE DESTINCTIVE CRMC
	COMMUNICATIONS DRASIN
	DEL MAR SCULPTURE GARDENS
	DRAKULICH NICHOLAS ATTY
	ED HOLDINGS LLC
	GORDON JENNINGS
	IMAGINE
	JENNINGS & DRAKULICH
	KITCHEN STUDIO DEL MAR
	KLUNER KERRY J MD
	L EDWARDS
	LYNNE DAGOSTINO
	SCHUCARD ASSOCS INC
	SHIHO
	STEPHEN GIALLOMBARDO
	SUE ANN EDWARDS
	US PUBLIC VENTURES LLC
2010	APRIL IN PARIS HAIR STDAPRIL
	APRIL PARKS
	ARC
	AXIS BAR
	AXIS RESTAURANT
	BLUE DOG INC
	CHARLES TOURTELLOTTE
	COLORPOPS INTERNATIONAL INC
	DEL MAR WORKOUT
	DONGHIA SHOWROOMS INC
	FARHAD YOUSEFI
	FOOT REFLEXOLOGY SHEILA ZACKER
	FRED YOUSEFI
	HORNING INTERESTS INC
	INAVEST INC
	LORRI JAMES INTERNATIONAL
	LORRI JAMES INTRNTNL INTRR
	LYNCH LANCASTER NORA L INS
	LYNCH NORA LANCASTER INSURANCE
	NORA LANCASTER
	ONE WORLD ENTERPRISES
	PILGRIM JOANNE ATTY AT LAW
	RICHLAND INTERESTS
	SHAOLIN KEMPO ARTS
	TRACY KEVIN ATTY AT LAW
	XTRA MILE
2120	ALEXANDER FAULKNER DESIGN
	ALPHA MEDICAL INC
	DEL MAR GLASS
	ENGEL & HULBERT
	GLOBAL INVESTMENT SERVICES

2120	JEFFREY ELDEN
	JENNIFER VILLANUEVA
	JOHNNY MAROTTA
	KATHY LARSON
	MAROTTA CONSTRUCTION CO
	NAILS BY ANGIE TRAN
	PAUL H HUSTON
	RICHARD WARREN
	SEAMS FASHIONABLE
	SUSAN JEANETTE
	TANYA MCMANUS FINE ART
	TORRE FINANCIAL SERVICES
	TORRE MORTGAGE
	WESTWARD EXPOS L P
2126	JOHN C READ CONSTRUCTION CO
	JOHN READ
	READ JOHN C CONSTRUCTION CO
2132	ANIMAL & BIRD HOSPITAL
	ANIMAL & BIRD HSPTL OF DEL MAR
	FREEFLIGHT
	MOBILE VETERINARY SERVICE
	OCCUPANT UNKNOWN
	STONEBREAKER ROBERT F DVM
2148	CHALLENGED ATHLETES
	NOAHS ARK CONVSERVANCY
2200	DEL MAR FIRE DEPT
2260	ABC CHRISTMAS TREE FARM
	DEL MAR FAIRGROUNDS
	DEL MAR SURFSIDE RACE PLACE
	DEL MAR THOROUGHBRED CLUB
	MARIO QUINTEROS
	PREMIERE FOOD SERVICES
2265	LIBERTY RECYCLING

Target Street	Cross Street	Source
-	✓	Cole Information Services

SAN DIEGUITO DR 2003

1441	ERIC CLARK
1505	MAUREEN LAFRICAIN
1515	ROBERT SEDGWICK
1525	ROCKY LABOSSIERE
1535	JUAN PEREZ
1555	MICHAEL QUINN
1557	GREGORY LOREN
1561	OCCUPANT UNKNOWN
1567	ROBERT HAYWARD
1569	GEORGE JONILONIS
1601	ERIC FROM
1604	VINCENT PATTI
1661	PAUL HAYDU
1810	STEVEN NEELEY
2124	JOHNNY MAROTTA
2136	GILLIES JOHN K ARCHITECT
2186	LEWIS HOLSTON
2194	RICHARD EARNEST
2195	BATTER KAY ASSOCS AIA
	BIOTRAK CONSULTING GROUP
	CHARRETTE DELMAR
	DIEGO SAN
2201	DEL MAR AUTOMOTIVE
	DEL MAR INN
	EUCALYPTUS STONEWARE INC
	KEVIN VINT
	LAWRENCE KALLETT
	PHILLIP WALCHER
	STUDIO A ARTS STUDIO
	VINT KEVIN MASONRY & CONCRETE

Target Street	Cross Street	Source
✓	-	Cole Information Services

JIMMY DURANTE BLVD 1999

2002	AMERICAN MARBLE
	ANANDA STEVENSON
	ARDELL GROUP THE
	AUSTIN MORGAN
	BIG BANG IDEA ENGINEERING
	CLAYESSENCE DESTINCTIVE CERAMICS
	DAGOSTINO LYNNE LAC
	FORTESCUE MIA DESINGS
	ICONICA
	IN RHYTHM MASSAGE THERAPY
	LAURA BIRNS
	MPLA ASSOCIATES
	PARISI
	PRECISION CHIROPRACTIC CENTER
	PRECISION PROPERTY APPRAISAL
	WALTERS STEPHANIE PARISI
	YES INCORPORATED
	ZIEBARTH BARBARA ASID
2010	A & D SERVICES
	ACQUISITION & DEVELOPMENT SERVICES
	ALL AMERICAN ARTIST
	ALLTRONIC REPAIR
	AQUA LEAN FERTILIZER
	BARRY COLE
	CHINN JAMES ARCHITECT
	COLORPOPS
	DEL MAR PACIFIC CHIROPRACTIC
	DEL MAR WORKOUT
	DEL MAR WORKOUT KIDS CLUB
	DEL MARIOS GRILL
	DESIGN BUILD PARTNERS INCORPORATED
	DUCKETT WILSON DEVELOPMENT COMPANY
	DURANTES SPORTS PUB
	ELDEN JEFFREY REAL ESTATE CONSULTANT
	FRENCH MANICURE
	GLOBAL RESOURCE NETWORK
	JOANNE PILGRIM
	LANCASTER NORA L INS
	LORRI JAMES INTERNATIONAL INTERIOR DESIGN
	LYNCH LANCASTER NORA L INS
	RONAH FOR SENSATIONAL SKIN
	SEAMON ROBERT DC
	STATE FARM INSURANCE COMPANIES AGENTS
	TARNOWSKI MARK ARCHT
2032	AWY ANDERSON
2120	ALPHA MEDICAL INCORPORATED
	ARIELA RECORDS
	BRAZILIAN JIU JITSU
	DEL MAR APPRAISAL GROUP
	DEL MAR BODYWORKS

2120	DEL MAR GLASS COMPANY
	FARMERS INSURANCE GROUP AGENTS (CONTD)
	GATEWAY TELECOMMUNICATIONS
	GIRARD SECURITIES
	HUSTON PAUL H INSURANCE
	INTEGRATED DIGITAL SOLUTIONS
	JEANETTE SUSAN
	LINDAS NAILS AND REFLEXOLOGY
	LLOYD TRIMBLE SALON
	MAROTTA CONSTRUCTION COMPANY
	MONTEIRO JIU JITSU
	NORTH COUNTY LEGALIZATION SERVICES
	NOVAK & COMPANY INSURANCE
	PETAL & PLUME
	PILGRIM JOANNE ATTORNEY AT LAW
	RENAISSANCE RESTORATION
	STECK SCOT HAIR DESIGN
	TANYA MCMANUS FINE ARTS
2126	READ JOHN C CONSTRUCTION COMPANY
2132	ANIMAL AND BIRD HOSPITAL OF DEL MAR
	FREEFLIGHT
	STONEBREAKER ROBERT DR
	STONEBREAKER ROBERT F DVM DEL MAR VETRNRY HOSP
2148	DEL MAR OCEANSPORTS
2200	CITY OF DEL MAR FIRE DEPARTMENT
	DEL MAR CITY OF FIRE DEPARTMENT
	FIRE DEPARTMENTS DEL MAR
2240	DEL MAR CITY OF PUBLIC WORKS
2260	AMTOTE INTERNATL
	DEL MAR SATELLITE WAGERING
	DEL MAR SURFSIDE RACE PLACE
	DOVER DOWNS
	PREMIER FOOD SERVICES INCORPORATED
2265	LIBERTY RECYCLING
2660	LES BOIS PARK

Target Street	Cross Street	Source
-	✓	Cole Information Services

SAN DIEGUITO DR 1999

1441	ERIC CLARK
1505	GEORGE LAFRICAIN
1515	OCCUPANT UNKNOWN
1525	ROCKY LABOSSIERE
1535	JUAN PEREZ
1555	MICHAEL QUINN
	OCCUPANT UNKNOWN
1557	GREGORY LOREN
1561	PAUL HAYDU
1567	KARLA HAYWARD
1569	CLARK DICK MORTGAGE
1601	ERIC FROM
1604	MARK PATTI
1810	STEVEN NEELY
2124	JOHNNY MAROTTA
2136	GILLIES JOHN K ARCHITECT
	OCCUPANT UNKNOWN
2186	LEWIS HOLSTON
2194	RICHARD EARNEST
2195	CHARRETTE DELMAR
	GOSS KELLER MARTINEZ
2201	ARMSTRONG & MCHUGH CORPORATION
	AVALON DESIGN OF CALIFORNIA
	BECHTEL TOWING
	C S S
	CALIFORNIA SPORTS TICS
	CECILIAS SAFETY SERVICE
	CHILDRENS ART STUDIO
	COUNTRY CARPETS
	DEL MAR AUTOMOTIVE SERVICE CENTER
	DEL MAR BLUE PRINT INCORPORATED
	EUCALYPTUS STONEWARE
	FIRSTER JOAN TEXTILE DESIGN
	VINT KEVIN MASONRY & CONCRETE

Target Street	Cross Street	Source
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JIMMY DURANTE BLVD 1995

JIMMY DURANTE BLVD
92014 DEL MAR

WEALTH CODE 9.0

1963	XXXX	00	
2002	BUILDING		
	★ACCOUNTS SQUARED	481-4450	2
	★BLANCHARD J H DC	755-5333	4
	★CHINN JAMES ARCH	755-5863	4
	★CHURCH RLGS SCIENCE	481-1792	4
	★CHURCH RLGS SCIENCE	481-7317	+5
	★COOK DONALD	755-1801	4
	★DEL MAR CHIROPRCTR	481-3793	6
	★ELDEN JEFFREY	793-4601	4
	★GOODWIN C CONSTR	755-3522	4
	★LIDCO INC	259-7338	+5
	★NEUROMEDICAL SVS	792-6022	+5
	★PRECISION CHIRO CTR	755-5333	4
	★PRECISION PROPERTY	755-9785	3
	★SEASIDE CH RLGS SCN	481-1792	4
	★SHEPPARD A DC	481-3793	
	★SHEPPARD KENNY DC	481-3793	
	★SMART MONEY	481-6912	3
	★TURNER HERBERT B	481-1530	3
	★TURNER HERBERT B	755-1662	3
	★TURNER HERBERT B	793-4600	+5
	★UNIV CENTER	259-9058	4
	★UNIV HUMNSTC STUDY	259-9733	
	★WHIPLASH&SPNL TRMA	755-6991	4
	★WOOLRYCH ED	794-9479	+5
2002			
2010	BUILDING		
	★ADVANCED PAGE	793-6856	+5
	★ALLTRONIC REPAIR	259-1477	4
	★AQUA LEAN FERTILIZR	481-8118	2
	★C M S AUTOMBL RPR	794-2750	+5
	★C M S INTERNATIONAL	792-6265	+5
	★CAPITAL INVESTMENT	794-2188	+5
	★CARDIFF BRDCSTG GRP	793-2900	3
	★CARDIFF BRDCSTG GRP	481-3410	3
	★DEL MAR APPRSL GRP	793-7004	3
	★DEL MAR BODY WORKS	792-2212	1
	★DEL MAR PAC CHIRO	792-0101	9
	★DEL MAR WORKOUT	481-6226	8
	★DEL MAR WORKOUT	792-4042	+5
	★DUCKETT WILSON DVLP	792-0184	+5
	★DURANTES	481-7893	4
	★FLIP INC	794-2797	+5
	★FRENCH MANICURE	755-0520	+5
	★GEBERIN V ROLFER	481-8113	9
	★JOHNSON WOOLLEY INS	755-1588	0
	★JUICY NEWS CAFE	792-2221	+5
	★LANCASTER NORA L	481-1410	
	★LYNCHLANCASTER NORA	457-2540	3
	★MOLLYS SKIN CARE	481-0625	4
	★NEGIS EURPN SKN CRE	755-4818	4
	★RONAH FOR SKIN	481-6226	1
	★SEAMON ROBERT DC	792-0101	9
	★SHANAZ	755-0520	4
	★STATE FARM INS AGNT	481-1410	8
2010			
2105	XXXX	00	
2111	XXXX	00	
2120	BUILDING		
	★ALPHA MEDICAL INC	793-9188	4
	★AMER LAW ASSN	481-0822	0
	★BLUE TATTOO SWIMWR	259-8906	+5
	★CAFFALL MARK PHD	259-5219	+5
	★DEL MAR GLASS CO	755-7505	1
	★DEL MAR NAIL BOUTQ	755-1827	4
	★EDWARD D JONES&CO	755-8789	3
	★FARMERS INS GRP	481-3116	0
	★GATEWAY INC	259-6868	3
	★HALE SCRTY PET DOOR	793-0622	4
	★HUSTON PAUL H INS	481-3116	0
	★JEANNETTE SUSAN	755-5871	3
	★JONES EDWARD D&CO	755-8789	1
	★KAESTNER REED PHOTO	755-1822	8
	★LAW CLUB	792-1602	3
	★LAW OFC THOS PAPPAS	792-1602	+5
	★LLOYD TRIMBLE SALON	755-1231	
	★MACGILLIS PAT	259-0589	+5
	★MAROTTA CONSTR CO	792-2201	1
	★MONTEIRO JIU JITSU	792-0069	+5
	★PETERSON THOMAS L	755-8789	3
	★PILGRIM JOANNE ATTY	755-8069	3
	★TRIMBLE LLOYD SALON	755-1231	
	★WHALEN S PHOTO	755-3485	9
2120			
2122	XXXX	00	
2126	★READ JOHN C CONST	755-4464	
2132	★DEL MAR VTRNRY HOSP	755-9351	
	★FREEFLIGHT	481-3148	8
	★ROLANDHOLST R A DR	755-9351	
	★STONEBREAKER R DVM	755-9351	4
2148	★DEL MAR MUSIC	755-3856	4
2160	XXXX	00	
2200	★DEL MAR FIRE DEPT	755-1522	
	★DEL MR CTY FIRE BUS	755-1522	
	★FIRE DEPT DEL MAR	755-1522	
2236	XXXX	00	
2240	★DEL MR CTY PUB WRKS	755-3294	
2260	HICKS James	481-9141	4
	★PREMIER FOOD SERV	755-6345	2
2265	★LIBERTY RECYCLING	481-2223	2

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

SAN DIEGUITO DR 1995

SAN DIEGUITO DR 92014
DEL MAR

WEALTH CODE 9.0

1433	XXXX	00	
1441	• KLEBAN Micheal	00	+5
1505	• MCQUISTON Donald K	755-9215	
	★ MCQUISTON&PRTNR INC	481-7030	+5
1515	• SEDGWICK Robt	755-8191	
1525	• LABOSSIERE Rocky	00	+5
1535	PEREZ Electa	755-9682	

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

SAN DIEGUITO DR 1995

..SAN DIEGUITO DR 92014 CONT..

	● PEREZ Juan	755-9682	
1555	VROMAN Dick	792-5481	
	VROMAN Susan	792-5481	
1557	● TOMLINSON Merlin	00	+5
1567	● HAYWARD Robt L	755-8536	
1569	XXXX	00	
1585	XXXX	00	
1601	● SHEPPARD Kenny	00	+5
1604	● PATTI Vincent	00	+5
1810	● MARECHAL Fay	00	+5
	WRAY C M	481-4319	+5
2179	XXXX	00	
2186	● HOLSTON Lewis P	755-8605	
2194	● EARNEST Richard	00	+5

2201..... BUILDING

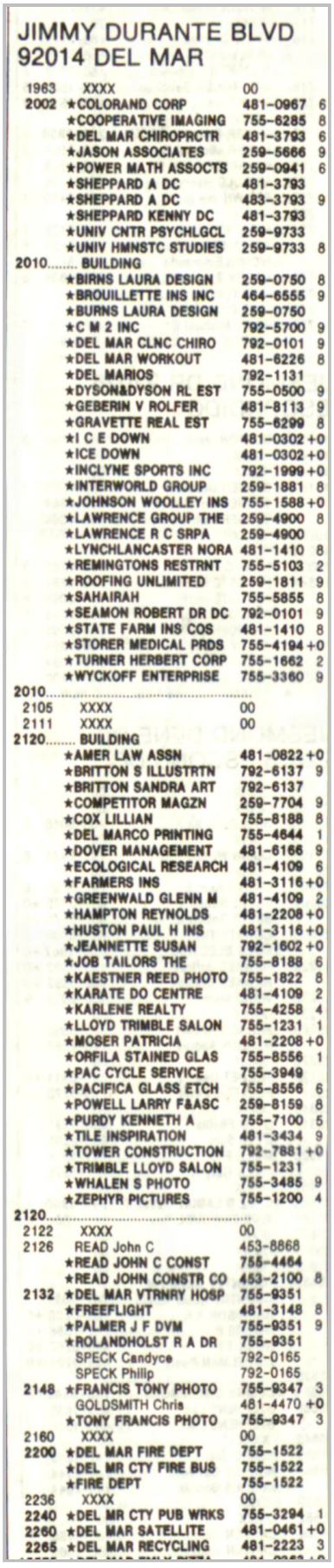
★ANGLERS ARSENAL	259-3133	2
★ARMSTRONG&MCHUGH	755-4917	
★BECHTEL TOWING	755-0534	
★CA SPORTS TICS	792-0485	4
★CHILDRENS ART STDO	792-1822	3
★DEL MAR AUTO SRV CN	755-2404	
★DEL MAR BLUE PRINT	755-5134	1
★EUCALYPTUS STONEWRE	755-5656	
★FIRSTER J TXTL DSGN	792-1822	9
★SPEEDY SHUTTLE CO	792-5957	4
★VINT KEVIN MASONRY	481-7033	

2201.....

★ 12 BUS 20 RES 9 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

JIMMY DURANTE BLVD 1990



JIMMY DURANTE BLVD
92014 DEL MAR

1963	XXXX	00	
2002	★COLORAND CORP	481-0967	6
	★COOPERATIVE IMAGING	755-6285	8
	★DEL MAR CHIROPRCTR	481-3793	6
	★JASON ASSOCIATES	259-5666	9
	★POWER MATH ASSOCTS	259-0941	6
	★SHEPPARD A DC	481-3793	
	★SHEPPARD A DC	483-3793	9
	★SHEPPARD KENNY DC	481-3793	
	★UNIV CNTR PSYCHLGCL	259-9733	
	★UNIV HMNSTC STUDIES	259-9733	8
2010	BUILDING		
	★BIRNS LAURA DESIGN	259-0750	8
	★BROUILLETTE INS INC	464-6555	9
	★BURNS LAURA DESIGN	259-0750	
	★C M 2 INC	792-5700	9
	★DEL MAR CLNC CHIRO	792-0101	9
	★DEL MAR WORKOUT	481-6226	8
	★DEL MARIOS	792-1131	
	★DYSON&DYSON RL EST	755-0500	9
	★GEBERIN V ROLFER	481-8113	9
	★GRAVETTE REAL EST	755-6299	8
	★I C E DOWN	481-0302	+0
	★ICE DOWN	481-0302	+0
	★INCLYNE SPORTS INC	792-1999	+0
	★INTERWORLD GROUP	259-1881	8
	★JOHNSON WOOLLEY INS	755-1588	+0
	★LAWRENCE GROUP THE	259-4900	8
	★LAWRENCE R C SRPA	259-4900	
	★LYNCHLANCASTER NORA	481-1410	8
	★REMINGTONS RESTRNT	755-5103	2
	★ROOFING UNLIMITED	259-1811	9
	★SAHAIRAH	755-5855	8
	★SEAMON ROBERT DR DC	792-0101	9
	★STATE FARM INS COS	481-1410	8
	★STORER MEDICAL PRDS	755-4194	+0
	★TURNER HERBERT CORP	755-1662	2
	★WYCKOFF ENTERPRISE	755-3360	9
2010			
2105	XXXX	00	
2111	XXXX	00	
2120	BUILDING		
	★AMER LAW ASSN	481-0822	+0
	★BRITTON S ILLUSTRTN	792-6137	9
	★BRITTON SANDRA ART	792-6137	
	★COMPETITOR MAGZN	259-7704	9
	★COX LILLIAN	755-8188	8
	★DEL MARCO PRINTING	755-4644	1
	★DOVER MANAGEMENT	481-6166	9
	★ECOLOGICAL RESEARCH	481-4109	6
	★FARMERS INS	481-3116	+0
	★GREENWALD GLENN M	481-4109	2
	★HAMPTON REYNOLDS	481-2208	+0
	★HUSTON PAUL H INS	481-3116	+0
	★JEANNETTE SUSAN	792-1602	+0
	★JOB TAILORS THE	755-8188	6
	★KAESTNER REED PHOTO	755-1822	8
	★KARATE DO CENTRE	481-4109	2
	★KARLENE REALTY	755-4258	4
	★LLOYD TRIMBLE SALON	755-1231	1
	★MOSER PATRICIA	481-2208	+0
	★ORFILA STAINED GLAS	755-8556	1
	★PAC CYCLE SERVICE	755-3949	
	★PACIFICA GLASS ETCH	755-8556	6
	★POWELL LARRY F&ASC	259-8159	8
	★PURDY KENNETH A	755-7100	5
	★TILE INSPIRATION	481-3434	9
	★TOWER CONSTRUCTION	792-7881	+0
	★TRIMBLE LLOYD SALON	755-1231	
	★WHALEN S PHOTO	755-3485	9
	★ZEPHYR PICTURES	755-1200	4
2120			
2122	XXXX	00	
2126	READ John C	453-8868	
	★READ JOHN C CONST	755-4464	
	★READ JOHN CONSTR CO	453-2100	8
2132	★DEL MAR VTRNRY HOSP	755-9351	
	★FREEFLIGHT	481-3148	8
	★PALMER J F DVM	755-9351	9
	★ROLANDHOLST R A DR	755-9351	
	SPECK Candyce	792-0165	
	SPECK Philip	792-0165	
2148	★FRANCIS TONY PHOTO	755-9347	3
	GOLDSMITH Chris	481-4470	+0
	★TONY FRANCIS PHOTO	755-9347	3
2160	XXXX	00	
2200	★DEL MAR FIRE DEPT	755-1522	
	★DEL MR CTY FIRE BUS	755-1522	
	★FIRE DEPT	755-1522	
2236	XXXX	00	
2240	★DEL MR CTY PUB WRKS	755-3294	1
2260	★DEL MAR SATELLITE	481-0461	+0
2265	★DEL MAR RECYCLING	481-2223	3

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

SAN DIEGUITO DR 1990

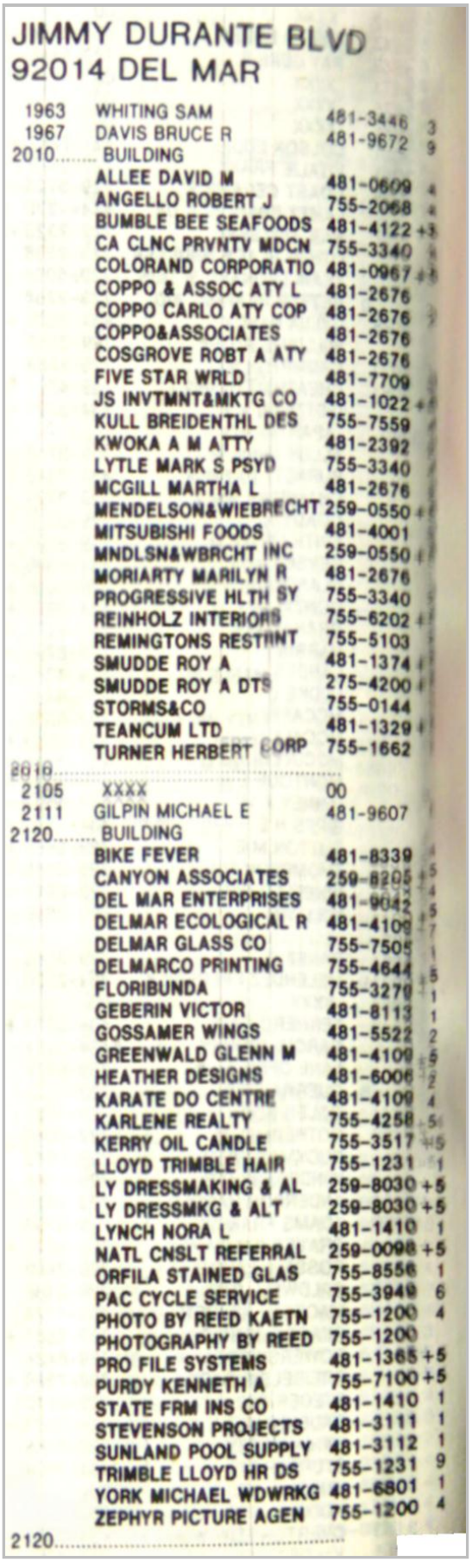
SAN DIEGUITO DR 92014
DEL MAR

1433	STACK A M	792-9758	+0
1441	DIXON Gordon H DDS	755-2000	
1505	MCQUISTON Donald K	755-9215	
1515	SEDGWICK Robt	755-8191	
1525	CARL Janice	259-8381	5
	CARL Karin	755-4819	
	CARL Rob	755-4819	
	★CARL&COMPANY	481-2010	9
1535	REAM Joseph T	755-9682	9
1555	XXXX	00	
1557	BRADFORD Delmar B	755-9546	
1567	HAYWARD Robt L	755-8536	
1569	FREEMAN Terry	755-4158	+0
	WOOLLEY Chris	755-4612	+0
	WOOLLEY Kenyon	755-4612	+0
	WOOLLEY Michelle	755-4612	+0
	WOOLLEY Terry	755-4158	+0
1585	XXXX	00	
1601	XXXX	00	
1604	XXXX	00	
1810	MARECHAL James K Jr	481-6426	+0
2179	XXXX	00	
2186	HOLSTON Lewis P	755-8605	
2194	★GOODWIN CLYDE CONS	755-3522	4
2201.....	BUILDING		
	★ARMSTRONG&MCHUGH	755-4917	
	★BECHTEL TOWING	755-0534	3
	★BLASUTTA C ILLSTRTN	755-5539	9
	★C B S SCIENTIFIC CO	755-4959	+0
	★DEL MAR AUTO SRV CN	755-2404	
	★EUCALYPTUS STONEWRE	755-5656	
	★FIRSTER J TXTL DSGN	792-1822	9
	★MACGILLIS PAT	259-0589	8
	★SUNSET BALLN FLGHTS	481-9122	+0
	★VINT KEVIN MASONRY	481-7033	1
	★WOOD WILLIAM DEVLP	259-6953	+0
2201.....			

★ 13 BUS 22 RES 10 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

JIMMY DURANTE BLVD 1985

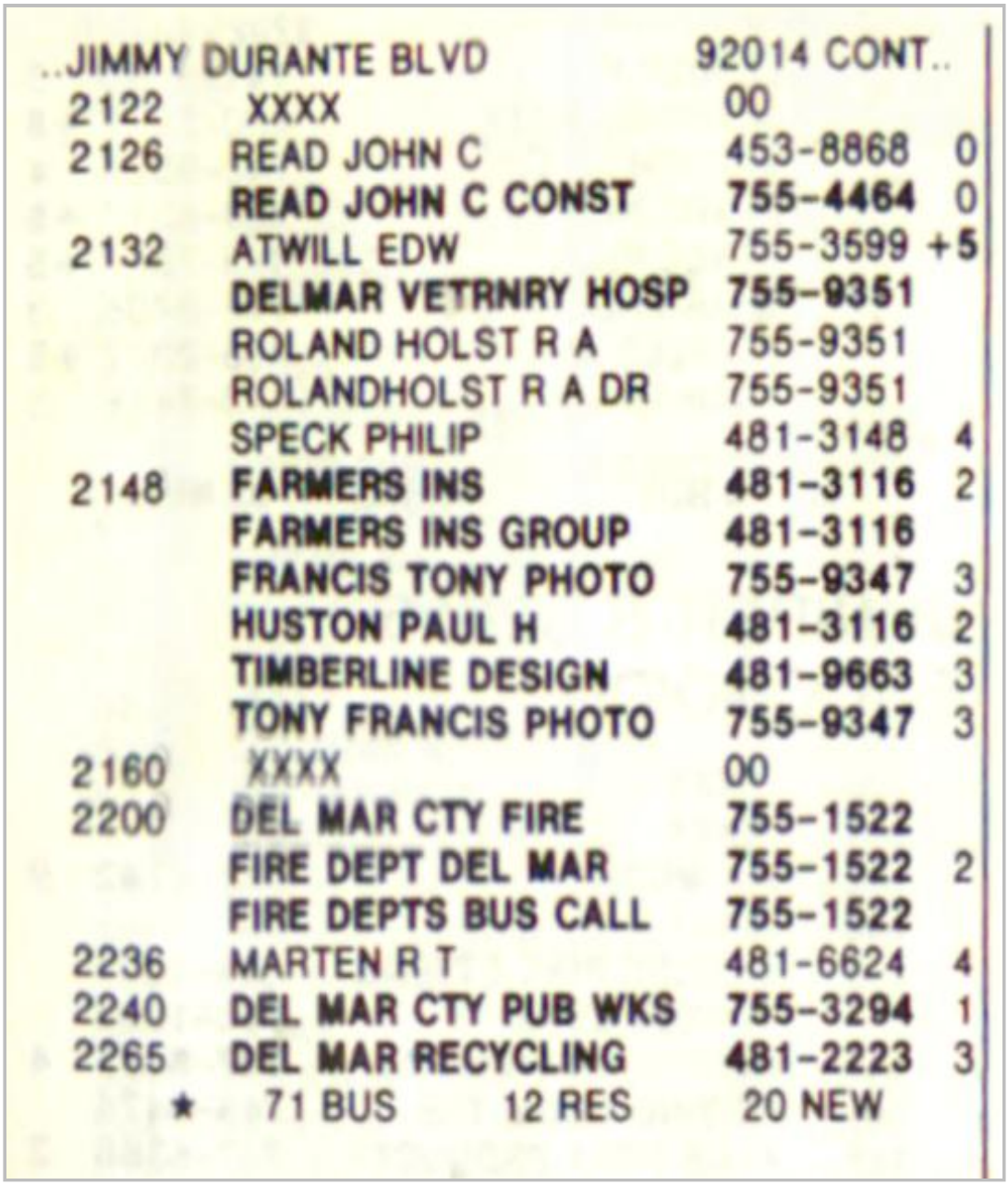


JIMMY DURANTE BLVD
92014 DEL MAR

1963	WHITING SAM	481-3446 3
1967	DAVIS BRUCE R	481-9672 9
2010	BUILDING	
	ALLEE DAVID M	481-0609 4
	ANGELLO ROBERT J	755-2068 4
	BUMBLE BEE SEAFOODS	481-4122 +3
	CA CLNC PRVNTV MDCN	755-3340
	COLORAND CORPORATIO	481-0967 +3
	COPPO & ASSOC ATY L	481-2676
	COPPO CARLO ATY COP	481-2676
	COPPO&ASSOCIATES	481-2676
	COSGROVE ROBT A ATY	481-2676
	FIVE STAR WRLD	481-7709
	JS INVTMNT&MKTG CO	481-1022 +5
	KULL BREIDENTHL DES	755-7559
	KWOKA A M ATTY	481-2392
	LYTLE MARK S PSYD	755-3340
	MCGILL MARTHA L	481-2676
	MENDELSON&WIEBRECHT	259-0550 +5
	MITSUBISHI FOODS	481-4001
	MNDLSN&WBRCHT INC	259-0550 +5
	MORIARTY MARILYN R	481-2676
	PROGRESSIVE HLTH SY	755-3340
	REINHOLZ INTERIORS	755-6202 +5
	REMINGTONS RESTRNT	755-5103
	SMUDDE ROY A	481-1374 +5
	SMUDDE ROY A DTS	275-4200 +5
	STORMS&CO	755-0144
	TEANCUM LTD	481-1329 +5
	TURNER HERBERT CORP	755-1662
2010		
2105	XXXX	00
2111	GILPIN MICHAEL E	481-9607
2120	BUILDING	
	BIKE FEVER	481-8339
	CANYON ASSOCIATES	259-8205 +5
	DEL MAR ENTERPRISES	481-9042 +4
	DELMAR ECOLOGICAL R	481-4109 +5
	DELMAR GLASS CO	755-7505 7
	DELMARCO PRINTING	755-4644 +5
	FLORIBUNDA	755-3279 1
	GEBERIN VICTOR	481-8113 1
	GOSSAMER WINGS	481-5522 2
	GREENWALD GLENN M	481-4109 +5
	HEATHER DESIGNS	481-6006 2
	KARATE DO CENTRE	481-4109 4
	KARLENE REALTY	755-4258 +5
	KERRY OIL CANDLE	755-3517 +5
	LLOYD TRIMBLE HAIR	755-1231 1
	LY DRESSMAKING & AL	259-8030 +5
	LY DRESSMKG & ALT	259-8030 +5
	LYNCH NORA L	481-1410 1
	NATL CNSLT REFERRAL	259-0098 +5
	ORFILA STAINED GLAS	755-8556 1
	PAC CYCLE SERVICE	755-3949 6
	PHOTO BY REED KAETN	755-1200 4
	PHOTOGRAPHY BY REED	755-1200
	PRO FILE SYSTEMS	481-1365 +5
	PURDY KENNETH A	755-7100 +5
	STATE FRM INS CO	481-1410 1
	STEVENSON PROJECTS	481-3111 1
	SUNLAND POOL SUPPLY	481-3112 1
	TRIMBLE LLOYD HR DS	755-1231 9
	YORK MICHAEL WDWRKG	481-6801 1
	ZEPHYR PICTURE AGEN	755-1200 4
2120		

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

JIMMY DURANTE BLVD 1985



..JIMMY DURANTE BLVD 92014 CONT..

2122	XXXX	00	
2126	READ JOHN C	453-8868	0
	READ JOHN C CONST	755-4464	0
2132	ATWILL EDW	755-3599	+5
	DELMAR VETRNRY HOSP	755-9351	
	ROLAND HOLST R A	755-9351	
	ROLANDHOLST R A DR	755-9351	
	SPECK PHILIP	481-3148	4
2148	FARMERS INS	481-3116	2
	FARMERS INS GROUP	481-3116	
	FRANCIS TONY PHOTO	755-9347	3
	HUSTON PAUL H	481-3116	2
	TIMBERLINE DESIGN	481-9663	3
	TONY FRANCIS PHOTO	755-9347	3
2160	XXXX	00	
2200	DEL MAR CTY FIRE	755-1522	
	FIRE DEPT DEL MAR	755-1522	2
	FIRE DEPTS BUS CALL	755-1522	
2236	MARTEN R T	481-6624	4
2240	DEL MAR CTY PUB WKS	755-3294	1
2265	DEL MAR RECYCLING	481-2223	3

★ 71 BUS 12 RES 20 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

SAN DIEGUITO DR 1985

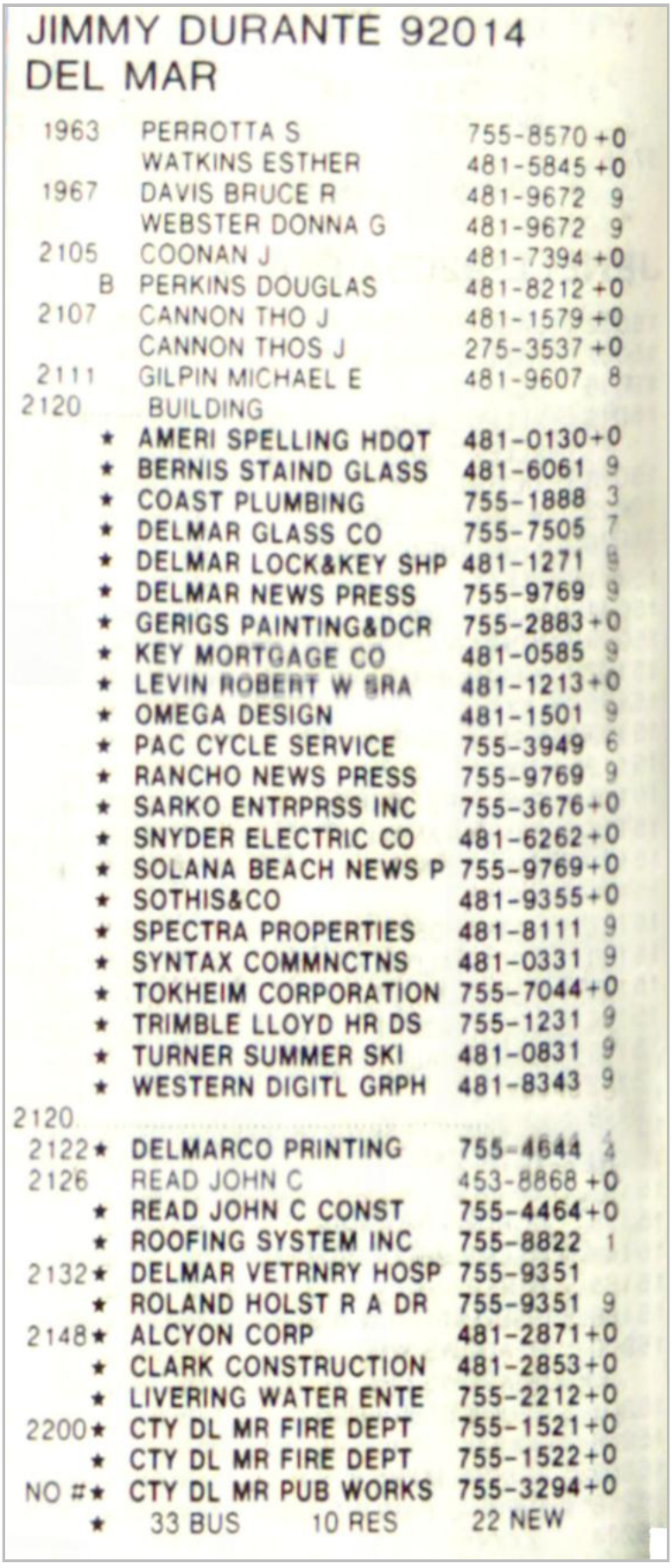
SAN DIEGUITO DR 92014
DEL MAR

1441	DIXON GORDON H DDS	755-2000	9
1505	MCQUISTON D K	755-9215	
1515	SEDGWICK ROBT	755-8191	
1525	CARL JANICE	259-8381	+5
	CARL KARIN	755-4819	+5
1535	KLARE ELECTA GAY	755-2130	+5
1555	REAM JOS T	755-9682	
1557	BRADFORD DELMAR B	755-9546	
1567	HAYWARD ROBT L	755-8536	
1569	FLAUGH DAVID	481-7793	1
1585	GARDNER L N	755-6476	4
1601	MATTSON BRUCE E	481-2055	+5
1604	XXXX	00	
2179	BARBER CABINET CO	755-6134	+5
	SHIRLEY J&CO	755-6633	0
2186	HOLSTON LEWIS P	755-8605	0
2194	GOODWIN CLYDE CONS	755-3522	4
2201	BUILDING		
	ARMSTRONG&MCHUGH	755-4917	0
	BECHTEL TOWING	755-0534	3
	BRANCH MANAGERS	755-2201	3
	DEL MAR AUTO SRV CN	755-2404	6
	DEL MAR FINE ART	755-7178	2
	DELMAR BLUE PRINT	755-5134	0
	DOUBLE EAGLE PATROL	481-3007	3
	ERICAS CUSHIND DESI	481-1018	
	ERICAS CUSHND DESGN	481-1018	3
	EUCALYPTUS STONEWRE	755-5656	6
	KALLETT L ENTPS	481-6613	4
	VINT KEVIN MASONRY	481-7033	1
2201			

★ 15 BUS 14 RES 5 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

JIMMY DURANTE BLVD 1980



JIMMY DURANTE 92014
DEL MAR

1963		PERROTTA S	755-8570 +0
		WATKINS ESTHER	481-5845 +0
1967		DAVIS BRUCE R	481-9672 9
		WEBSTER DONNA G	481-9672 9
2105		COONAN J	481-7394 +0
	B	PERKINS DOUGLAS	481-8212 +0
2107		CANNON THO J	481-1579 +0
		CANNON THOS J	275-3537 +0
2111		GILPIN MICHAEL E	481-9607 8
2120		BUILDING	
	*	AMERI SPELLING HDQT	481-0130+0
	*	BERNIS STAIND GLASS	481-6061 9
	*	COAST PLUMBING	755-1888 3
	*	DELMAR GLASS CO	755-7505 7
	*	DELMAR LOCK&KEY SHP	481-1271 9
	*	DELMAR NEWS PRESS	755-9769 9
	*	GERIGS PAINTING&DCR	755-2883+0
	*	KEY MORTGAGE CO	481-0585 9
	*	LEVIN ROBERT W SRA	481-1213+0
	*	OMEGA DESIGN	481-1501 9
	*	PAC CYCLE SERVICE	755-3949 6
	*	RANCHO NEWS PRESS	755-9769 9
	*	SARKO ENTRPRSS INC	755-3676+0
	*	SNYDER ELECTRIC CO	481-6262+0
	*	SOLANA BEACH NEWS P	755-9769+0
	*	SOTHIS&CO	481-9355+0
	*	SPECTRA PROPERTIES	481-8111 9
	*	SYNTAX COMMNCTNS	481-0331 9
	*	TOKHEIM CORPORATION	755-7044+0
	*	TRIMBLE LLOYD HR DS	755-1231 9
	*	TURNER SUMMER SKI	481-0831 9
	*	WESTERN DIGITL GRPH	481-8343 9
2120			
2122	*	DELMARCO PRINTING	755-4644 4
2126		READ JOHN C	453-8868 +0
	*	READ JOHN C CONST	755-4464+0
	*	ROOFING SYSTEM INC	755-8822 1
2132	*	DELMAR VETRNRY HOSP	755-9351
	*	ROLAND HOLST R A DR	755-9351 9
2148	*	ALCYON CORP	481-2871+0
	*	CLARK CONSTRUCTION	481-2853+0
	*	LIVERING WATER ENTE	755-2212+0
2200	*	CTY DL MR FIRE DEPT	755-1521+0
	*	CTY DL MR FIRE DEPT	755-1522+0
NO #	*	CTY DL MR PUB WORKS	755-3294+0
	*	33 BUS 10 RES	22 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

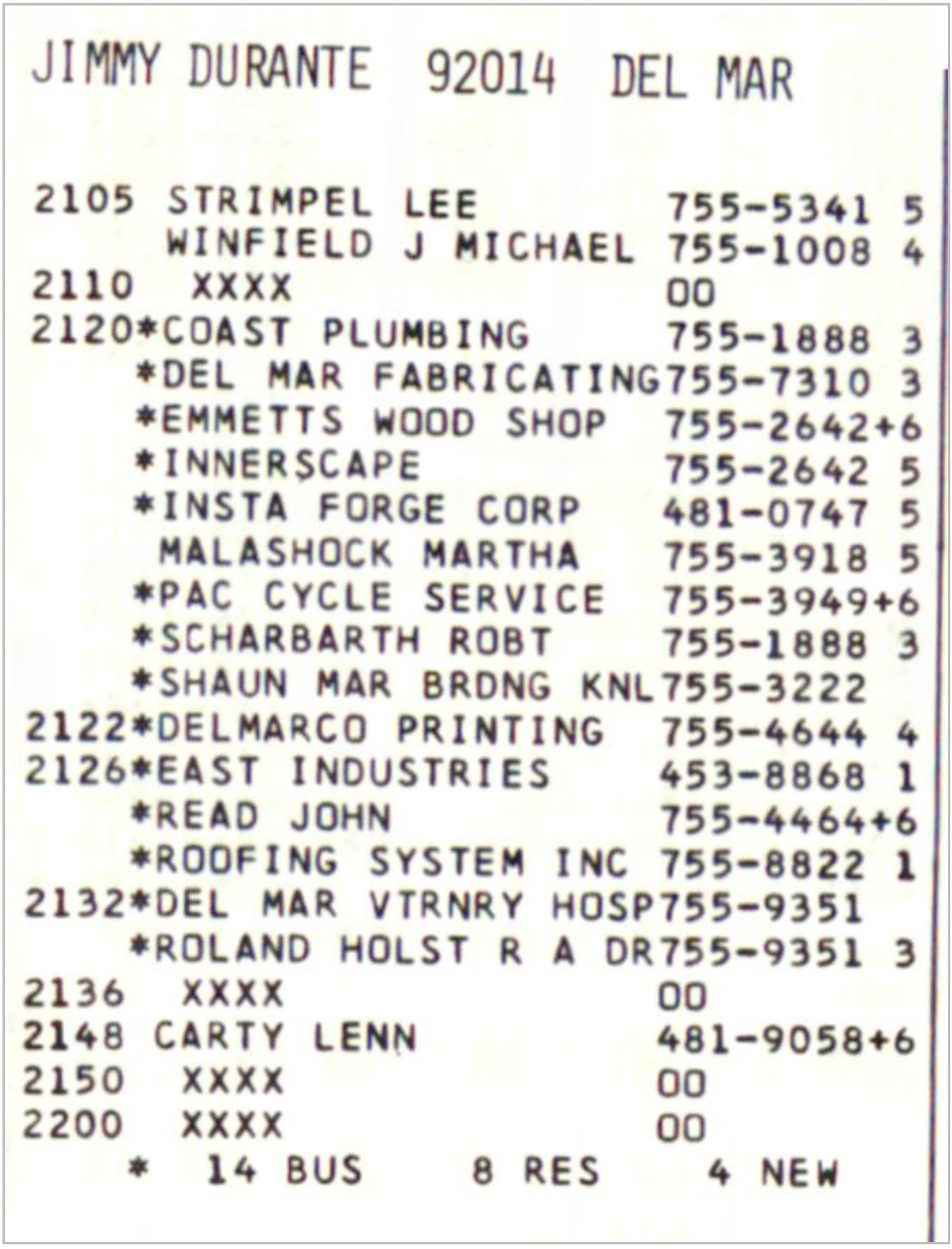
SAN DIEGUITO DR 1980

SAN DIEGUITO DR 92014
DEL MAR

1441	DIXON GORDON H DDS	755-2000	9
1505	MCQUISTON D K	755-9215	4
★	**MCQUISTON&DAUGHTER**	**452-8463**	**+0**
1515	SEDGWICK ROBT	755-8191	
1535	ANDERSEN ROBT	755-2130	5
1555	REAM JOS T	755-9682	1
1557	BRADFORD DELMAR B	755-9546	
1561	HAYDU PAUL J	481-0145	+0
1567	HAYWARD ROBT L	755-8536	
1585	RIGLEY WILLARD A	481-6485	+0
1601	KEANE KENNETH L	755-1037	
1604	XXXX	00	
1810	MARECHAL PETER	481-6341	9
2179★	**SHIRLEY J&CO**	**755-6633**	**+0**
2186	HOLSTON LEWIS P	755-8605	+0
2194	FALLOWS THOS	755-3700	+0
2201.....	BUILDING		
★	**ARMSTRONG&MCHUGH**	**755-4917**	**+0**
★	**DELMAR BLUE PRINT**	**755-5134**	**+0**
★	**DELMAR AUTOMTV SERV**	**755-2404**	**6**
★	**DELMAR FRGN CAR SRV**	**755-9277**	**6**
★	**DORFMAN REALTORS**	**755-6708**	**+0**
★	**EDWARD K&CO**	**755-3236**	**+0**
★	**EUCALYPTUS STONEWRE**	**755-5656**	**6**
★	**GOLDEN PLUMBING**	**436-5088**	**9**
★	**NOVA SEARCH INTRNTL**	**452-8030**	**+0**
★	**PHILS FRGN CAR GRGE**	**755-9277**	**6**
★	**ROTSHECK CNSTRCTN**	**755-8907**	**+0**
2201.....			
NO #	CONLEY WALTER J	755-2003	
★	13 BUS 15 RES	12 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

JIMMY DURANTE BLVD 1976



JIMMY DURANTE 92014 DEL MAR

2105 STRIMPEL LEE 755-5341 5
WINFIELD J MICHAEL 755-1008 4
2110 XXXX OO
2120*COAST PLUMBING 755-1888 3
*DEL MAR FABRICATING 755-7310 3
*EMMETTS WOOD SHOP 755-2642+6
*INNERSCAPE 755-2642 5
*INSTA FORGE CORP 481-0747 5
MALASHOCK MARTHA 755-3918 5
*PAC CYCLE SERVICE 755-3949+6
*SCHARBARTH ROBT 755-1888 3
*SHAUN MAR BRDNG KNL 755-3222
2122*DELMARCO PRINTING 755-4644 4
2126*EAST INDUSTRIES 453-8868 1
*READ JOHN 755-4464+6
*ROOFING SYSTEM INC 755-8822 1
2132*DEL MAR VTRNRY HOSP 755-9351
*ROLAND HOLST R A DR 755-9351 3
2136 XXXX OO
2148 CARTY LENN 481-9058+6
2150 XXXX OO
2200 XXXX OO
* 14 BUS 8 RES 4 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

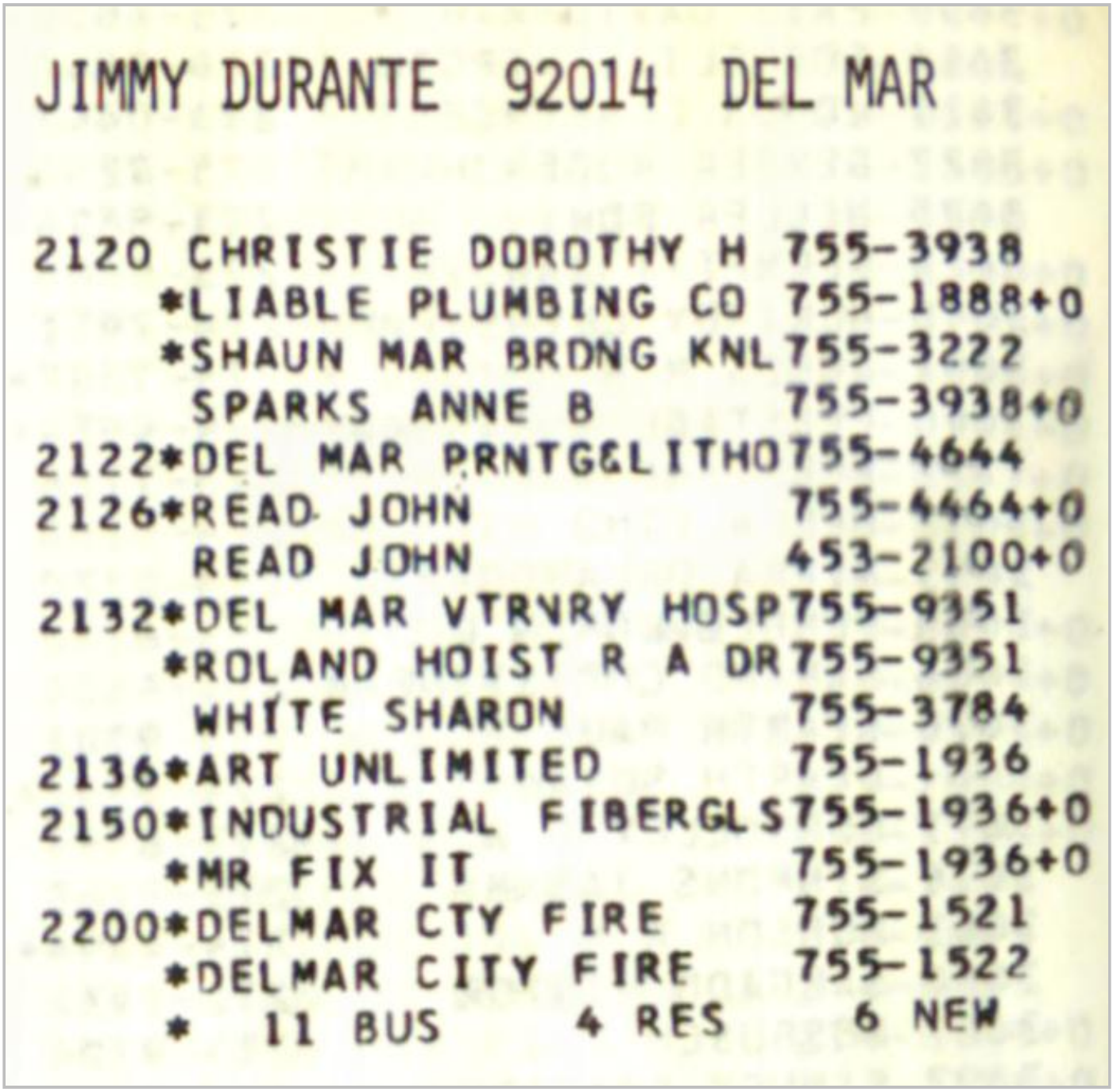
SAN DIEGUITO DR 1976

SAN DIEGUITO DR 92014 DEL MAR

1441	MCDONALD P MICHAEL	481-9131 5
1505	MCQUISTON D K	755-9215 4
1515	SEDGWICK ROBT	755-8191 0
1535	ANDERSEN ROBT	755-2130 5
1555	REAM JOS T	755-9682 1
1557	BRADFORD CANDY	755-7404 2
	BRADFORD DELMAR B	755-9546
1561	DOUTHITT FRANK M	755-4884 1
1567	HAYWARD ROBT L	755-8536 0
1585	MURRAY JEAN I	755-5896+6
1601	KEANE KENNETH L	755-1037
2179	*WATTIER ELECTRIC CO	755-2244 3
2201	....BUILDING	
	*ARMSTRONG&MC HUGH	755-4917+6
	*BLOCK H&R	755-2136 5
	*DELMAR AUTOMTV SERV	755-2404+6
	*DELMAR FRGN CAR SRV	755-9277+6
	*DORFMAN A J REALTOR	755-6708+6
	*EUCALYPTUS STONEWRE	755-5656+6
	*FRAMESMITH THE	755-5404 4
	*FREEFORM CERAMICS	755-8000 5
	*FROG WEST IRON WRKS	755-5011+6
	*GARAGE SALE THE	755-6700+6
	*PHILS FRGN CAR GRGE	755-9277+6
	*SMITH M	755-5404 5
	*VIVIENNE	755-6708+6
	*CONLEY WALTER J	755-2003
	*SHOEMAKER LYNNE	755-2797
2201	.....	
	* 16 BUS 11 RES	10 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

JIMMY DURANTE BLVD 1970

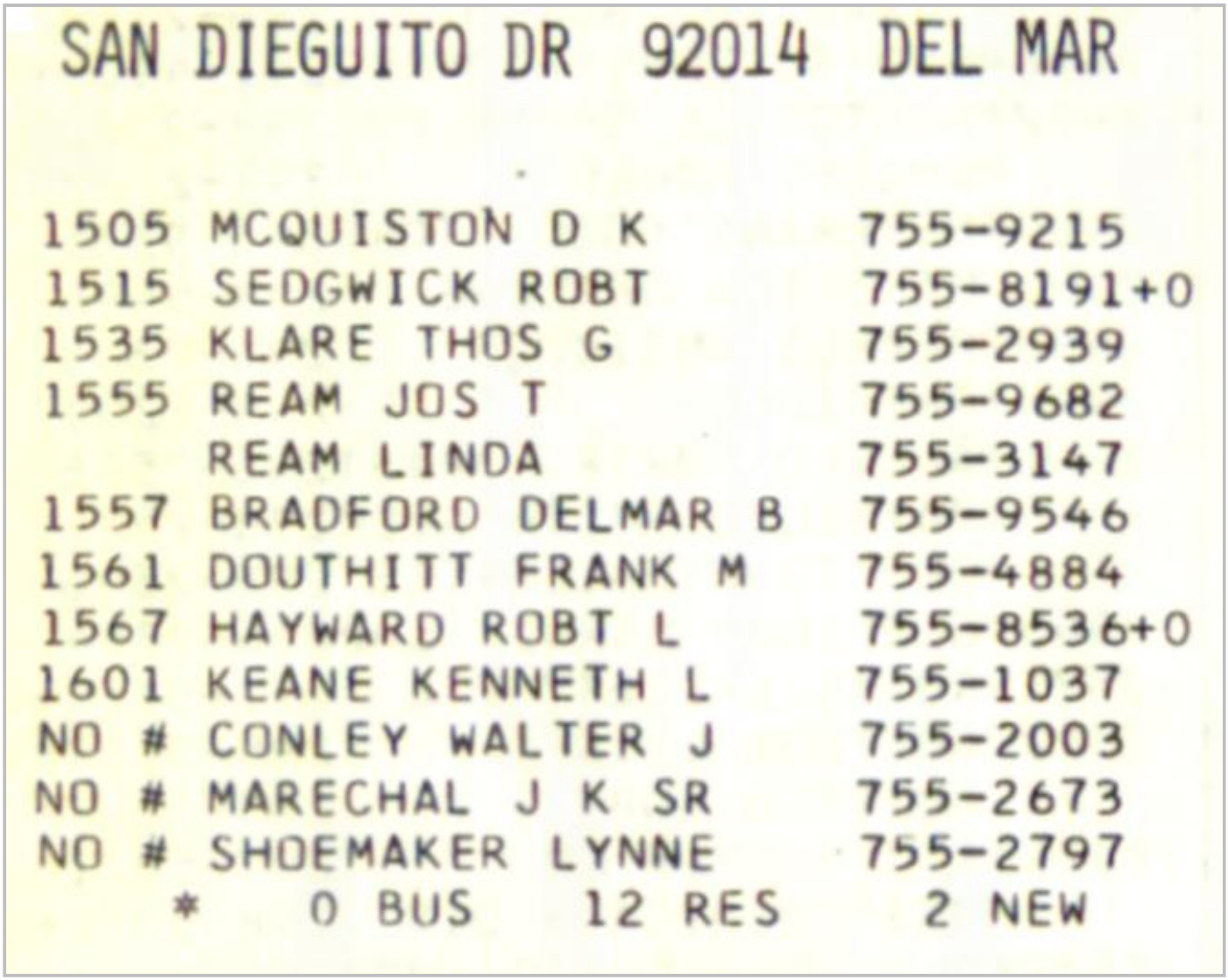


JIMMY DURANTE 92014 DEL MAR

2120 CHRISTIE DOROTHY H 755-3938
*LIABLE PLUMBING CO 755-1888+0
*SHAUN MAR BRDNG KNL 755-3222
SPARKS ANNE B 755-3938+0
2122*DEL MAR PRNTG&LITHO 755-4644
2126*READ JOHN 755-4464+0
READ JOHN 453-2100+0
2132*DEL MAR VTRNRY HOSP 755-9351
*ROLAND HOIST R A DR 755-9351
WHITE SHARON 755-3784
2136*ART UNLIMITED 755-1936
2150*INDUSTRIAL FIBERGLS 755-1936+0
*MR FIX IT 755-1936+0
2200*DELMAR CTY FIRE 755-1521
*DELMAR CITY FIRE 755-1522
* 11 BUS 4 RES 6 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

SAN DIEGUITO DR 1970



SAN DIEGUITO DR 92014 DEL MAR

1505	MCQUISTON D K	755-9215
1515	SEDGWICK ROBT	755-8191+0
1535	KLARE THOS G	755-2939
1555	REAM JOS T	755-9682
	REAM LINDA	755-3147
1557	BRADFORD DELMAR B	755-9546
1561	DOUTHITT FRANK M	755-4884
1567	HAYWARD ROBT L	755-8536+0
1601	KEANE KENNETH L	755-1037
NO #	CONLEY WALTER J	755-2003
NO #	MARECHAL J K SR	755-2673
NO #	SHOEMAKER LYNNE	755-2797

* 0 BUS 12 RES 2 NEW

2101-2125 JIMMY DURANTE BLVD
2101-2125 JIMMY DURANTE BLVD
Del Mar, CA 92014

Inquiry Number: 3906289.4
April 09, 2014

EDR Historical Topographic Map Report

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

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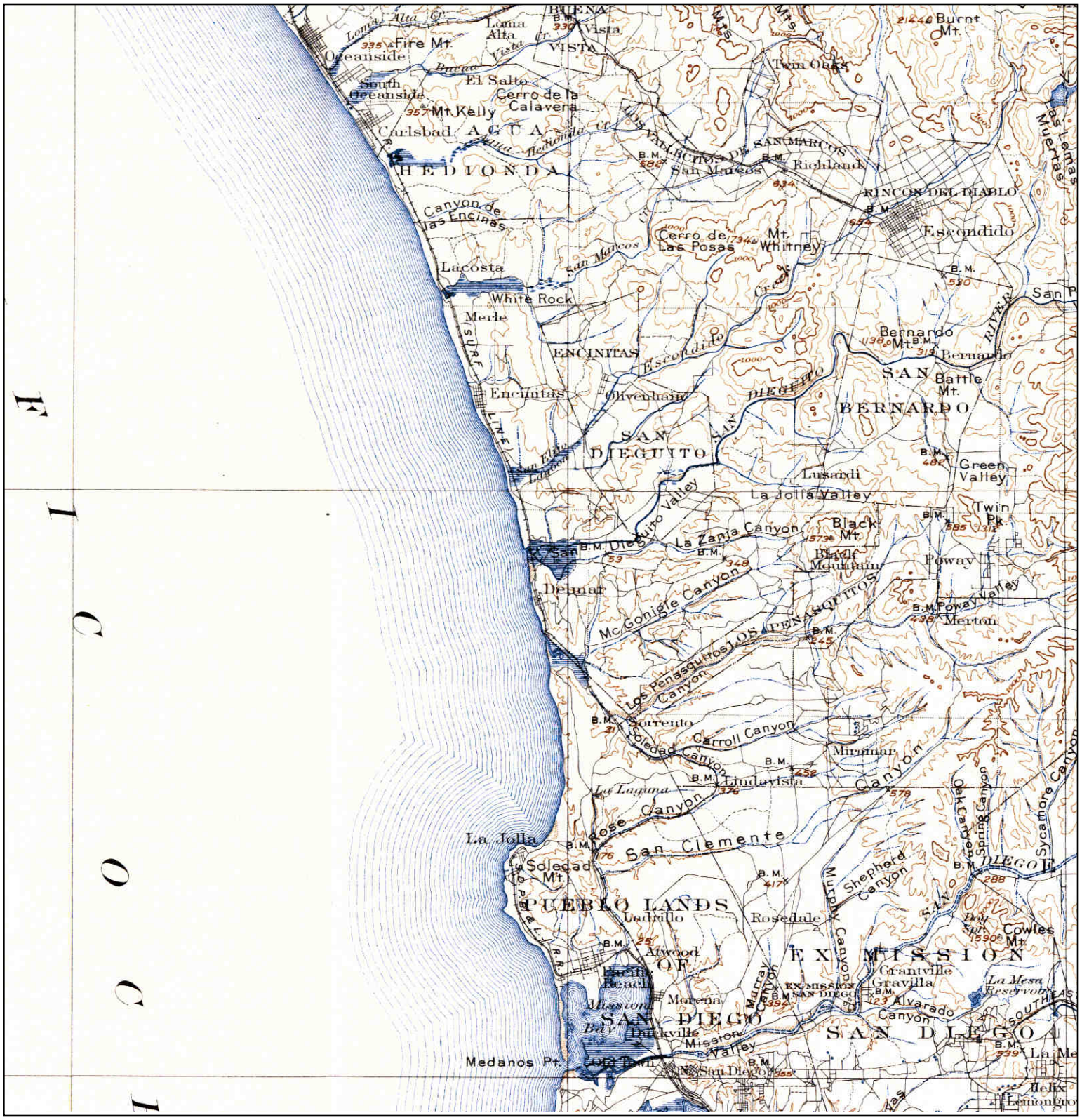
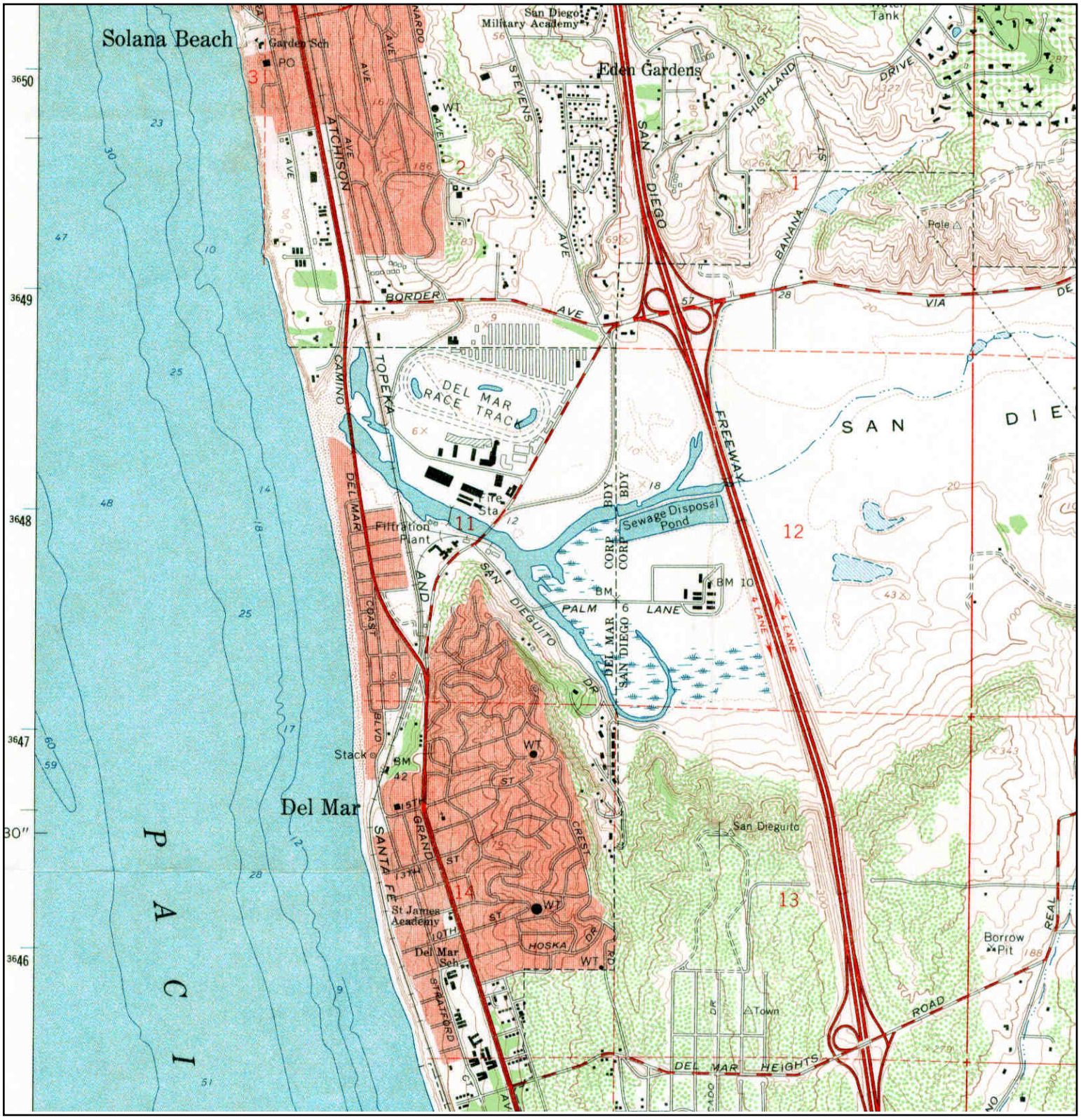


Unsurveyed Area on the Topographic Map

N

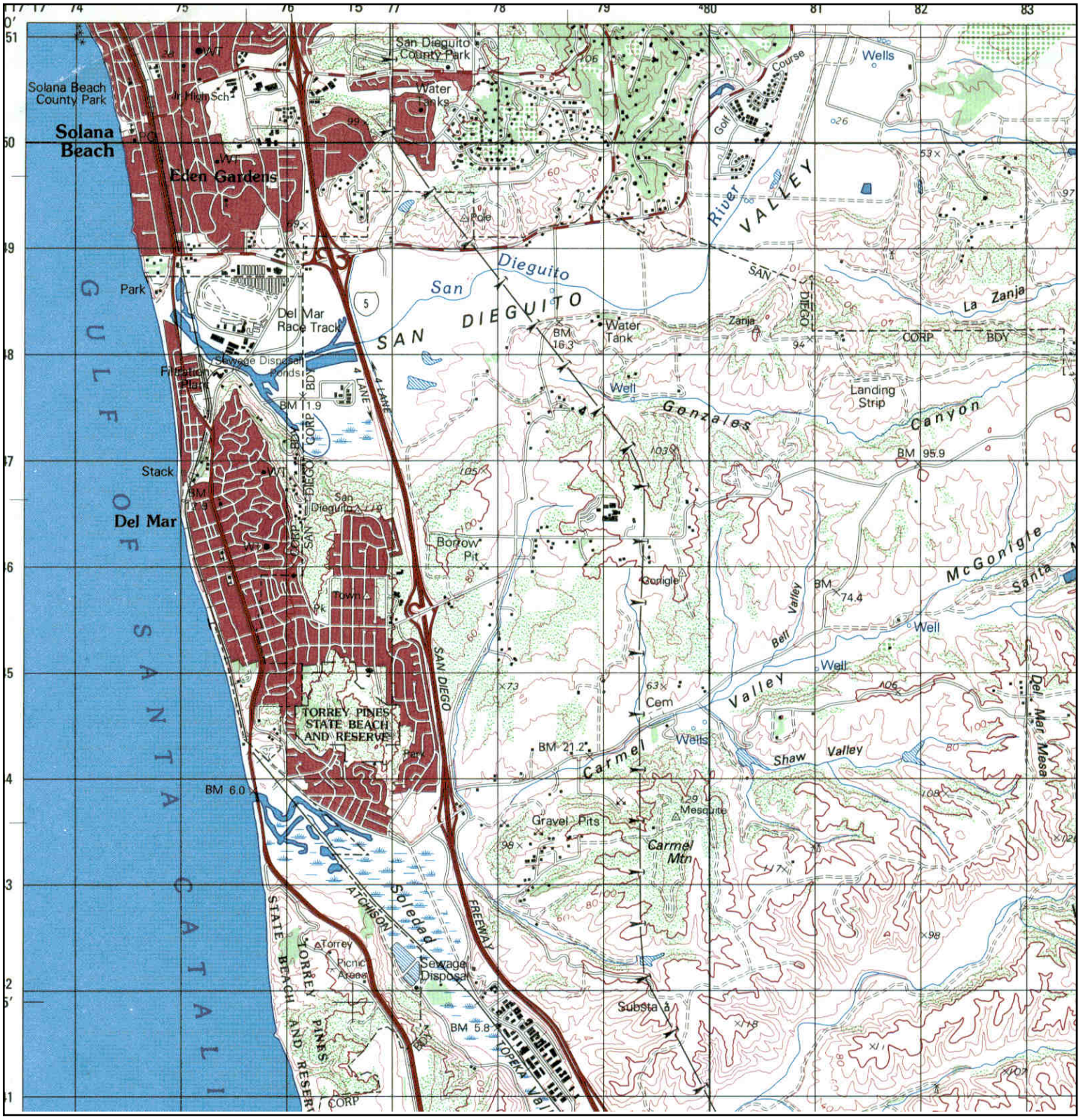
TARGET QUAD		SITE NAME:	2101-2125 JIMMY DURANTE BLVD	CLIENT:	Kleinfelder, Inc.
NAME:	SOUTHERN CA SHEET 2	ADDRESS:	2101-2125 JIMMY DURANTE BLVD Del Mar, CA 92014	CONTACT:	Margaret Carroll
MAP YEAR:	1904			INQUIRY#:	3906289.4
SERIES:	60	LAT/LONG:	32.9697 / -117.2634	RESEARCH DATE:	04/09/2014
SCALE:	1:250000				

Historical Topographic Map



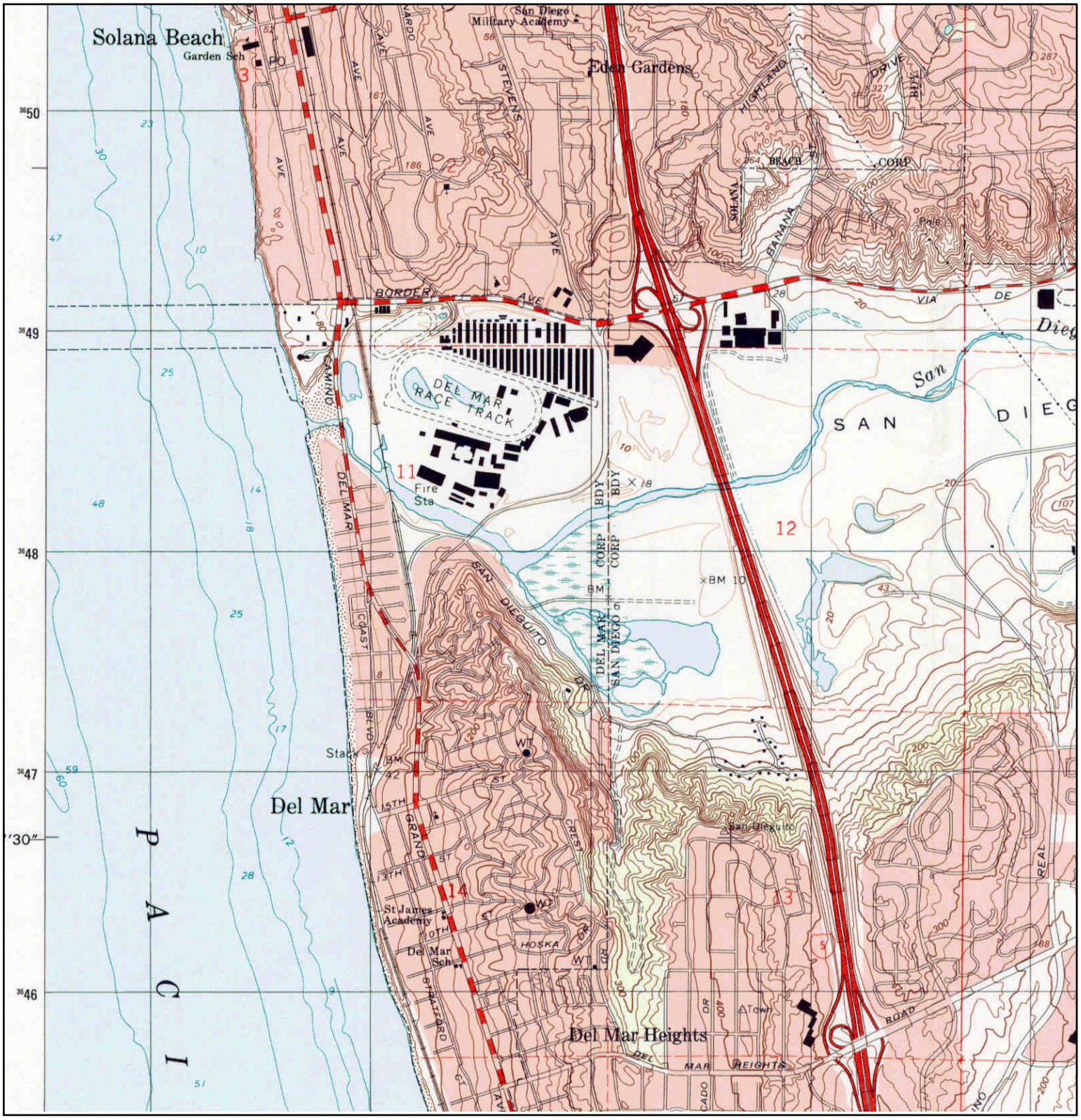
N	TARGET QUAD NAME: DEL MAR MAP YEAR: 1967 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 2101-2125 JIMMY DURANTE BLVD ADDRESS: 2101-2125 JIMMY DURANTE BLVD Del Mar, CA 92014 LAT/LONG: 32.9697 / -117.2634	CLIENT: Kleinfelder, Inc. CONTACT: Margaret Carroll INQUIRY#: 3906289.4 RESEARCH DATE: 04/09/2014

Historical Topographic Map



N	TARGET QUAD NAME: LA JOLLA MAP YEAR: 1975 SERIES: 15 SCALE: 1:50000	SITE NAME: 2101-2125 JIMMY DURANTE BLVD ADDRESS: 2101-2125 JIMMY DURANTE BLVD Del Mar, CA 92014 LAT/LONG: 32.9697 / -117.2634	CLIENT: Kleinfelder, Inc. CONTACT: Margaret Carroll INQUIRY#: 3906289.4 RESEARCH DATE: 04/09/2014

Historical Topographic Map



N	TARGET QUAD NAME: DEL MAR MAP YEAR: 1994 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 2101-2125 JIMMY DURANTE BLVD ADDRESS: 2101-2125 JIMMY DURANTE BLVD Del Mar, CA 92014 LAT/LONG: 32.9697 / -117.2634	CLIENT: Kleinfelder, Inc. CONTACT: Margaret Carroll INQUIRY#: 3906289.4 RESEARCH DATE: 04/09/2014

APPENDIX K

Traffic Study and Trip Generation Comparison Technical Memorandum

TRAFFIC STUDY

For

Watermark Del Mar Residential Project

in the City of Del Mar

Submitted To:

Watermark DM, L. P.

Submitted By:

Darnell & Associates, Inc.

Revised: October 21, 2015
Original: August 27, 2015

Darnell & Associates, Inc.

October 21, 2015

Marne Bouillon
Kitchell Development Company,
853 Camino Del Mar, Suite 200
Del Mar, California 92014

D&A Ref. No: 150201

Subject: Traffic Study for the 48 Condominium Unit Residential Project Located at the Southeast Corner of Jimmy Durante Boulevard and San Dieguito Drive in Del Mar, California.

Dear Mr. Bouillon:

In accordance with your authorization, Darnell & Associates, Inc. (D&A) has prepared this focused transportation study to assess impacts related to the proposed 48 Condominium Unit Residential Project located at the southeast corner of Jimmy Durante Boulevard and San Dieguito Drive in Del Mar, California. This report analyzes the traffic impacts associated with the proposed project on local roadways and intersections, including existing, existing plus proposed project, and existing plus cumulative (approved/pending) projects plus the proposed project. The analysis also addresses the analysis of the future installation of a roundabout at Jimmy Durante Boulevard and San Dieguito Drive as requested by the City of Del Mar. The report has been revised to respond to City of Del Mar comments dated September 30, 2015.

If you have any questions, please feel free to contact this office.

Sincerely,

DARNELL & ASSOCIATES, INC.

Bill E. Darnell

Bill E. Darnell, P.E.

Firm Principal
RCE: 22338
TR: 539

BED/jam
150201 – Watermark Del Mar 08/15

REGISTERED PROFESSIONAL ENGINEER
BILL E. DARNELL
No. 539
TRAFFIC
STATE OF CALIFORNIA

10/21/2015
Date

REGISTERED PROFESSIONAL ENGINEER
BILL E. DARNELL
No. 22338
CIVIL
STATE OF CALIFORNIA

10/21/2015
Date

1144 Mercury Street • SUITE 207A • SAN DIEGO, CA 92111
PHONE: 619-233-9373
E-mail: office@darnell-assoc.com

Darnell & Associates, Inc.

October 21, 2015

Marne Bouillon
Kitchell Development Company,
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DARNELL & ASSOCIATES, INC.

Bill E. Darnell, P.E.

Firm Principal
RCE: 22338
TR: 539

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150201 – Watermark Del Mar 08/15

_____
Date

_____
Date

1144 Mercury Street • SUITE 207A • SAN DIEGO, CA 92111
PHONE: 619-233-9373
E-mail: office@darnell-assoc.com

TRAFFIC STUDY

For

Watermark Del Mar

Residential Project

In the City of Del Mar

Prepared for:

Watermark DM, L. P.
853 Camino Del Mar,
Suite 200
Del Mar, CA 92014

Prepared by:

DARNELL & ASSOCIATES, INC.
4411 Mercury Street, Suite 207A
San Diego, California 92111
619-233-9373

October 21, 2015

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- TRAFFIC Counts

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APPENDIX C

Letter dated February 17, 2015 comparing the proposed Watermark Project Trip Generation to the approved Riverview Office Project Trip Generation.

SECTION I EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The Watermark Del Mar Residential Project proposes to construct 48 Condominiums at the southeast comer of Jimmy Durante Boulevard and San Dieguito Drive. As illustrated in this report, the proposed project is estimated to generate 384 average daily trips with 28 being generated during the morning peak hour and 39 being generated during the afternoon peak hour.

This report will show that under each condition analyzed, the proposed project will not significantly impact any segment or intersection located within the vicinity of the project site. The report also concludes that neither the daily nor peak hour volumes at the intersection of Jimmy Durante Boulevard, and San Dieguito Drive will be high enough to warrant signalization under existing plus project, and cumulative plus project conditions. The report also analyzed the level of service conditions at Jimmy Durante Boulevard and San Dieguito Drive intersection with the existing intersection stop controls and with the potential roundabout proposed by the City of Del Mar at the intersection.

Section III of the report provides a comparison of the trip generation of the proposed Watermark Project to the previously approved Riverview Office Project on the project site.

PROJECT DESCRIPTION

The Watermark Del Mar Residential Project proposes to construct 48 condominiums on the project site with an access driveway to San Dieguito Drive east of Jimmy Durante Boulevard. The site is located west of Interstate 5 at the southeast corner of Jimmy Durante Boulevard and San Dieguito Drive in the City of Del Mar. Figure 1 shows the regional location of the project and Figure 2 shows the site plan.

REPORT ORGANIZATION

Section I evaluates the existing roadway characteristics and traffic conditions surrounding the project area. Section II addresses existing conditions. Section III discusses the project traffic. Section IV analyzes the traffic for the existing plus project, cumulative and cumulative plus project conditions. Section V discusses the project's access points and on-site circulation. This section of the report will also address the Jimmy Durante Boulevard and San Dieguito Drive intersection using stop sign controls, installation of a traffic signal, and a potential roundabout proposed by the City of Del Mar. Section VI summarizes the recommended traffic mitigation measures. Section VII summarizes the report's findings and conclusions.

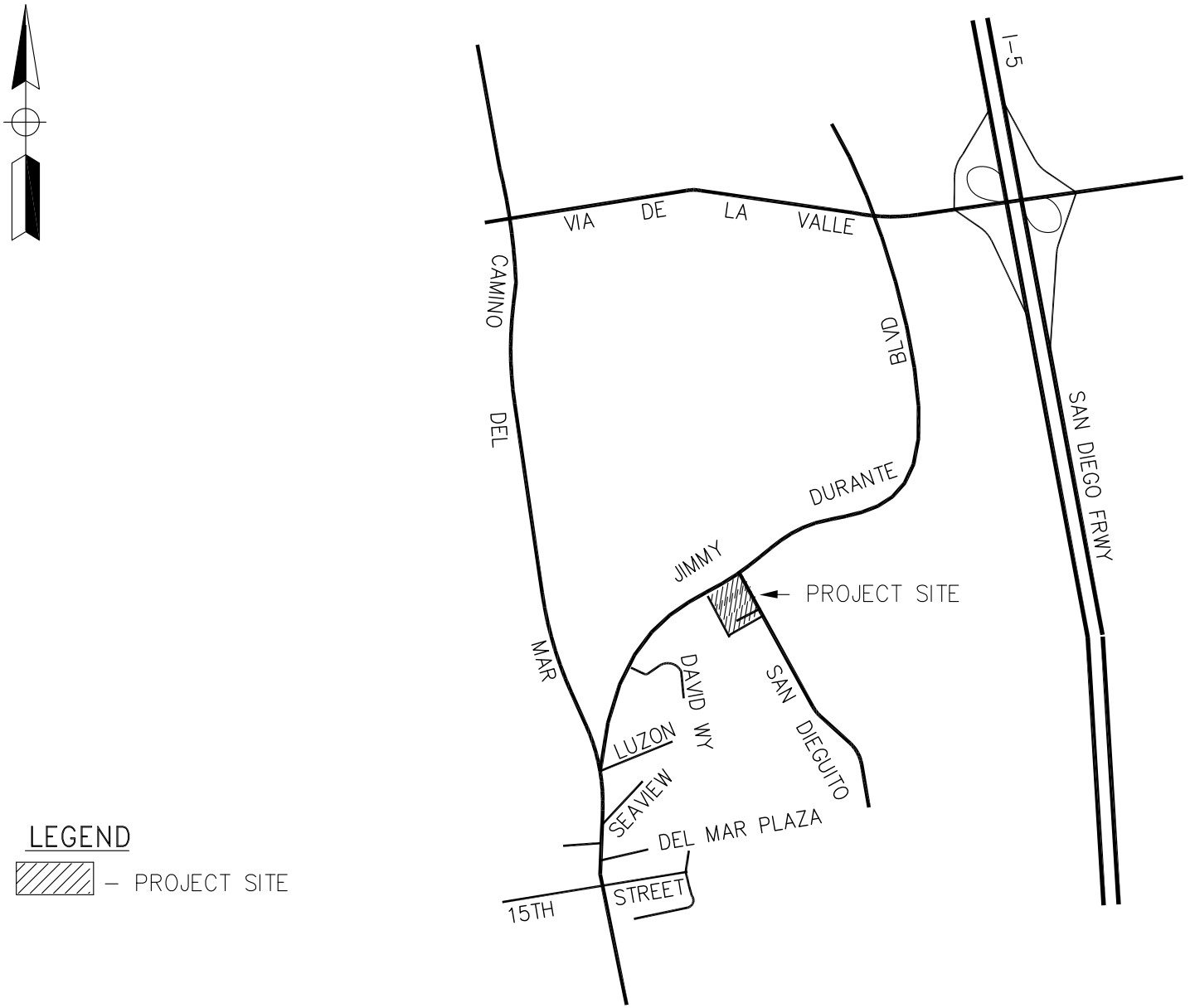

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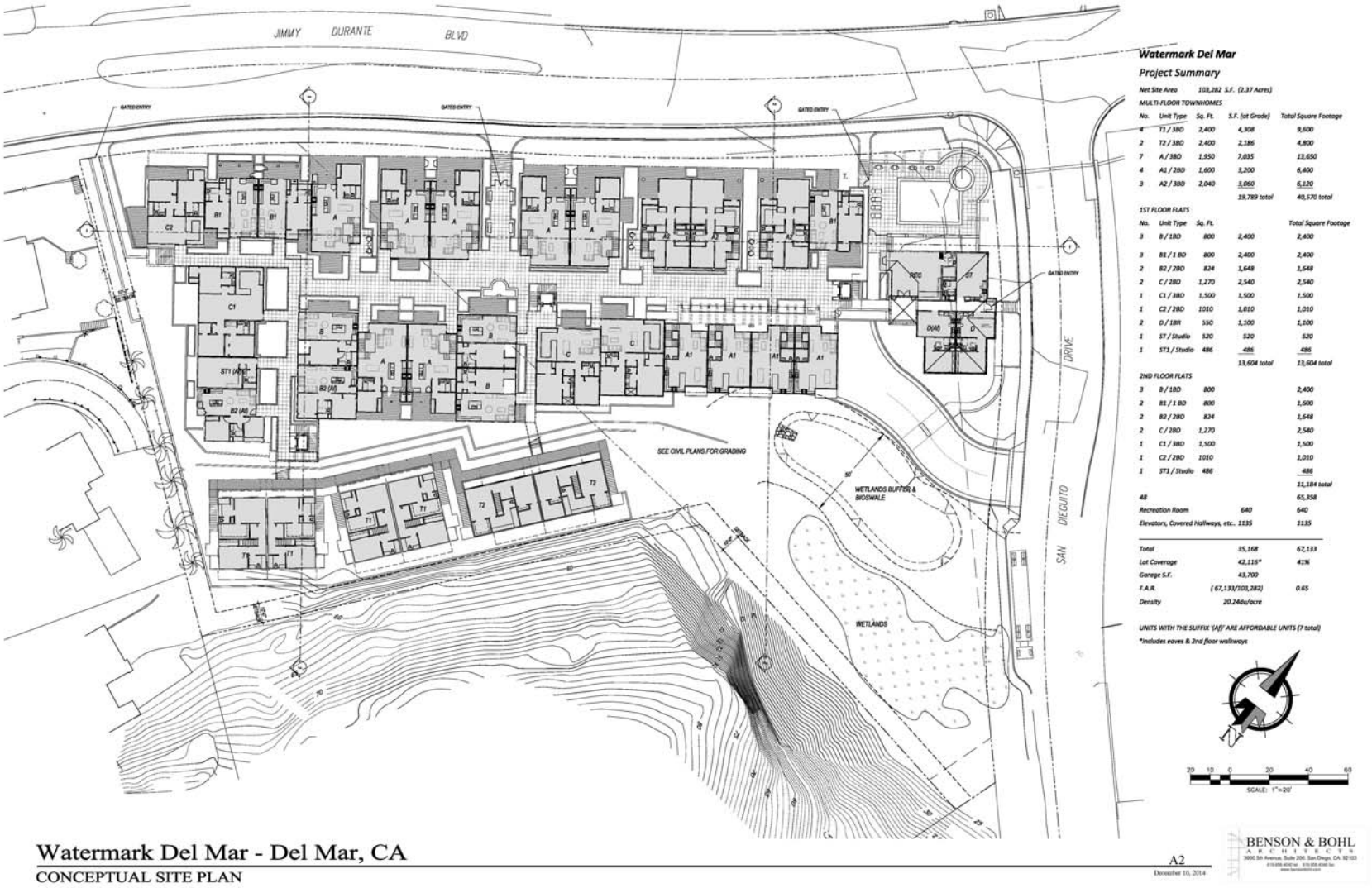
FIGURE 1

VICINITY MAP



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140501 – Watermark 10/21/2015

FIGURE 2

PROPOSED RESIDENTIAL SITE PLAN

SECTION II - EXISTING CONDITIONS

This section of the traffic study is intended to assess the existing conditions of the roadways and intersections within the vicinity of the project to determine travel flow and/or delay difficulties, if any, that exist prior to adding the traffic generated by the proposed project. The existing conditions analysis establishes a base condition which is used to apply the other scenarios discussed in this report.

Darnell & Associates, Inc. conducted a field review of the area surrounding the project in March 2015. Figure 3 depicts existing roadway and intersection geometries in the project vicinity.

EXISTING ROADWAY CHARACTERISTICS

Existing Roadway Segments and Intersections

Via De La Valle is constructed northeast of Jimmy Durante Boulevard as a five-lane Major Arterial (roadway with a painted median), with a capacity of 45,000 Average Daily Traffic (ADT) at Level of Service (LOS) E. West of Jimmy Durante Boulevard, Via De La Valle is constructed as a two-lane roadway with a two-way left turn lane, bike lanes, and permitted parking. This section of Via De La Valle has a capacity of 45,000 ADT at LOS E. The posted speed limit on Via De La Valle is 45 miles per hour.

Camino Del Mar· is constructed as a two-lane roadway with a raised median, bike lanes, and parking from Via De La Valle to Seaview Avenue. This segment of Camino Del Mar has a capacity equivalent to that of a two-lane Collector with a continuous left turn lane, which is 15,000 ADT at LOS E. South of Seaview Avenue, Camino Del Mar is constructed as a four lane Secondary Arterial/Collector (four-lane undivided roadway) with a capacity of 30,000 ADT at LOS E. The posted speed limit on Camino Del Mar is 35 to 40 miles per hour.

Jimmy Durante Boulevard is constructed south of Via De La Valle as a four-lane roadway with a two-way left turn lane and bike lanes. This section of Jimmy Durante Boulevard has a capacity equivalent to that of a Secondary Arterial/Collector, which is 30,000 ADT at LOS E. South of San Dieguito Drive, Jimmy Durante Boulevard is constructed as a two-lane roadway with a raised median and bike lanes. This section of Jimmy Durante Boulevard has a capacity equivalent to that of a two-lane Collector with a median or a continuous left turn lane, which is 15,000 ADT at LOS E. The posted speed limit on Jimmy Durante Boulevard is 45 miles per hour between Via De La Valle and San Dieguito Drive and 40 mph south of San Dieguito Drive.

San Dieguito Drive is constructed as a two-lane undivided road with a painted center-line. The capacity of San Dieguito Drive is equivalent to that of a two-lane Collector with commercial-industrial fronting, which is 8,000 ADT at LOS E.

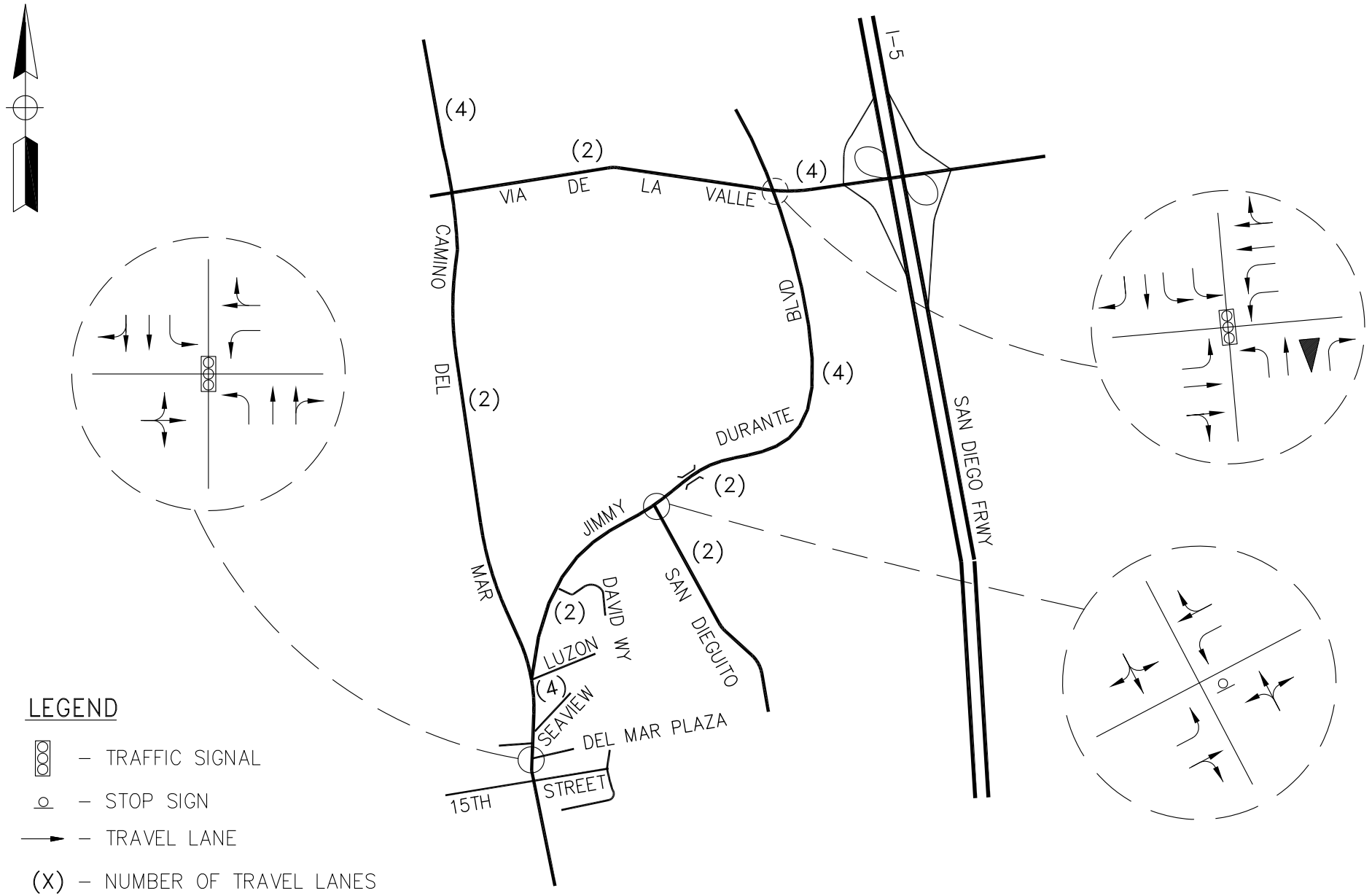

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FIGURE 3

EXISTING CONDITIONS

Twenty-four hour machine counts were taken on Jimmy Durante Boulevard, Via De La Valle and San Dieguito Drive. AM/PM peak hour turning movement counts were collected at the two study intersections. Figure 4 presents the daily and AM/PM peak hour volumes that were collected in February 2015. A copy of the daily and AM/PM peak hour counts can be found in Appendix A.

- Jimmy Durante Boulevard and Via De La Valle (signalized); and
- Jimmy Durante Boulevard and San Dieguito Drive (two-way stop-controlled).

EXISTING LEVEL OF SERVICE CONDITIONS

Roadway Segments

For the purpose of this report, the daily traffic volumes of the roadway segments in the vicinity of the project (as presented in Figure 4) were compared to the Roadway Classifications, Levels of Service and Average Daily Traffic thresholds depicted in Table 2 of the *San Diego Traffic Engineers' Council (SANTEC) and the Institute of Transportation Engineers (ITE) Guidelines for Traffic Impact Studies (TIS) in the San Diego Region*. A copy of these roadway Levels of Service thresholds and the daily (24 hour) traffic count sheets are included in Appendix A.

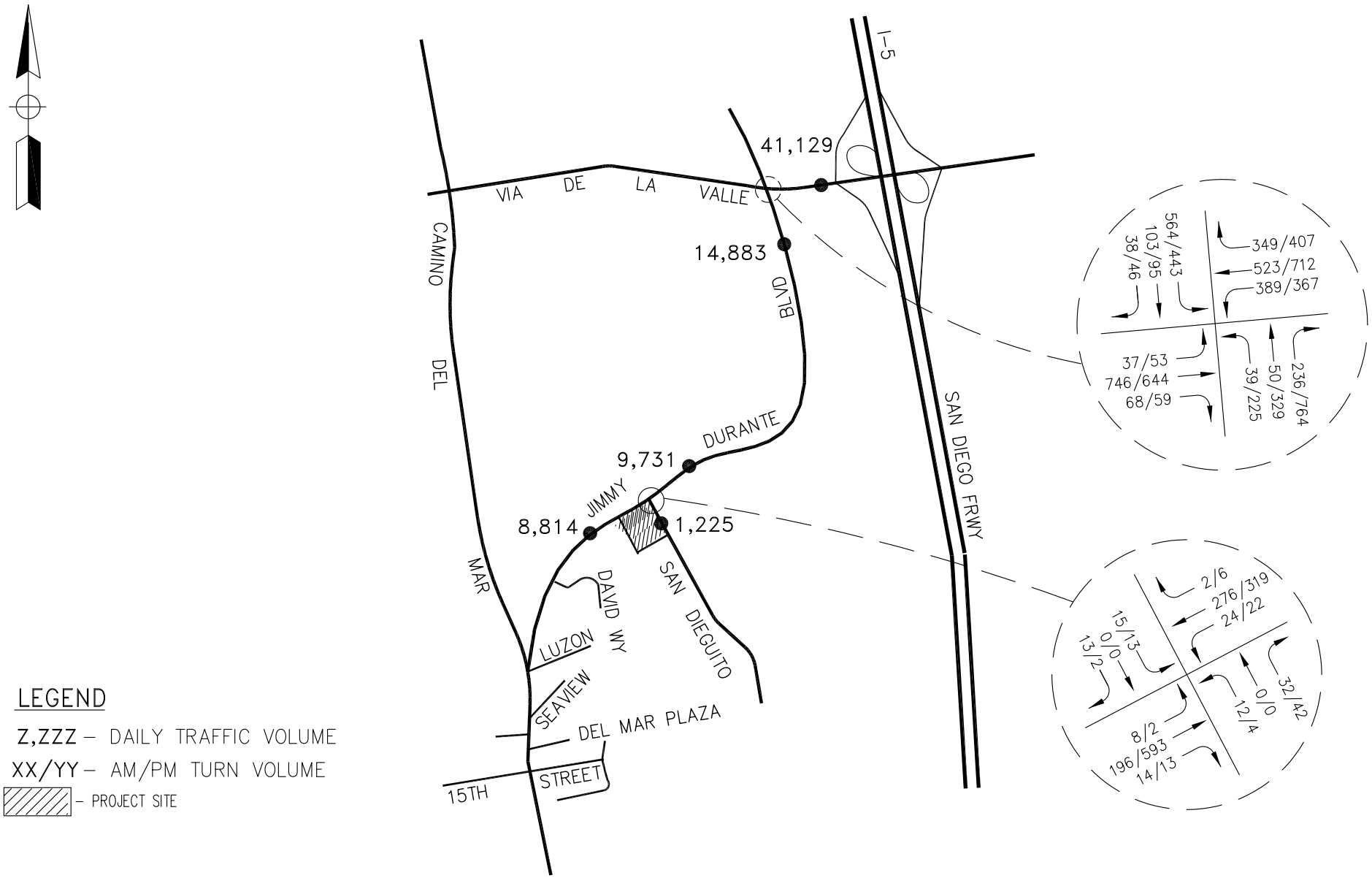
Review of Table 1, shows each of the roadway segments were found to operate at LOS B or better.

Table 1 - Existing Roadway Segment Level Of Service Summary

Roadway Segment	Classification	Capacity[1]	A.D.T.	v/c Ratio	LOS
Jimmy Durante Boulevard					
-South of Via De La Valle	Secondary Arterial	30,000	14,883	0.496	B
-North of San Dieguito Drive	2 Ln Collector (CLTL)	15,000	9,731	0.649	B
-South of San Dieguito Drive	2 Ln Collector (CLTL)	15,000	8,814	0.588	A
San Dieguito Road					
East of Jimmy Durante Boulevard	2 Ln Collector (C/I)	8,000	1,225	0.153	A

[1] Capacity is based on the upper limit of LOS E per Table 2 of the *San Diego Traffic Engineers' Council (SANTEC) and the Institute of Transportation Engineers (ITE) Guidelines for Traffic impact Studies (TIS) in the San Diego Region*., 2 Ln Collector (CLTL) = Two-Lane Collector with a Continuous Left Turn Lane, 2 Ln Collector (C/I) =Two-Lane Collector with commercial-industrial fronting.

This section of the traffic study is intended to assess the existing conditions of the roadways and intersections within the vicinity of the project to determine travel flow and/or delay difficulties, if any, that exist prior to adding the traffic generated by the proposed project. The existing conditions analysis establishes a base condition that is used to assess the other scenarios discussed in this report.



LEGEND

Z,ZZZ – DAILY TRAFFIC VOLUME

XX/YY – AM/PM TURN VOLUME

– PROJECT SITE

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FIGURE 4

EXISTING TRAFFIC VOLUMES

Intersections

The intersection of Jimmy Durante Boulevard and Via De La Valle is signalized, and the intersection of Jimmy Durante Boulevard and San Dieguito Drive is currently two-way stop controlled on San Dieguito Drive.

The City of Del Mar requires the use of the most recent version of the Highway Capacity Manual (HCM) methodology for peak hour analysis at the intersections through which project traffic is assigned. The HCM values were calculated utilizing the lane geometries shown in Figure 3. The results of the analysis are presented in Table 2.

Using the HCM methodology, the Level of Service at signalized intersections is based on delay using variables such as lane configuration, traffic volumes, and signal timings, while the Level of Service at unsignalized intersections is determined by the longest delay time for any single turn move. The move with the longest delay is identified as the Critical Movement. Table 2 presents the delay in seconds and the corresponding LOS for each intersection. As can be seen from Table 2 all intersections operate at LOS C or better under existing conditions. During the PM peak hour the southbound driveway at San Dieguito Drive entering Jimmy Durante Boulevard operates at LOS D and northbound San Dieguito Drive which serves the project operates at LOS B.

The Highway Capacity Software (HCM) worksheets for existing conditions can be found in Appendix B.

Table 2 - Existing Intersection HCM Level Of Service Summary

Intersection	Critical Movement	AM Peak		PM Peak	
		Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Jimmy Durante Boulevard@ Via De La Valle (Sig.)	Intersection	29.0	C	34.9	C
Jimmy Durante Boulevard (E/W) @San Dieguito Road(N/S) (Two-Way Stop-Controlled)	Intersection	1.8	A	1.3	A

(sec/veh) = (Seconds/Vehicle), LOS = Level of Service, (Sig.) = Signalized, (E/W) = East/West Direction, (N/S) = North/South Direction.

SECTION III
PROJECT RELATED CONDITIONS TRIP GENERATION RATES

TRIP GENERATION

The trip generation potential for the project is based on trip generation rates, both daily and peak hour rates, which were taken from the *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* published by the San Diego Association of Governments (SANDAG) in July, 1998.

Table 3 summarizes the trip generation rates and volumes for the proposed project. The table shows that the proposed 48 Residential Dwelling Unit Project will generate a total of 384 average daily trips, 28 morning peak hour truck trips and 39 afternoon peak hour trips. It should be noted that the density of the project is slightly greater than 20 dwelling units to the acre and would therefore qualify to use six (6) daily trips per dwelling unit, resulting in 288 daily trips, 23 AM and 29 PM peak hour trips. To present a worst case condition the rate of eight (8) trips per dwelling unit was utilized.

Table 3 - Trip Generation Rates And Calculations Summary

Trip Generation Rates

Land Use	Daily Rate	AM Peak Hour % of Daily Trips (In:Out Split)	PM Peak Hour % of Daily Trips (In:Out Split)
Residential	8 trips/DU	8% (2:8)	10% (7:3)

Project Trip Generation

Land Use	Total No. of	Total Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips (In:Out)		
			Total	In	Out	Total	In	Out
Residential	48 DU	384	28	6	22	36	12	27

DU = Dwelling Unit

TRIP DISTRIBUTION

Trip distribution for this site was determined based on existing travel patterns. Existing travel patterns indicate that 64 percent of the residents would travel to and from the north, 36 percent would travel to and from the south. The project distribution percentages are presented on Figure 5.

TRIP ASSIGNMENT

New traffic volumes generated by the proposed project were assigned to the local roadway network using the percentages depicted in Figure 5. The project-related daily and peak hour trips are shown in Figure 6. The impacts associated with the addition of project traffic are discussed in the following section, Section IV. The project-related traffic presented in Figure 6 was reviewed to identify the roadways and intersections that with the addition of the project, would add 50 or more peak hour trips as identified in the Santec/ITE Traffic Study Guidelines. Based on this review it was concluded the following roadways and intersections would be analyzed:

Roadways:

- Jimmy Durante Boulevard:
    - Between Via De La Valle and San Dieguito Drive;
    - Between San Dieguito Drive and Camino Del Mar;
- San Dieguito Drive:
    - East of Jimmy Durante Boulevard;

Intersections:

- Jimmy Durante Boulevard at San Dieguito Drive; and
- Jimmy Durante Boulevard at Via De La Valle.

The above-noted roadways and intersections will be analyzed in the following sections of this report.

PREVIOUSLY APPROVED RIVERVIEW OFFICE PROJECT

Appendix F contains a memorandum comparing the trip generation of the proposed Watermark Project to the previously-approved Riverview Office Project. Review of the February 17, 2015 memorandum shows that the proposed Watermark Project will generate 78 fewer daily vehicles, 24 fewer AM peak hour vehicle trips and 29 fewer PM peak hour vehicle trips.

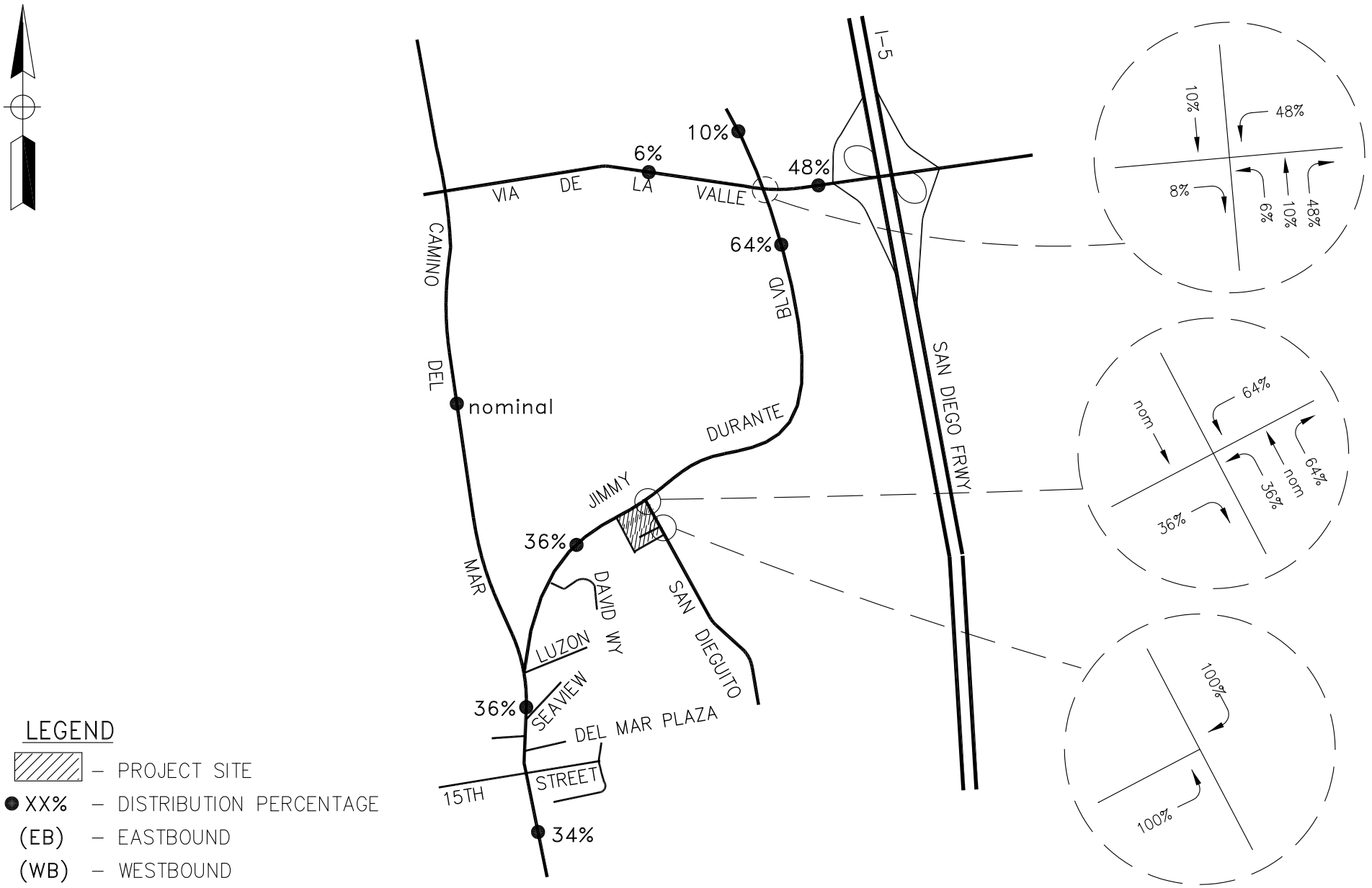

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FIGURE 5
TRIP DISTRIBUTION

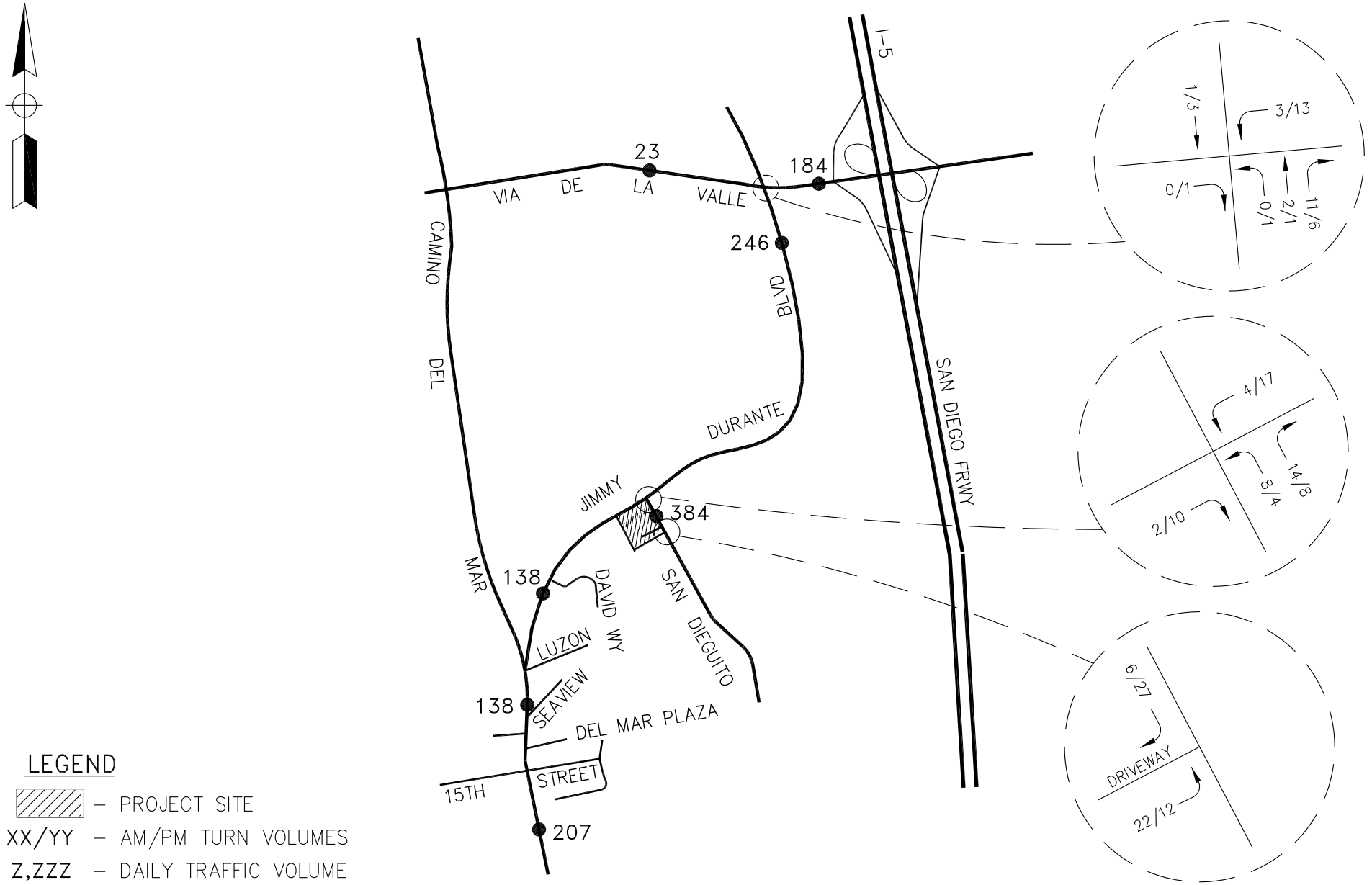

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FIGURE 6

PROJECT RELATED TRIPS

LEVEL OF SERVICE

Level of Service (LOS) is a professional industry standard by which the operating conditions of a given roadway segment or intersection are measured. Level of Service is defined on a scale of A to F; where LOS A represents the best operating conditions and LOS F represents the worst operating conditions. LOS A facilities are characterized as having free-flowing traffic conditions with no restrictions on maneuvering or operating speeds; traffic volumes are low and travel speeds are high. LOS F facilities are characterized as having forced flow with many stoppages and low operating speeds. Table 4 shows the volume to capacity (v/c) ratio and delay ranges that are equivalent to each Level of Service.

Table 4 - Level Of Service Ranges

Level of Service	Signalized Intersections - Delay (Seconds/Vehicle)[1]	Unsignalized Intersections - Delay (Seconds/Vehicle)[2]	Roadway Segments- Volume to Capacity (v/c) Ratio[3]
A	≤ 10.0	≤ 10.0	< 0.41
B	10.1 to 20.0	10.1 to 15.0	0.42 to 0.62
C	20.1 to 35.0	15.1 to 25.0	0.63 to 0.79
D	35.1 to 55.0	25.1 to 35.0	0.80 to 0.92
E	55.1 to 80.0	35.1 to 50.0	0.93 to 1.00
F	≥80.1	≥50.1	> 1.00

[1] The delay ranges shown are based on the Highway Capacity Software version 4.1 for signalized intersections.

[2] The delay ranges shown are based on the Highway Capacity Software version 4.1 for unsignalized intersections.

[3] The volume to capacity ratios are based on SANTEC/ITE Guidelines For Traffic Impact Studies (TIS) in the San Diego Region-February 29, 2000; actual Levels of Service are determined by average daily vehicle trips

In general, the region-wide goal for an acceptable Level of Service on all freeways, roadway segments, and intersections is "D".

CONGESTION MANAGEMENT PROGRAM

Based on the approval of Proposition 111 in 1990, regulations require the preparation, implementation and annual updating of a Congestion Management Program (CMP) in each of California's urbanized counties. In 1991, San Diego County adopted their initial CMP statutes. One required element of the CMP is a process to evaluate the transportation and traffic impacts of large projects on the regional transportation system. That process is undertaken by local agencies, project applicants, and traffic consultants through a transportation impact report usually conducted as part of the CEQA project review process. Authority for local land use decisions, including project approvals and any required mitigation, remains the responsibility of local jurisdictions.

The criteria for which a project is subject to the regulations as set forth in the CMP are determined by the trip generation potential for the project. Currently, the average daily traffic (ADT) threshold is 2,400 vehicles. The proposed Watermark Del Mar Residential Project will generate approximately 384 daily trips (see Section III, Project-Related Conditions) and is therefore not subject to CMP guidelines for traffic impact studies.

LEVELS OF SIGNIFICANCE STANDARDS

The City of Del Mar refers to the *San Diego Traffic Engineers' Council (SANTEC) and the Institute of Transportation Engineers (ITE) Guidelines for Traffic Impact Studies (TIS) in the San Diego Region* to determine the significance of traffic impacts in regards to requiring mitigation. Table 5 summarizes the Measure of Significant Project Traffic Impact Measures outlined in the *SANTEC/ITE Guidelines TIS in the San Diego Region.* As can be seen from Table 5, an increase in v/c ratio of 0.02 or less or an increase in delay of 2 seconds or less on roads/intersections operating at LOS D, E or F is considered to be insignificant.

Table 5 - Measure Of Significant Project Traffic Impact Measures

Level of Service With Project	Allowable Change Due to Project Impacts					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	v/c	Speed (mph)	v/c	Speed (mph)	Delay (Sec/veh)	Delay (min)
D, E, & F (or ramp meter delays above 15 min.)	0.01	1	0.02	1	2	2

Source: *SANTEC/ITE Guidelines TIS in the San Diego Region*

ANALYSIS METHODOLOGY

The Levels of Service for the roadway segments in the vicinity of the project were analyzed under existing plus other approved/pending projects and existing plus other approved/pending projects plus the proposed project conditions. The roadway segment LOS was determined by comparing the traffic volumes under all traffic conditions to the capacity of the roadway according to its cross-section and the Levels of Service thresholds identified in the *SANTEC/ITE Guidelines TIS in the San Diego Region*.

As with the roadway segments, the Levels of Service for the intersections in the vicinity of the project were analyzed under existing plus other approved/pending projects and existing plus other approved/pending projects plus the proposed project conditions. The most recent version of the Highway Capacity Manual (HCM) procedures for signalized and unsignalized intersections were used to analyze the morning and afternoon peak hour conditions of the intersections in the project vicinity. The signalized intersection methodology defines LOS based on delay using variables such as lane configuration, traffic volumes, and signal timings. The unsignalized intersection methodology defines LOS based on the longest delay experienced by any single movement.

EXISTING PLUS OTHER APPROVED/PENDING PROJECTS

In discussions with the City of Del Mar, it was determined that the following approved/pending projects would need to be included in this traffic report.

- Tentative Map TTM 15-001 for Estates at Del Mar – 929 Border Avenue (3 Lots);
- Reconstruction of Del Mar City Hall;
- City-Wide Sidewalk Improvement Project including a City of Del Mar proposed roundabout at the Jimmy Durante Boulevard and San Dieguito Drive intersection;
- Trailhead Parking at the Northeast corner of Jimmy Durante Boulevard and San Dieguito Drive; and
- Single Family Home on Luzon Street.

Each of the projects was determined to not generate any significant new traffic volumes to the study area roads and intersections. However, see the discussion on cumulative projects traffic presented later in this section.

EXISTING PLUS PROJECT CONDITIONS

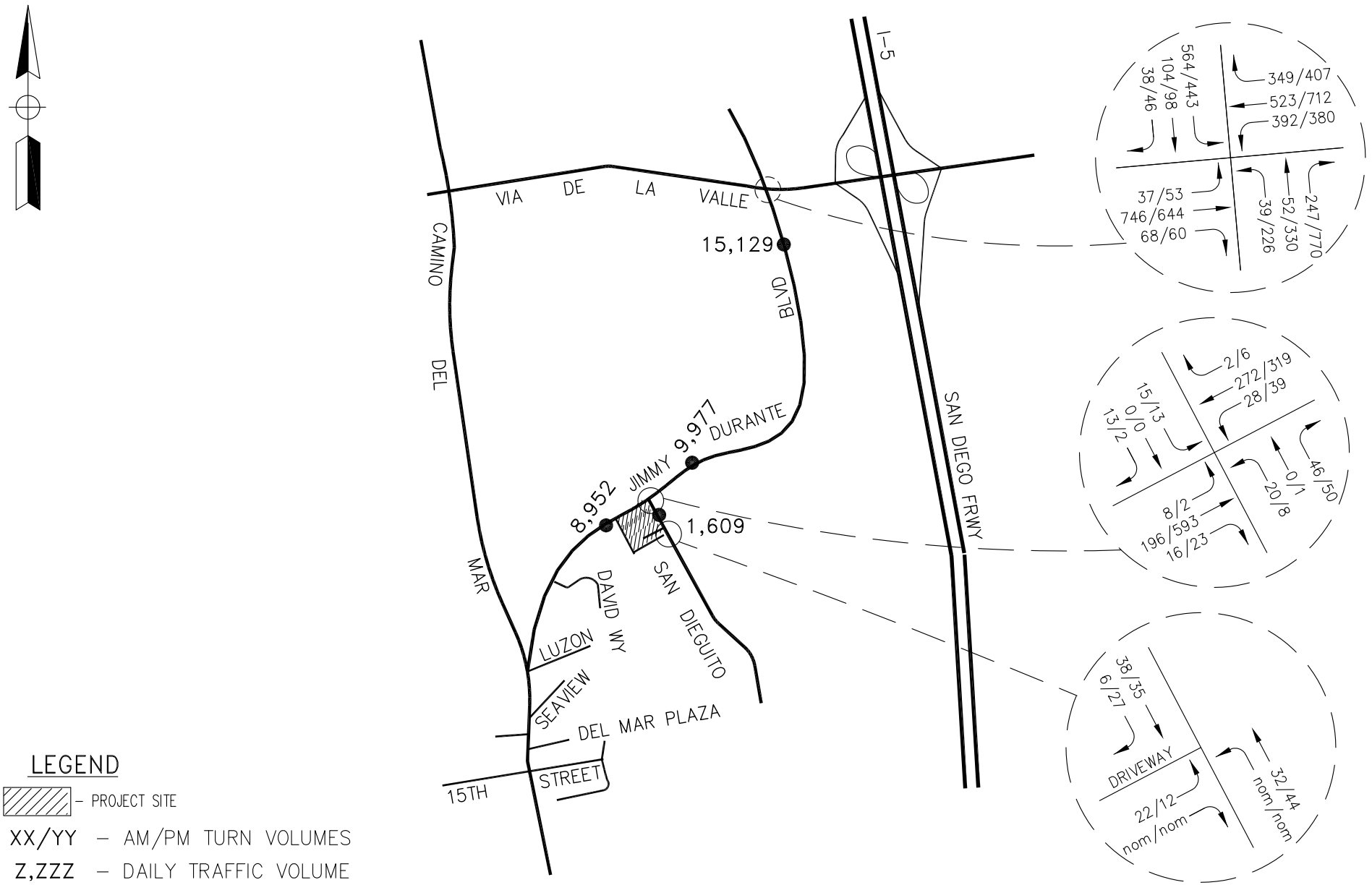
Roadway Segments

Daily traffic on the roadways near the proposed project site was reanalyzed with the project trips added to the existing traffic volumes. Table 6 presents a summary of the roadway segment volumes and associated LOS using the Levels of Service thresholds identified in the *SANTEC/ITE Guidelines TIS in the San Diego Region* for those roads serving the project. The existing plus project daily volumes and peak hour turn volumes are illustrated in Figure 7.

Review of Table 6 shows that the addition of project traffic results in each roadway segment to operate at LOS B or better and the project does not create a significant impact.

Intersections

The intersections were reanalyzed using the HCM, methodology for signalized and unsignalized intersections with the project trips added to the existing traffic volumes. The results of the analysis are summarized in Table 7. As can be seen from Table 7, project traffic increases the delay at the intersection of Jimmy Durante Boulevard and San Dieguito Drive by 0.3 seconds during the PM peak hour, which is considered to not be significant according to the SANTEC/ITE Traffic Impact Measures. The intersection however, continues to operate at LOS A or better with the addition of project traffic. It should be noted that the San Dieguito Drive stop controlled approaches Jimmy Durante Boulevard operate at LOS C and D.with the addition of project traffic. All other intersections continue to operate at LOS B or better with the addition of project traffic. Further review of Table 7 shows the project increases the delay on the San Dieguito Drive approaches to Jimmy Durante Boulevard in the PM peak hour from LOS B (14.5 sec/veh) to LOS C (15.6 sec/veh) and from LOS D (26.2 sec/veh) to LOS D (27.5 sec/veh). These individual approach increases do not create a significant impact at the Jimmy Durante Boulevard/San Dieguito Road intersection.



LEGEND

- PROJECT SITE
- XX/YY – AM/PM TURN VOLUMES
- Z,ZZZ – DAILY TRAFFIC VOLUME

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FIGURE 7

EXISTING PLUS PROJECT TRAFFIC VOLUMES

Table 6 – Existing+ Project Roadway Segment Level of Service Summary

Roadway Segment	Classification	Capacity [1]	Existing Conditions			Existing+ Project Conditions			Increase in v/c Ratio	Significant Impact
			A.D.T.	v/c Ratio	LOS	A.D.T.	v/c Ratio	LOS		
Jimmy Durante Blvd										
- s/o Via De La Valle	Secondary Arterial	30,000	14,883	0.496	A	15,129	0.504	B	0.008	No
- s/o San Dieguito Road	2 Ln Collector (CLTL)	15,000	9,731	0.649	B	9,977	0.665	B	0.016	No
- s/o San Dieguito Road	2 Ln Collector (CLTL)	15,000	8,814	0.588	A	8.952	0.597.	A	0.009	No
San Dieguito Road										
- c/o Jimmy Durante Blvd	2 Ln Collector (C/1)	8,000	1,225	0.153	A	1,350	0.169	A	0.016	No

[1] Capacity is based on the upper limit of LOSE per Table 2 of the *San Diego Traffic Engineers' Council (SANTEC) and the Institute of Transportation Engineers (ITE) Guidelines for Traffic Impact Studies (TIS) in the San Diego Region*

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[2] Impact Significance is Based on SANTEC/ITE Guidelines For Traffic Impact Studies (TIS) in the San Diego Region-February 29, 2000 Draft, applied to segments operating at LOS D, E, or F.

[3] This segment was analyzed using HCM for multi-lane roadways and was found to operate at LOS C or better during the AM and PM peak hours

2 Ln Collector (CLTL) =Two-Lane Collector with a Continuous Left Turn Lane;

2 Ln Collector (C/l) = Two-Lane Collector with commercial-industrial fronting.

NA =Not Applicable

Table 7 – Summary of Existing Plus Project Intersection Level of Service													
Intersection	Crtl. Mvmt.	Existing Conditions				Existing Plus Project Conditions							
		AM Peak		PM Peak		AM Peak				PM Peak			
Jimmy Durante Boulevard@ Via De La Valle (Sig.)	Int.	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh))	LOS	Increase in Delay (sec/veh)	SIGN Increase [1]	Delay (sec/veh)	LOS	Increase in Delay (sec/veh)	SIGN Increase [1]
		29.0	C	34.9	C	29.0	C	0.0	NO	35.2	D	0.3	NO
Jimmy Durante Boulevard (E/W) @San Dieguito Drive(N/S) (Two-Way Stop-Controlled)	EB	0.3	A	0.0	A	0.3	A	0.0	NO	0.0	A	0.0	NO
	WB	0.6	A	0.6	A	0.7	A	0.1	NO	1.0	A	0.4	NO
	NB	10.9	B	14.5	B	11.3	B	0.4	NO	15.6	C	1.2	NO
	SB	12.7	B	26.2	D	13.0	B	0.3	NO	27.5	D	1.2	NO
	Int.	1.8	A	1.3	A	2.2	A	0.4	NO	1.6	A	0.3	NO
San Dieguito Drive(N/S)@ Project Driveway (One-Way Stop-Controlled)	EB	NA	NA	NA	NA	9.0	A	9.0	NO	9.1	A	9.1	NO
	Int.	NA	NA	NA	NA	2.0	A	2.0	NO	0.9	A	0.9	NO

Delay= seconds of delay per vehicles; LOS = Level of Services; SIGN = County of San Diego's Guidelines for Determining Significance;

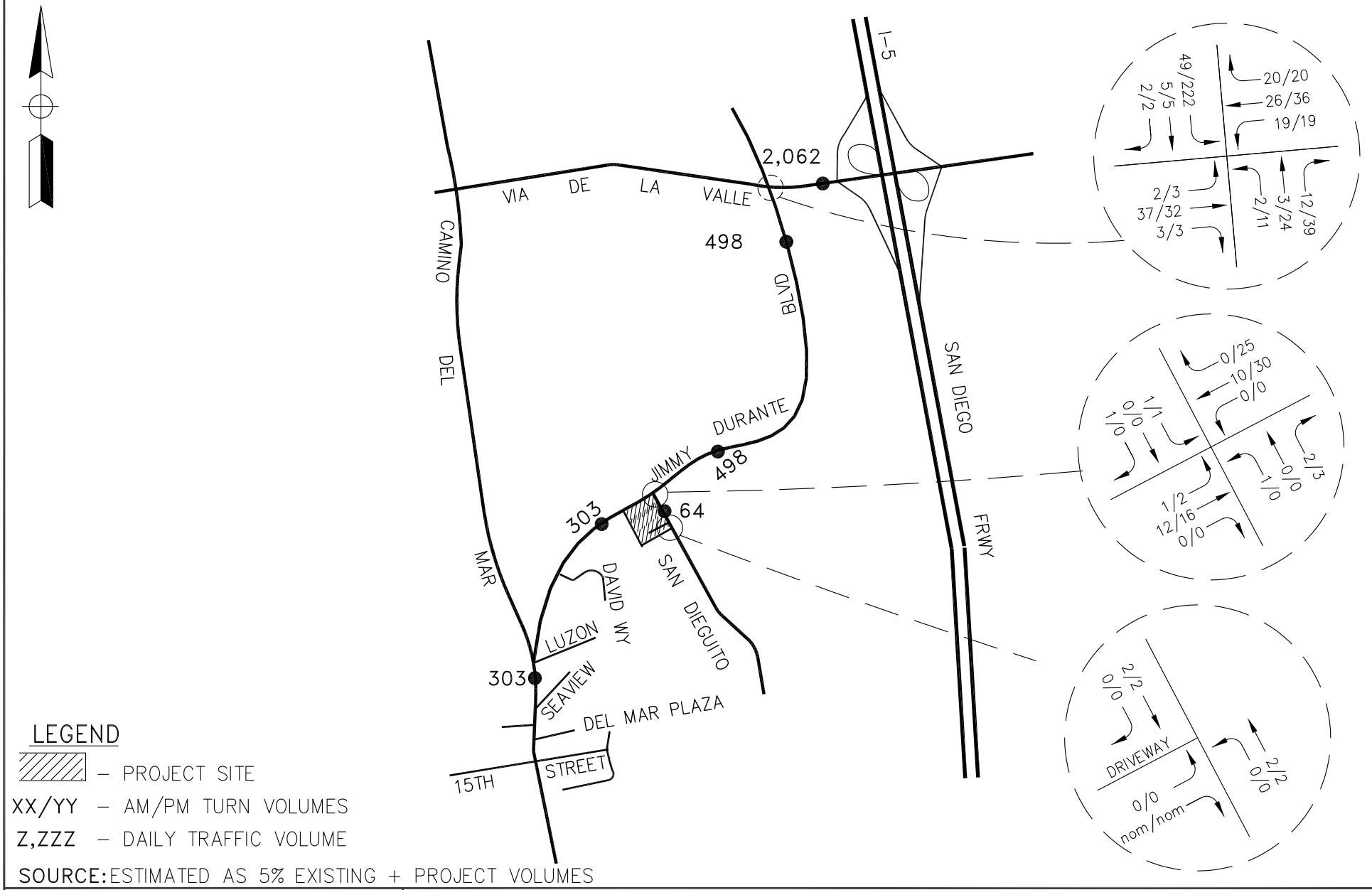
[1] Impact Significance is Based on SANTEC/ITE Guidelines For Traffic Impact Studies (TIS) in the San Diego Region, applied to intersections operating at LOS D, E, or F., Sig. = Signalized, Int. = Intersection, EB = EASTBOUND; WB= WESTBOUND; SB= SOUTHBOUND; NB= NORTHBOUND, Crtl Mvmt = Critical Movement

CUMULATIVE PROJECTS

A review of the cumulative projects concluded that the projects listed would not generate any significant amount of new traffic to the study area roadways. However, to be conservative, 5% of the existing plus project traffic volumes was used to represent cumulative project traffic. Figure 8 presents the cumulative projects traffic volumes and Figure 9 presents the addition of cumulative projects traffic to the existing plus project volumes presented on Figure 7. The results are presented in Figure 9. The existing plus cumulative plus project traffic volumes were then analyzed. Table 8 presents the roadways segment daily analysis and Table 9 presents the intersection analysis.

Review of Table 8 shows that the addition of cumulative project traffic to the existing roadways analyzed will continue to operate at LOS B or better and will not create a significant impact.

Review of Table 9 shows that each of the intersections analyzed operate at LOS D or better and do not create a significant impact. It should be noted that the addition of cumulative projects traffic increases the delay in the PM to the southbound driveway approach to Jimmy Durante Boulevard by 3.2 seconds/vehicle to 30.7 seconds to vehicle of delay (LOS D). However the overall delay at the intersection continues to operate at LOS A with a delay of 1.6 seconds/vehicle. Therefore the project is not considered to create an significant impact.



LEGEND

– PROJECT SITE

XX/YY – AM/PM TURN VOLUMES

Z,ZZZ – DAILY TRAFFIC VOLUME

SOURCE: ESTIMATED AS 5% EXISTING + PROJECT VOLUMES

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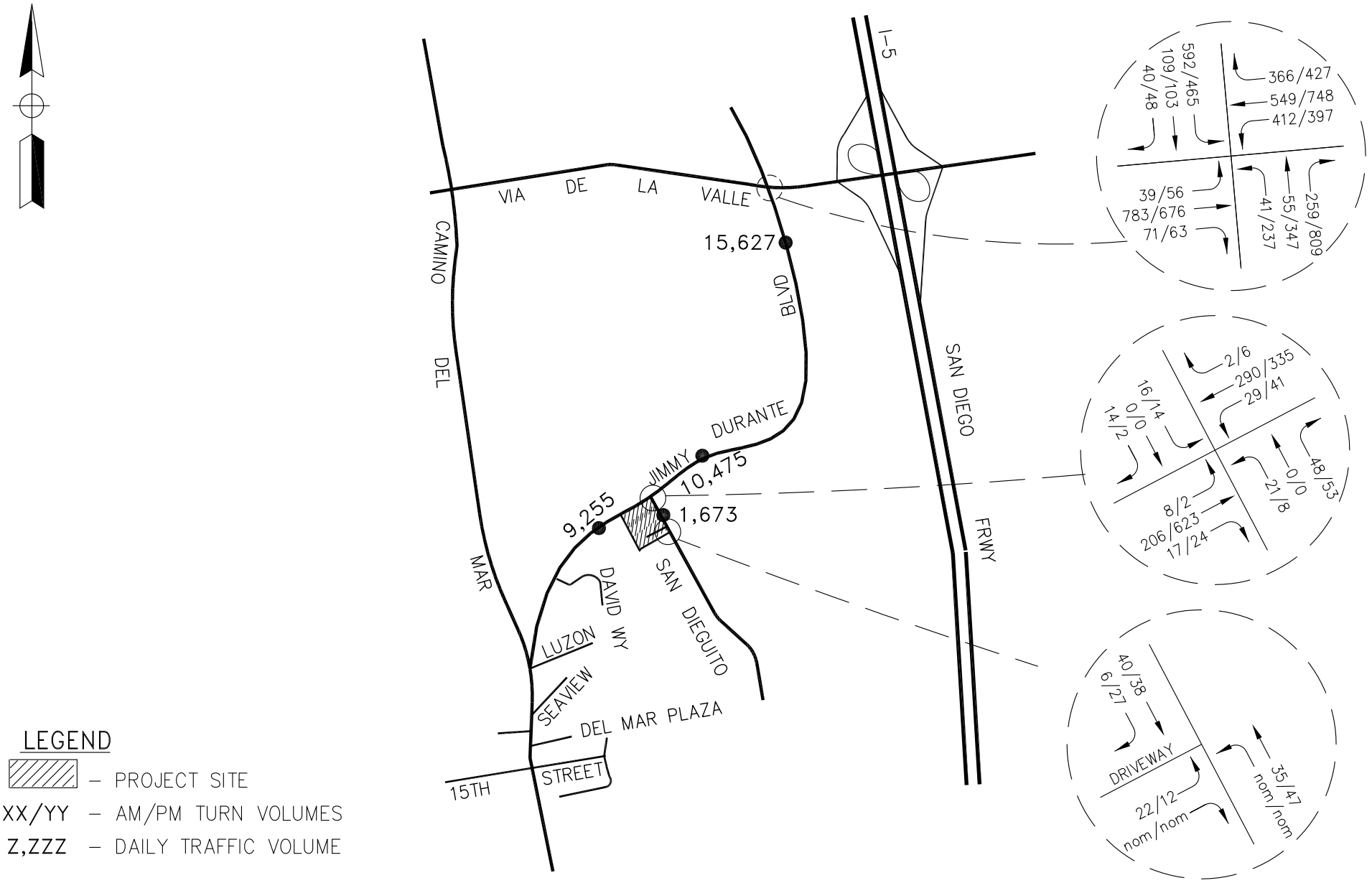
FIGURE 8

CUMULATIVE PROJECTS TRAFFIC VOLUMES



LEGEND

- PROJECT SITE
- XX/YY – AM/PM TURN VOLUMES
- Z,ZZZ – DAILY TRAFFIC VOLUME

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FIGURE 9

EXISTING PLUS CUMULATIVE PROJECTS TRAFFIC VOLUMES

Table 8 – Summary of Existing + Project+ Cumulative Roadway Segment Level of Service

Roadway Segment	Classification	Capacity[1]	Existing Conditions			Existing+ Project Conditions					Existing+Project + Cumulative Conditions				
			A.D.T.	v/c Ratio	LOS	A.D.T.	v/c Ratio	LOS	Increase in v/c Ratio	SIGN Impact	A.D.T.	v/c Ratio	LOS	Increase in v/c Ratio	SIGN
Jimmy Durante Blvd. - s/o Via De La Valle	Secondary Arterial	30,000	14,883	0.496	A	15,129	0.504	B	0.008	No	15,885	0.530	B	0.026	No
- s/o San Dieguito Dr.	2 Ln Collector (CLTL)	15,000	9,731	0.649	B	9,977	0.665	B	0.016	No	10,475	0.698	B	0.033	No
- n/o San Dieguito Dr	2 Ln Collector (CLTL)	15,000	8,814	0.588	A	8,952	0.597	A	0.009	No	9,339	0.622	A	0.025	No
San Dieguito Dr. - e/o Jimmy Durante Blvd.	2 Ln Collector (C/1)	8,000	1,225	0.153	A	1,350	0.169	A	0.016	No	1,418	0.177	A	0.008	No

[1] Capacity is based on the upper limit of LOSE per Table 2 of the *San Diego Traffic Engineers' Council (SANTEC) and the Institute of Transportation Engineers (ITE)*

[2] Impact Significance is Based on SANTEC/ITE Guidelines For Traffic Impact Studies (TIS) in the San Diego Region, applied to segments operating at LOS D, E, or F. This segment was analyzed using HCM for multi-lane roadways and was found to operate at LOS C or better during the morning and afternoon peak hours, SIGN = County of San Diego's Guidelines for Determining Significance; 2 Ln Collector (CLTL) = Two-lane Collector with a Continuous Left Tum Lane, 2 Ln Collector (C/1) = Two-lane Collector with commercial-industrial fronting

Table 9 – Summary of Existing Plus Project and Cumulative Plus Project Intersection Level of Service

Intersection	Critical Movement	Existing Plus Project Conditions				Cumulative Plus Project Conditions							
		AM Peak		PM Peak		AM Peak				PM Peak			
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Increase in Delay	SIGN Increase [1]	Delay (sec)	LOS	Increase in Delay	SIGN Increase [1]
Jimmy Durante Boulevard@ Via De La Valle (Sig.)	Intersection	29.0	C	35.2	D	31.1	C	2.1	NO	40.2	D	5.0	NO
Jimmy Durante Boulevard (E/W) @San Dieguito Dr.(N/S) (Two-Way Stop-Controlled)	EB	0.3	A	0.0	A	0.3	A	0.3	NO	0.0	A	0.0	NO
	WB	0.7	A	1.0	A	0.7	A	0.0	NO	1.0	A	0.0	NO
	NB	11.3	B	15.6	C	11.5	B	0.2	NO	16.2	C	0.6	NO
	SB	13.0	B	27.5	D	13.4	B	0.4	NO	30.7	D	3.2	NO
	Intersection	2.2	A	1.6	A	2.3	A	0.1	NO	1.7	A	0.1	NO
San Dieguito Dr.(N/S)@ Project Driveway (One-Way Stop-Controlled)	EB	NA	NA	NA	NA	9.0	A	9.0	NO	9.1	A	9.1	NO
	Intersection	NA	NA	NA	NA	2.0	A	2.0	NO	0.9	A	0.9	NO

Delay= seconds of delay per vehicles; LOS = Level of Services; SIGN = County of San Diego's Guidelines for Determining Significance;

[1] Impact Significance is Based on SANTEC/ITE Guidelines For Traffic Impact Studies (TIS) in the San Diego Region, applied to intersections operating at LOS D, E, or F.

Sig. = Signalized, EB = EASTBOUND; WB= WESTBOUND; SB= SOUTHBOUND; NB= NORTHBOUND, EBL= EASTBOUND LEFT, NBL= NORTHBOUND LEFT

ROUNDABOUT ANALYSIS AT JIMMY DURANTE BOULEVARD AND SAN DIEGUITO DRIVE

The City of Del Mar is currently evaluating a potential roundabout at the Jimmy Durante Boulevard and San Dieguito Drive intersection. At one time, this was included in the proposed Sidewalk Improvement Project for Jimmy Durante Boulevard and Camino Del Mar, but was deleted from that project. However, the conceptual design of the roundabout is shown on those original plans, which are included for reference as Figures 10 and 11. The Roundabout design is a one lane roundabout. Since the roundabout would be located adjacent to the proposed project, the City of Del Mar has requested the intersection be analyzed with the proposed roundabout geometrics. The Synchro 8 (HCM) Software package was used to analyze the existing plus project plus cumulative project traffic volumes presented on Figures 7 and 9 respectively.

It should be noted that the Applicant has revised the original site plan and building placement to accommodate the City of Del Mar's proposed roundabout design, should the City decide to proceed with such improvements.

Table 10 summarizes the results of the analysis. The HCM worksheets are presented in Appendix B.

Table 10 – Roundabout Analysis Jimmy Durante Boulevard at San Dieguito Drive

	Level of Service							
	Existing Plus Project				Cumulative Plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
Roadway Segment	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Jimmy Durante Blvd.								
• Eastbound Approach	5.5	A	12.6	B	5.7	A	13.8	B
• Westbound Approach	6.4	A	7.0	A	6.6	A	7.2	A
San Dieguito Drive								
• Northbound Approach	4.9	A	7.7	A	5.0	A	8.1	A
• Southbound Approach	4.9	A	5.0	A	5.1	A	5.1	A
• Intersection	5.9	A	10.3	B	6.0	A	11.1	B

Review of Table 10 shows that the roundabout will operate at LOS A in the AM peak period and LOS B in the PM peak hour period. It should be noted that the analysis of the roundabout is provided for information purposes and is not a required project condition.

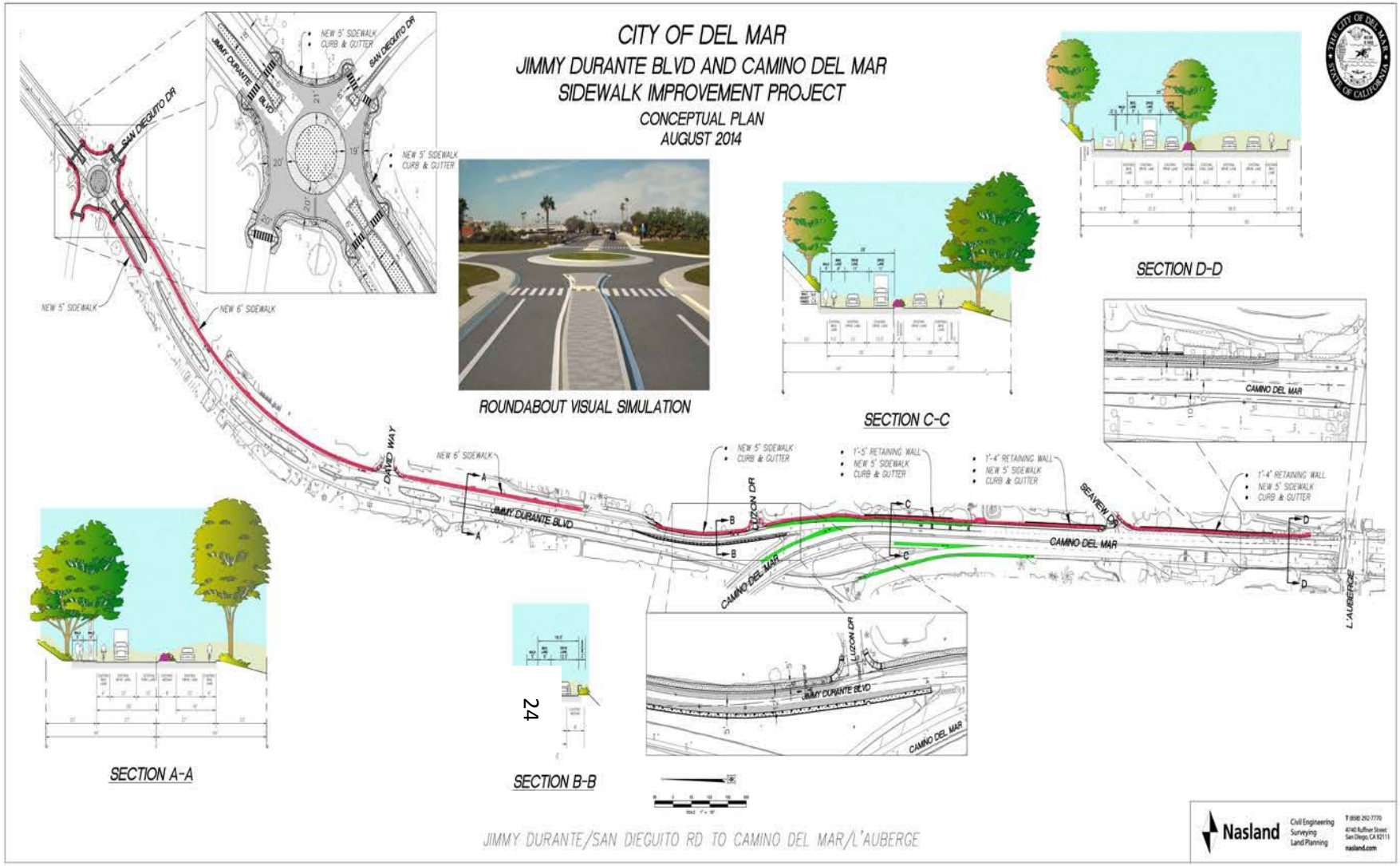

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FIGURE 10

City of Del Mar

Jimmy Durante Blvd. and Camino Del Mar

Sidewalk Improvement Project Conceptual Plan

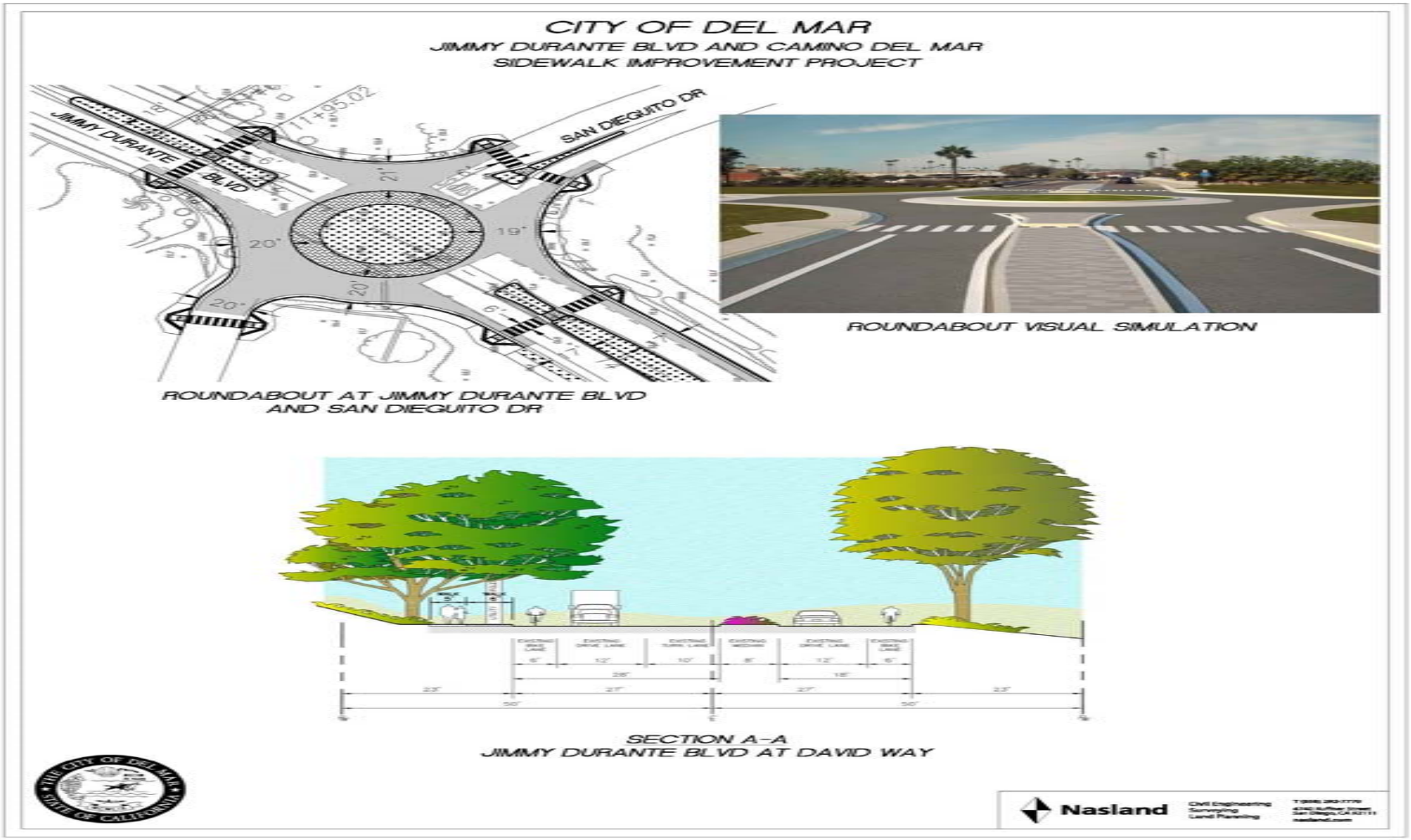

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FIGURE 11

City of Del Mar

Jimmy Durante Blvd. and San Dieguito Rd. Roundabout Plan

SECTION V - PROJECT ACCESS AND ON-SITE CIRCULATION

PROPOSED PROJECT ACCESS

The project proposes one access off San Dieguito Drive that will operate as a stop controlled driveway. The project access point was analyzed using the HCS, version 4.1, methodology for unsignalized intersections and was found to operate at LOS B or better. The HCS worksheets for the project driveway can be found in Appendix B.

ON-SITE CIRCULATION

The proposed site plan consists of a parking area located under the building that provides a total of 108 parking spaces, of which 12 are guest spaces and 96 are resident spaces. The dimensions of the parking stalls aisle way widths are defined in the proposed Specific Plan and include the use of three tandem stalls. The proposed on-site circulation will adequately accommodate project traffic.

SECTION VI -RECOMMENDED TRAFFIC MITIGATION MEASURES

ROADWAY SEGMENTS

The analysis of adding project traffic to existing and existing plus cumulative projects traffic conditions presented on Table 8 resulted in Jimmy Durante Boulevard to operate at LOS B or better. Therefore, no roadway mitigation is required.

INTERSECTIONS

All intersections, including project driveways, analyzed in this report were found to operate at LOS D or better under existing plus project and cumulative plus project conditions. Therefore, mitigation by the proposed project is not required.

The installation of a traffic signal and/or a roundabout at the Jimmy Durante Boulevard and San Dieguito Drive intersection is not a required mitigation measure of the project. Any need for future signalization and/or installation of a roundabout at the intersection is by traffic generated by operations of the Fair, Race Events and/or the proposed projects within the Del Mar Fair Grounds.

The project will be responsible for constructing the project frontage improvements along Jimmy Durante Boulevard and San Dieguito Drive.

The site plan for the project has been designed to accommodate the City of Del Mar's potential future roundabout at the Jimmy Durante Boulevard and San Dieguito Drive intersection.

SECTION VII - SUMMARY OF FINDINGS AND CONCLUSIONS

- The applicant proposes to develop a 48 Condominium Residential Unit Project. The site is located west of Interstate 5 at the southeast corner of Jimmy Durante Boulevard and San Dieguito Drive in the City of Del Mar.

- The project is estimated to generate 384 average daily trips with 28 trips being generated during the morning peak hour and 39 being generated during the afternoon peak hour. The estimate uses the worst case condition of 8 trips per unit in lieu of 6 trips per unit in accordance with the SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region.

- Under existing, existing plus project, and existing plus cumulative projects plus project conditions the roadway segments were found to operate at LOS D or better.

- Analysis of Jimmy Durante Boulevard and San Dieguito Drive intersection for Existing Plus Project and Existing Plus Project Plus Cumulative Projects conditions found the intersection to operate at LOS D of better. Therefore, no mitigation is required.

- Analysis of the project access to San Dieguito Drive found the intersection to operate at LOS A for each condition analyzed and no impact was found.

- The Jimmy Durante Boulevard and Via De La Valle intersection operates at LOS C or better under existing conditions. The addition of project traffic and cumulative projects traffic to the intersection changes the PM peak hour to an acceptable LOS D. Mitigation by the proposed project is not required.

- Neither the daily and peak hour volumes at the intersection of Jimmy Durante Boulevard and San Dieguito Drive are high enough to warrant signalization under existing plus project conditions. This intersection was found to operate at LOS A during the AM Peak and PM peak hour under existing plus project and cumulative plus project conditions with current traffic control (two-way stop-control). The stop-controlled approaches to Jimmy Durante Boulevard presently operate at LOS D or better and continue to operate at LOS D with the addition of project and cumulative projects traffic.

- Analysis of the City of Del Mar potential Roundabout at Jimmy Durante Boulevard and San Dieguito Drive for existing plus project and existing project plus cumulative projects traffic found the intersection to operate at LOS A in the AM peak period and LOS B in the PM peak period.

- Access and internal circulation will adequately accommodate project traffic.

APPENDIX A

- AM/ PM Traffic Counts

THURSDAY, FEBUARY 26TH, 2015 CITY: DEL MAR PROJECT: PTD15-0227-02

VIA DE LA VALLE BTN JIMMY DURANTE & I-5 SB RAMPS

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			30		20			12:00			422		384		
00:15			12		26			12:15			351		362		
00:30			9		15			12:30			349		377		
00:45			15	66	12	73	139	12:45			335	1457	384	1507	2964
01:00			10		18			13:00			339		352		
01:15			7		20			13:15			351		344		
01:30			7		11			13:30			349		355		
01:45			14	38	12	61	99	13:45			298	1337	326	1377	2714
02:00			7		19			14:00			398		342		
02:15			10		9			14:15			422		399		
02:30			6		7			14:30			378		333		
02:45			4	27	9	44	71	14:45			418	1616	362	1436	3052
03:00			4		10			15:00			462		342		
03:15			4		5			15:15			411		322		
03:30			8		4			15:30			443		349		
03:45			5	21	9	28	49	15:45			400	1716	355	1368	3084
04:00			9		5			16:00			456		351		
04:15			11		10			16:15			387		370		
04:30			13		19			16:30			510		342		
04:45			18	51	26	60	111	16:45			339	1692	398	1461	3153
05:00			25		33			17:00			468		342		
05:15			25		68			17:15			502		368		
05:30			51		70			17:30			458		312		
05:45			62	163	77	248	411	17:45			371	1799	349	1371	3170
06:00			74		95			18:00			403		362		
06:15			89		121			18:15			357		333		
06:30			138		135			18:30			332		318		
06:45			168	469	222	573	1042	18:45			268	1360	345	1358	2718
07:00			236		265			19:00			267		284		
07:15			314		302			19:15			232		295		
07:30			416		352			19:30			247		262		
07:45			380	1346	366	1285	2631	19:45			196	942	212	1053	1995
08:00			384		300			20:00			222		205		
08:15			355		284			20:15			198		218		
08:30			366		290			20:30			207		184		
08:45			349	1454	301	1175	2629	20:45			177	804	191	798	1602
09:00			316		318			21:00			189		161		
09:15			333		305			21:15			171		142		
09:30			293		289			21:30			129		131		
09:45			320	1262	295	1207	2469	21:45			89	578	144	578	1156
10:00			274		268			22:00			95		108		
10:15			262		278			22:15			91		88		
10:30			278		305			22:30			62		90		
10:45			304	1118	318	1169	2287	22:45			52	300	70	356	656
11:00			284		333			23:00			56		65		
11:15			317		312			23:15			53		44		
11:30			321		326			23:30			41		42		
11:45			341	1263	342	1313	2576	23:45			22	172	28	179	351
Total Vol.				7278		7236	**14514**					13773		12842	**26615**

			Daily Totals		
	NB	SB	EB	WB	**Combined**
			21051	20078	**41129**
	AM		**PM**		
Split %	50.1%	49.9%	**35.3%**	51.7%	48.3%	**64.7%**
Peak Hour	07:30	11:45	**11:45**	16:30	12:00	**16:30**
Volume	1535	1465	**2928**	1819	1507	**3269**
P.H.F.	0.92	0.95	**0.91**	0.89	0.98	**0.94**

THURSDAY, FEBRUARY 26TH, 2015 CITY: DEL MAR PROJECT: PTD15-0227-08

JIMMY DURANTE N-O SAN DIEGUITO

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	7		2					12:00	91		97				
00:15	5		2					12:15	113		89				
00:30	2		2					12:30	95		88				
00:45	1	15	4	10			25	12:45	91	390	83	357			747
01:00	4		5					13:00	95		78				
01:15	2		1					13:15	97		72				
01:30	2		2					13:30	90		80				
01:45	2	10	1	9			19	13:45	89	371	96	326			697
02:00	1		1					14:00	95		63				
02:15	2		1					14:15	93		70				
02:30	3		2					14:30	97		85				
02:45	2	8	1	5			13	14:45	114	399	73	291			690
03:00	1		0					15:00	112		70				
03:15	0		0					15:15	102		77				
03:30	2		1					15:30	135		75				
03:45	2	5	1	2			7	15:45	130	479	79	301			780
04:00	3		1					16:00	157		80				
04:15	3		4					16:15	169		75				
04:30	1		5					16:30	162		79				
04:45	4	11	3	13			24	16:45	184	672	90	324			996
05:00	2		3					17:00	154		79				
05:15	4		4					17:15	156		93				
05:30	3		6					17:30	159		75				
05:45	12	21	14	27			48	17:45	143	612	78	325			937
06:00	14		22					18:00	127		63				
06:15	15		42					18:15	102		66				
06:30	13		48					18:30	103		69				
06:45	33	75	74	186			261	18:45	112	444	59	257			701
07:00	51		74					19:00	71		47				
07:15	65		71					19:15	54		41				
07:30	50		70					19:30	49		33				
07:45	62	228	84	299			527	19:45	43	217	28	149			366
08:00	59		78					20:00	39		26				
08:15	65		79					20:15	32		25				
08:30	55		79					20:30	32		17				
08:45	65	244	89	325			569	20:45	29	132	26	94			226
09:00	53		73					21:00	38		25				
09:15	62		59					21:15	35		22				
09:30	55		61					21:30	29		11				
09:45	72	242	64	257			499	21:45	20	122	9	67			189
10:00	74		89					22:00	30		15				
10:15	75		75					22:15	15		10				
10:30	70		76					22:30	18		13				
10:45	69	288	70	310			598	22:45	15	78	8	46			124
11:00	67		70					23:00	12		7				
11:15	69		85					23:15	15		6				
11:30	78		79					23:30	11		3				
11:45	93	307	82	316			623	23:45	9	47	2	18			65
Total Vol.		1454		1759			**3213**			3963		2555			**6518**

Daily Totals

	NB	SB	EB	WB	Combined
	5417	4314			**9731**

	AM			PM		
Split %	45.3%	54.7%	**33.0%**	60.8%	39.2%	**67.0%**
Peak Hour	11:45	11:45	**11:45**	16:00	12:00	**16:30**
Volume	392	356	**748**	672	357	**997**
P.H.F.	0.87	0.92	**0.93**	0.96	0.92	**0.91**

THURSDAY, FEBUARY 26TH, 2015 CITY: DEL MAR PROJECT: PTD15-0227-02

JIMMY DURANTE S-O SAN DIEGUITO

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	7		2					12:00	81		97				
00:15	5		2					12:15	103		68				
00:30	0		2					12:30	81		78				
00:45	1	13	4	10			23	12:45	91	356	78	321			677
01:00	4		5					13:00	88		72				
01:15	2		1					13:15	89		67				
01:30	2		0					13:30	84		76				
01:45	2	10	1	7			17	13:45	86	347	69	284			631
02:00	1		1					14:00	95		53				
02:15	2		1					14:15	83		60				
02:30	3		1					14:30	87		79				
02:45	2	8	1	4			12	14:45	104	369	66	258			627
03:00	1		0					15:00	97		64				
03:15	0		0					15:15	90		71				
03:30	2		1					15:30	132		67				
03:45	2	5	0	1			6	15:45	126	445	60	262			707
04:00	3		1					16:00	138		71				
04:15	3		4					16:15	169		68				
04:30	1		5					16:30	162		68				
04:45	4	11	1	11			22	16:45	142	611	84	291			902
05:00	2		2					17:00	144		105				
05:15	4		3					17:15	131		81				
05:30	3		4					17:30	148		60				
05:45	12	21	14	23			44	17:45	119	542	61	307			849
06:00	14		12					18:00	124		60				
06:15	15		30					18:15	131		61				
06:30	13		46					18:30	97		45				
06:45	33	75	74	162			237	18:45	74	426	43	209			635
07:00	41		66					19:00	61		27				
07:15	55		61					19:15	44		41				
07:30	40		70					19:30	49		33				
07:45	62	198	84	281			479	19:45	49	203	28	129			332
08:00	51		70					20:00	29		21				
08:15	55		66					20:15	29		25				
08:30	49		79					20:30	32		14				
08:45	59	214	89	304			518	20:45	29	119	26	86			205
09:00	41		63					21:00	30		20				
09:15	54		57					21:15	35		20				
09:30	45		58					21:30	29		6				
09:45	72	212	64	242			454	21:45	23	117	8	54			171
10:00	64		80					22:00	26		15				
10:15	69		62					22:15	24		9				
10:30	64		59					22:30	14		13				
10:45	67	264	69	270			534	22:45	16	80	3	40			120
11:00	57		52					23:00	12		6				
11:15	64		65					23:15	10		2				
11:30	78		75					23:30	11		3				
11:45	93	292	82	274			566	23:45	2	35	0	11			46
Total Vol.		1323		1589			**2912**			3650		2252			**5902**

	Daily Totals				
	NB	SB	EB	WB	Combined
	4973	3841			**8814**

	AM			PM		
Split %	45.4%	54.6%	**33.0%**	61.8%	38.2%	**67.0%**
Peak Hour	11:45	11:45	**11:45**	16:15	16:30	**16:15**
Volume	358	325	**683**	617	338	**942**
P.H.F.	0.87	0.84	**0.96**	0.91	0.80	**0.95**

THURSDAY, FEBUARY 26TH, 2015 CITY: DEL MAR PROJECT: PTD15-0227-02

JIMMY DURANTE S-O VIA DE LA VALLE

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	12		10					12:00	268		133				
00:15	7		1					12:15	138		161				
00:30	1		4					12:30	119		144				
00:45	1	21	6	21			42	12:45	157	682	147	585			1267
01:00	6		6					13:00	119		152				
01:15	2		1					13:15	129		148				
01:30	1		2					13:30	150		126				
01:45	3	12	3	12			24	13:45	117	515	127	553			1068
02:00	2		1					14:00	145		114				
02:15	2		1					14:15	146		114				
02:30	3		2					14:30	124		135				
02:45	1	8	2	6			14	14:45	160	575	121	484			1059
03:00	1		0					15:00	187		115				
03:15	2		0					15:15	147		115				
03:30	3		2					15:30	218		101				
03:45	2	8	0	2			10	15:45	185	737	106	437			1174
04:00	4		3					16:00	212		107				
04:15	4		2					16:15	207		128				
04:30	6		6					16:30	305		121				
04:45	4	18	7	18			36	16:45	211	935	141	497			1432
05:00	4		11					17:00	308		147				
05:15	10		5					17:15	348		107				
05:30	7		13					17:30	220		81				
05:45	15	36	31	60			96	17:45	201	1077	118	453			1530
06:00	28		18					18:00	186		87				
06:15	16		47					18:15	169		97				
06:30	24		66					18:30	167		84				
06:45	43	111	111	242			353	18:45	125	647	102	370			1017
07:00	54		105					19:00	115		68				
07:15	73		111					19:15	107		54				
07:30	76		126					19:30	99		46				
07:45	85	288	184	526			814	19:45	64	385	51	219			604
08:00	74		149					20:00	60		35				
08:15	85		102					20:15	59		35				
08:30	70		112					20:30	57		31				
08:45	100	329	119	482			811	20:45	58	234	41	142			376
09:00	66		115					21:00	75		31				
09:15	81		97					21:15	84		26				
09:30	64		107					21:30	61		20				
09:45	105	316	119	438			754	21:45	35	255	28	105			360
10:00	89		118					22:00	30		17				
10:15	97		96					22:15	36		21				
10:30	110		112					22:30	17		17				
10:45	124	420	108	434			854	22:45	19	102	12	67			169
11:00	93		85					23:00	16		8				
11:15	105		110					23:15	19		6				
11:30	134		112					23:30	19		5				
11:45	162	494	129	436			930	23:45	9	63	7	26			89
Total Vol.		2061		2677			**4738**			6207		3938			**10145**

	Daily Totals				
	NB	SB	EB	WB	Combined
	8268	6615			**14883**

	AM			PM		
Split %	43.5%	56.5%	**31.8%**	61.2%	38.8%	**68.2%**
Peak Hour	11:30	07:15	**11:45**	16:30	12:15	**16:30**
Volume	702	570	**1254**	1172	604	**1688**
P.H.F.	0.65	0.77	**0.78**	0.92	0.94	**0.93**

THURSDAY, FEBUARY 26TH, 2015 CITY: DEL MAR PROJECT: PTD15-0227-02

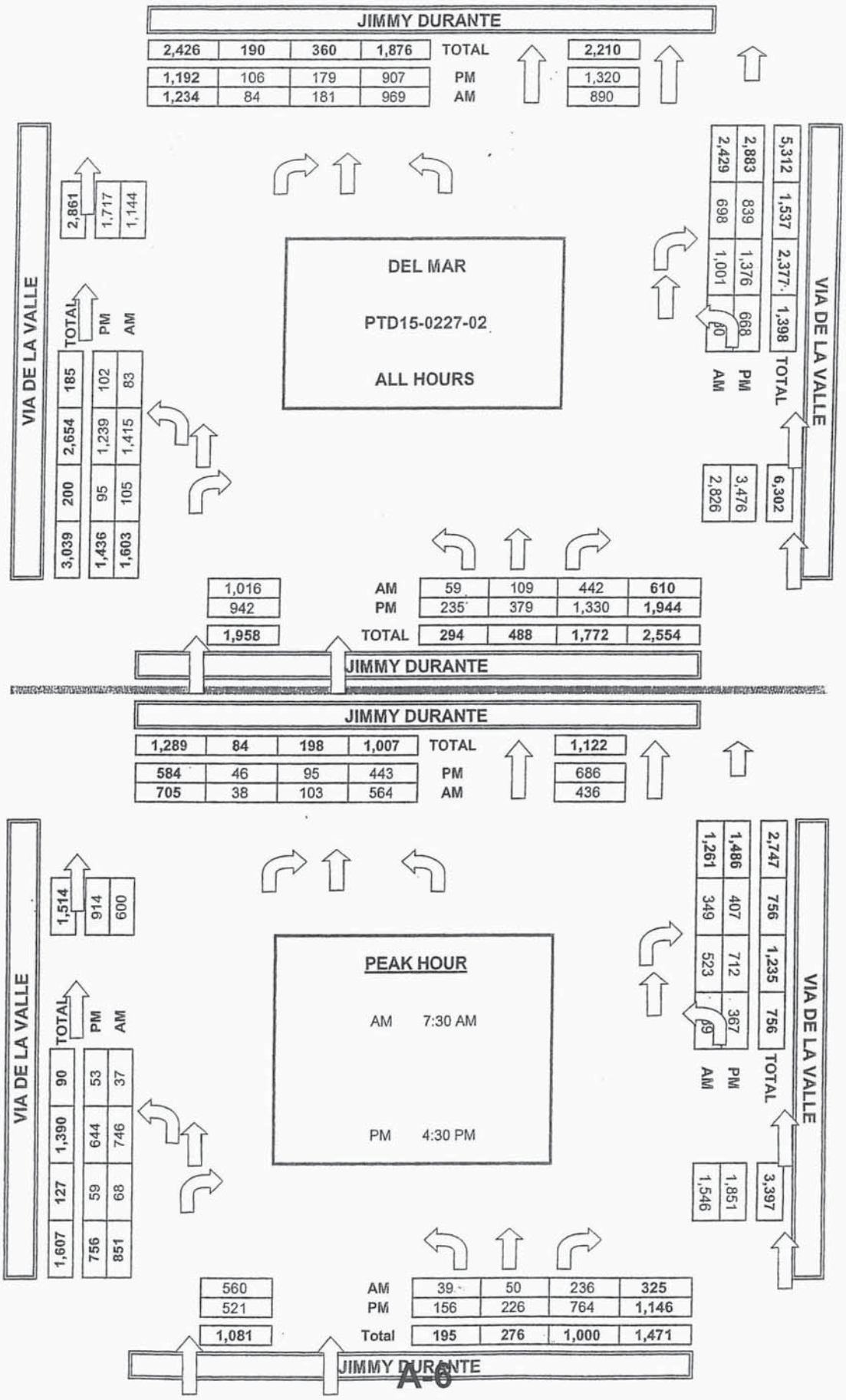
SAN DIEGUITO DR. E-O JIMMY DURANTE

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		0			12:00			12		11		
00:15			0		0			12:15			22		17		
00:30			0		0			12:30			9		10		
00:45			0	2	0	0	2	12:45			15	58	13	51	109
01:00			0		0			13:00			12		13		
01:15			0		0			13:15			14		20		
01:30			0		0			13:30			7		14		
01:45			1	1	0	0	1	13:45			14	47	9	56	103
02:00			1		0			14:00			17		13		
02:15			0		0			14:15			18		13		
02:30			0		0			14:30			23		8		
02:45			0	1	0	0	1	14:45			15	73	17	51	124
03:00			0		0			15:00			13		16		
03:15			0		0			15:15			6		8		
03:30			0		0			15:30			10		11		
03:45			0	0	0	0		15:45			17	46	12	47	93
04:00			1		0			16:00			13		12		
04:15			0		1			16:15			10		11		
04:30			0		2			16:30			9		10		
04:45			0	1	1	4	5	16:45			6	38	7	40	78
05:00			2		0			17:00			11		17		
05:15			0		0			17:15			12		11		
05:30			0		1			17:30			3		9		
05:45			0	2	1	2	4	17:45			11	37	12	49	86
06:00			0		1			18:00			9		3		
06:15			1		2			18:15			8		2		
06:30			7		5			18:30			10		1		
06:45			9	17	3	11	28	18:45			4	31	4	10	41
07:00			11		11			19:00			9		6		
07:15			8		10			19:15			5		3		
07:30			10		16			19:30			3		5		
07:45			7	36	9	46	82	19:45			5	22	1	15	37
08:00			8		11			20:00			4		3		
08:15			17		9			20:15			3		2		
08:30			5		12			20:30			5		3		
08:45			9	39	9	41	80	20:45			6	18	0	8	26
09:00			21		8			21:00			3		0		
09:15			7		13			21:15			3		3		
09:30			6		8			21:30			5		1		
09:45			14	48	10	39	87	21:45			4	15	0	4	19
10:00			11		4			22:00			3		0		
10:15			12		14			22:15			4		2		
10:30			12		10			22:30			0		1		
10:45			11	46	18	46	92	22:45			2	9	0	3	12
11:00			11		8			23:00			1		0		
11:15			20		11			23:15			0		0		
11:30			20		15			23:30			2		0		
11:45			11	62	14	48	110	23:45			1	4	1	1	5
Total Vol.			255		237		**492**				398		335		**733**

	Daily Totals				
	NB	SB	EB	WB	Combined
			653	572	**1225**
	AM		PM		
Split %	51.8%	48.2%	**40.2%**	54.3%	45.7%	**59.8%**
Peak Hour	11:30	11:30	**11:30**	14:00	12:45	**14:00**
Volume	65	57	**122**	73	60	**124**
P.H.F.	0.74	0.84	**0.78**	0.79	0.75	**0.97**

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS

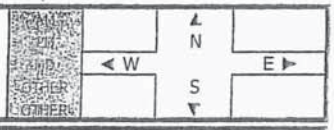


INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

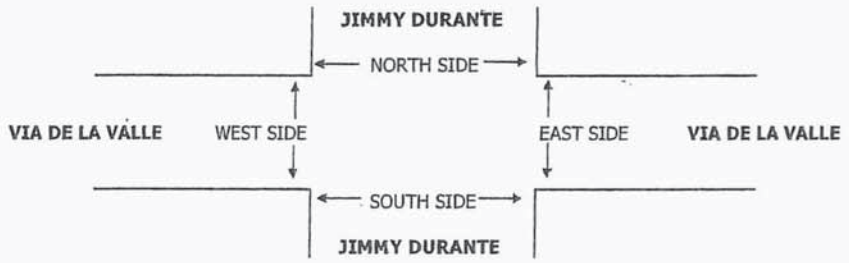
DATE:	LOCATION:	DEL MAR	PROJECT #:	PTD15-0227-02
2/26/15	NORTH & SOUTH:	JIMMY DURANTE	LOCATION #:	2
THURSDAY	EAST & WEST:	VIA DE LA VALLE	CONTROL:	SIGNAL

NOTES:



		NORTHBOUND JIMMY DURANTE			SOUTHBOUND JIMMY DURANTE			EASTBOUND VIA DE LA VALLE			WESTBOUND VIA DE LA VALLE			
	LANES:	NL 1	NT 1	NR 2	SL 2	ST 2	SR 1	EL 1	ET 2	ER 0	WL 2	WT 2	WR 0	TOTAL
AM	7:00 AM	5	7	42	100	16	10	8	120	4	99	76	79	566
	7:15 AM	1	26	43	122	18	6	13	126	9	88	106	120	678
	7:30 AM	7	15	53	187	33	10	7	194	12	86	140	114	858
	7:45 AM	8	18	56	141	29	14	9	174	21	120	131	91	812
	8:00 AM	11	10	55	131	26	7	7	202	19	111	132	65	776
	8:15 AM	13	7	72	105	15	7	14	176	16	72	120	79	696
	8:30 AM	6	10	51	86	19	16	13	232	11	73	141	76	734
	8:45 AM	8	16	70	97	25	14	12	191	13	81	155	74	756
	VOLUMES	59	109	442	969	181	84	83	1,415	105	730	1,001	698	5,876
	APPROACH %	10%	18%	72%	79%	15%	7%	5%	88%	7%	30%	41%	29%	
	APP/DEPART	610	/	890	1,234	/	1,016	1,603	/	2,826	2,429	/	1,144	0
	BEGIN PEAK HR	7:30 AM												
	VOLUMES	39	50	236	564	103	38	37	746	68	389	523	349	3,142
	APPROACH %	12%	15%	73%	80%	15%	5%	4%	88%	8%	31%	41%	28%	
	PEAK HR FACTOR	0.883			0.766			0.933			0.922			0.916
	APP/DEPART	325	/	436	705	/	560	851	/	1,546	1,261	/	600	0
PM	4:00 PM	20	35	149	147	28	16	8	141	8	61	161	134	908
	4:15 PM	28	44	118	107	20	15	9	150	8	90	156	110	855
	4:30 PM	56	91	165	100	26	6	18	248	18	84	161	106	1,079
	4:45 PM	29	34	138	93	29	13	14	121	13	101	197	109	891
	5:00 PM	21	50	229	120	30	17	7	131	16	92	171	93	977
	5:15 PM	50	51	232	130	10	10	14	144	12	90	183	99	1,025
	5:30 PM	19	39	153	133	18	14	13	158	9	62	167	79	864
	5:45 PM	12	35	146	77	18	15	19	146	11	88	180	109	856
	VOLUMES	235	379	1,330	907	179	106	102	1,239	95	668	1,376	839	7,455
	APPROACH %	12%	19%	68%	76%	15%	9%	7%	86%	7%	23%	48%	29%	
	APP/DEPART	1,944	/	1,320	1,192	/	942	1,436	/	3,476	2,883	/	1,717	0
	BEGIN PEAK HR	4:30 PM												
	VOLUMES	156	226	764	443	95	46	53	644	59	367	712	407	3,972
	APPROACH %	14%	20%	67%	76%	16%	8%	7%	85%	8%	25%	48%	27%	
	PEAK HR FACTOR	0.860			0.874			0.665			0.913			0.920
	APP/DEPART	1,146	/	686	584	/	521	756	/	1,851	1,486	/	914	0

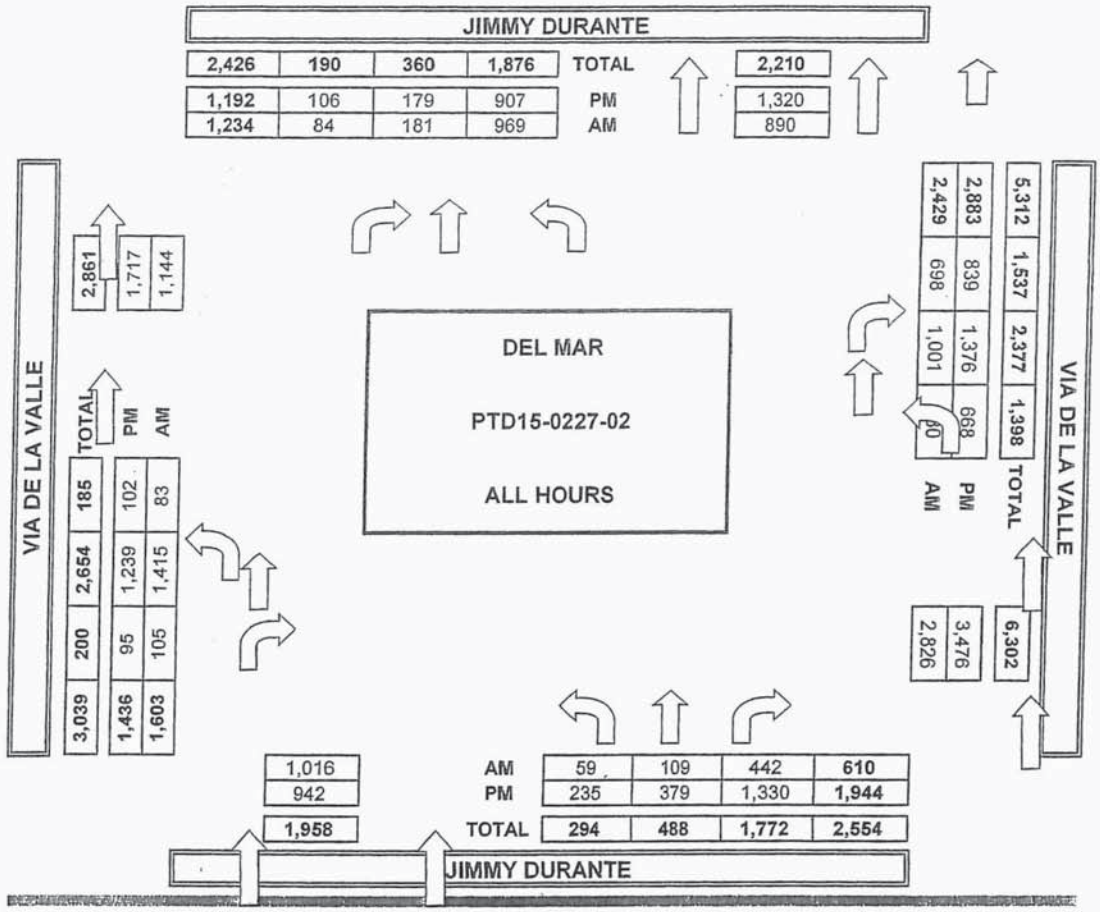
U-TURNS					
	NB	SB	EB	WB	TTL
	X	X	X	X	
AM					0
					0
					0
					0
					0
					0
					0
					0
AM VOLUMES	0	0	0	0	0
PM					0
					0
					0
					0
					0
					0
					0
	1				1
PM VOLUMES	1	0	0	0	1

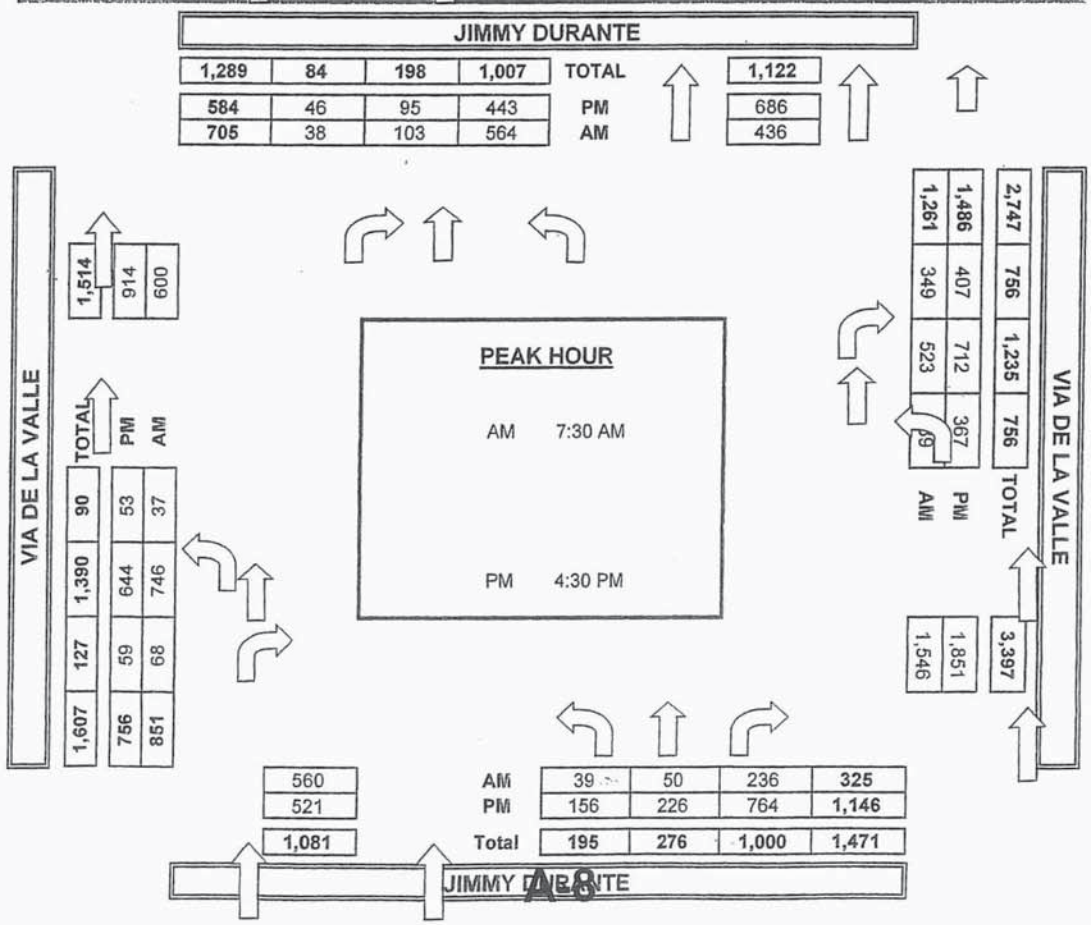


		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM					0					0					0
	7:15 AM					0					0					0
	7:30 AM					0					0					0
	7:45 AM					0					0					0
	8:00 AM					0					0					0
	8:15 AM					0					0					0
	8:30 AM					0					0					0
	8:45 AM					0					0					0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:00 PM					0					0					0
	4:15 PM					0					0					0
	4:30 PM					0					0					0
	4:45 PM					0					0					0
	5:00 PM					0					0					0
	5:15 PM					0					0					0
	5:30 PM					0					0					0
	5:45 PM					0					0					0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS



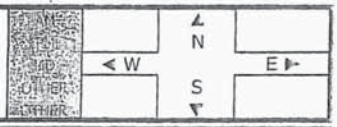


INTERSECTION TURNING MOVEMENT COUNTS

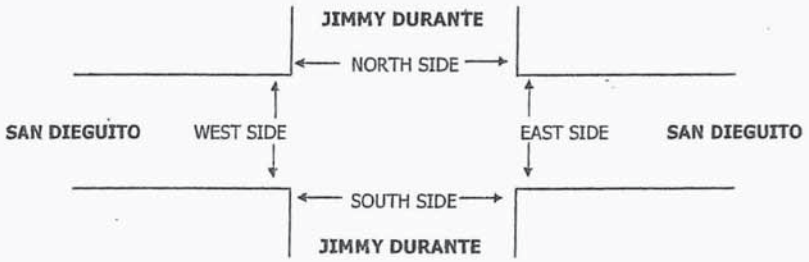
PREPARED BY: PACIFIC TECHNICAL DATA

DATE:	LOCATION:	DEL MAR	PROJECT #:	PTD15-0227-02
2/26/15	NORTH & SOUTH:	JIMMY DURANTE	LOCATION #:	1
THURSDAY	EAST & WEST:	SAN DIEGUITO	CONTROL:	2-WAY STOP (EW)

NOTES:



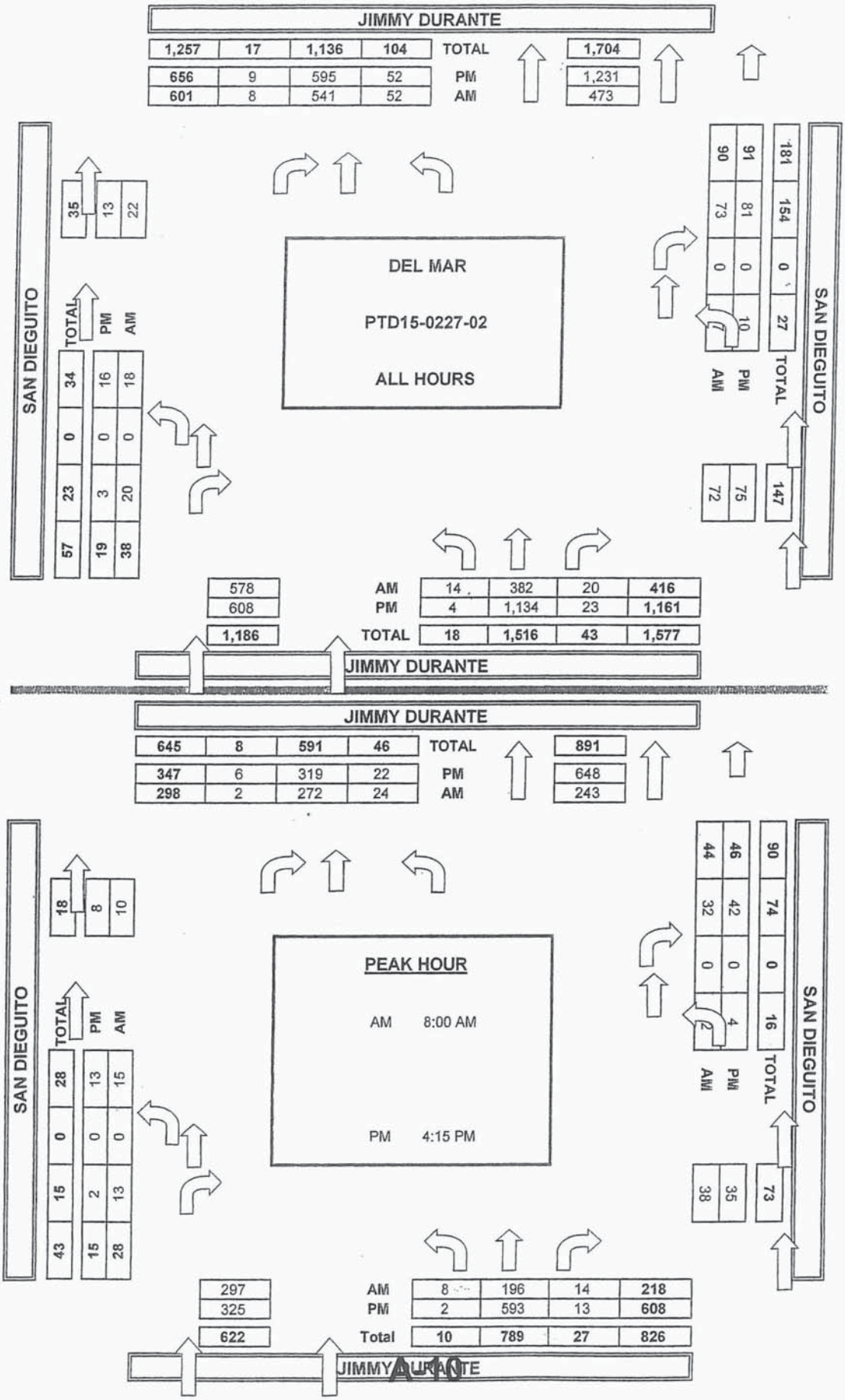
		NORTHBOUND JIMMY DURANTE			SOUTHBOUND JIMMY DURANTE			EASTBOUND SAN DIEGUITO			WESTBOUND SAN DIEGUITO				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 1	WT 0	WR 1	TOTAL	NB X	SB X	EB X	WB X	TTL
AM	7:00 AM	0	42	2	10	66	3	1	0	2	0	0	12	138					0
	7:15 AM	2	51	1	6	59	1	0	0	2	0	0	11	133					0
	7:30 AM	0	39	3	6	61	0	2	0	1	4	0	11	127					0
	7:45 AM	4	54	0	6	83	2	0	0	2	1	0	7	159					0
	8:00 AM	5	44	4	5	63	0	1	0	6	4	0	8	140					0
	8:15 AM	1	49	6	12	58	0	8	0	2	1	0	7	144					0
	8:30 AM	1	47	2	2	67	0	4	0	3	4	0	10	140					0
	8:45 AM	1	56	2	5	84	2	2	0	2	3	0	7	164					0
	VOLUMES	14	382	20	52	541	8	18	0	20	17	0	73	1,145	0	0	0	0	0
	APPROACH %	3%	92%	5%	9%	90%	1%	47%	0%	53%	19%	0%	81%						
	APP/DEPART	416	/	473	601	/	578	38	/	72	90	/	22	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	8	196	14	24	272	2	15	0	13	12	0	32	588					
	APPROACH %	4%	90%	6%	8%	91%	1%	54%	0%	46%	27%	0%	73%						
	PEAK HR FACTOR		0.924			0.819			0.700			0.786		0.896					
	APP/DEPART	218	/	243	298	/	297	28	/	38	44	/	10	0					
PM	4:00 PM	1	157	4	8	72	1	1	0	0	0	0	10	254					0
	4:15 PM	2	165	5	6	75	0	7	0	1	1	0	13	275					0
	4:30 PM	0	149	1	5	68	2	2	0	0	1	0	7	235					0
	4:45 PM	0	136	5	3	78	3	1	0	0	2	0	4	232					0
	5:00 PM	0	143	2	8	98	1	3	0	1	0	0	18	274					0
	5:15 PM	0	135	3	10	86	1	0	0	1	0	0	13	249		1			1
	5:30 PM	1	131	0	2	56	0	1	0	0	3	0	6	200					0
	5:45 PM	0	118	3	10	62	1	1	0	0	3	0	10	208					0
	VOLUMES	4	1,134	23	52	595	9	16	0	3	10	0	81	1,927	0	1	0	0	1
	APPROACH %	0%	98%	2%	8%	91%	1%	84%	0%	16%	11%	0%	89%						
	APP/DEPART	1,161	/	1,231	656	/	608	19	/	75	91	/	13	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	2	593	13	22	319	6	13	0	2	4	0	42	1,016					
	APPROACH %	0%	98%	2%	6%	92%	2%	87%	0%	13%	9%	0%	91%						
	PEAK HR FACTOR		0.884			0.811			0.469			0.639		0.924					
	APP/DEPART	608	/	648	347	/	325	15	/	35	46	/	8	0					



		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM					0					0					0
	7:15 AM					0					0					0
	7:30 AM					0					0					0
	7:45 AM					0					0					0
	8:00 AM					0					0					0
	8:15 AM					0					0					0
	8:30 AM					0					0					0
	8:45 AM					0					0					0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:00 PM					0					0					0
	4:15 PM					0					0					0
	4:30 PM					0					0					0
	4:45 PM					0					0					0
	5:00 PM					0					0					0
	5:15 PM					0					0					0
	5:30 PM					0					0					0
	5:45 PM					0					0					0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS



APPENDIX B

- HCM Intersection Capacity Worksheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	746	68	389	523	349	39	50	236	564	103	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.0	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	1.00	1.00	0.97	1.00	1.00
Frt	1.00	0.99		1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3495		3433	3327		1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3495		3433	3327		1770	1863	1583	3433	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	811	74	423	568	379	42	54	257	613	112	41
RTOR Reduction (vph)	0	7	0	0	112	0	0	0	0	0	0	32
Lane Group Flow (vph)	40	878	0	423	835	0	42	54	257	613	112	9
Turn Type	Prot	NA		Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									Free			6
Actuated Green, G (s)	2.6	25.4		12.3	35.1		9.1	9.1	82.3	17.5	17.5	17.5
Effective Green, g (s)	2.6	25.4		12.3	35.1		9.1	9.1	82.3	17.5	17.5	17.5
Actuated g/C Ratio	0.03	0.31		0.15	0.43		0.11	0.11	1.00	0.21	0.21	0.21
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	55	1078		513	1418		195	205	1583	729	396	336
v/s Ratio Prot	0.02	c0.25		c0.12	0.25		0.02	c0.03		c0.18	0.06	
v/s Ratio Perm									0.16			0.01
v/c Ratio	0.73	0.81		0.82	0.59		0.22	0.26	0.16	0.84	0.28	0.03
Uniform Delay, d1	39.5	26.3		34.0	18.1		33.3	33.5	0.0	31.1	27.1	25.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	37.9	4.8		10.4	0.6		0.6	0.7	0.2	8.7	0.4	0.0
Delay (s)	77.4	31.1		44.3	18.7		33.9	34.2	0.2	39.7	27.5	25.7
Level of Service	E	C		D	B		C	C	A	D	C	C
Approach Delay (s)		33.1			26.6			9.4			37.2	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	82.3	Sum of lost time (s)	18.0
Intersection Capacity Utilization	67.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	644	59	365	712	407	225	329	764	443	95	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.0	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	1.00	1.00	0.97	1.00	1.00
Frt	1.00	0.99		1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3495		3433	3346		1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3495		3433	3346		1770	1863	1583	3433	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	700	64	397	774	442	245	358	830	482	103	50
RTOR Reduction (vph)	0	7	0	0	87	0	0	0	0	0	0	41
Lane Group Flow (vph)	58	757	0	397	1129	0	245	358	830	482	103	9
Turn Type	Prot	NA		Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									Free			6
Actuated Green, G (s)	3.4	23.2		12.2	32.0		18.2	18.2	88.1	16.5	16.5	16.5
Effective Green, g (s)	3.4	23.2		12.2	32.0		18.2	18.2	88.1	16.5	16.5	16.5
Actuated g/C Ratio	0.04	0.26		0.14	0.36		0.21	0.21	1.00	0.19	0.19	0.19
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	68	920		475	1215		365	384	1583	642	348	296
v/s Ratio Prot	0.03	0.22		c0.12	c0.34		0.14	c0.19		c0.14	0.06	
v/s Ratio Perm									0.52			0.01
v/c Ratio	0.85	0.82		0.84	0.93		0.67	0.93	0.52	0.75	0.30	0.03
Uniform Delay, d1	42.1	30.5		37.0	27.0		32.2	34.3	0.0	33.9	30.8	29.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	60.8	6.0		12.1	12.2		4.8	29.2	1.2	4.9	0.5	0.0
Delay (s)	102.9	36.5		49.0	39.2		37.0	63.6	1.2	38.8	31.3	29.3
Level of Service	F	D		D	D		D	E	A	D	C	C
Approach Delay (s)		41.2			41.6			22.9			36.8	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	88.1	Sum of lost time (s)	18.0
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	196	14	24	272	2	12	0	32	15	0	13
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	213	15	26	300	2	13	0	35	16	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									4			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	302			228			604	592	221	601	599	301
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	302			228			604	592	221	601	599	301
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			97	100	96	96	100	98
cM capacity (veh/h)	1259			1340			394	408	819	387	404	739

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	9	228	26	302	48	30
Volume Left	9	0	26	0	13	16
Volume Right	0	15	0	2	35	14
cSH	1259	1700	1340	1700	1126	497
Volume to Capacity	0.01	0.13	0.02	0.18	0.04	0.06
Queue Length 95th (ft)	1	0	1	0	3	5
Control Delay (s)	7.9	0.0	7.7	0.0	10.9	12.7
Lane LOS	A		A		B	B
Approach Delay (s)	0.3		0.6		10.9	12.7
Approach LOS					B	B

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	34.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	593	13	22	319	6	4	0	42	13	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	645	14	24	347	7	4	1	46	14	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									4			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	353			659			1053	1057	652	1070	1061	350
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	353			659			1053	1057	652	1070	1061	350
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			98	100	90	92	100	100
cM capacity (veh/h)	1205			929			199	219	468	175	218	693

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	2	659	24	353	51	16
Volume Left	2	0	24	0	4	14
Volume Right	0	14	0	7	46	2
cSH	1205	1700	929	1700	524	194
Volume to Capacity	0.00	0.39	0.03	0.21	0.10	0.08
Queue Length 95th (ft)	0	0	2	0	8	7
Control Delay (s)	8.0	0.0	9.0	0.0	14.5	25.2
Lane LOS	A		A		B	D
Approach Delay (s)	0.0		0.6		14.5	25.2
Approach LOS					B	D

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	746	68	392	523	349	39	52	247	564	104	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.0	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	1.00	1.00	0.97	1.00	1.00
Frt	1.00	0.99		1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3495		3433	3327		1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3495		3433	3327		1770	1863	1583	3433	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	811	74	426	568	379	42	57	268	613	113	41
RTOR Reduction (vph)	0	7	0	0	112	0	0	0	0	0	0	32
Lane Group Flow (vph)	40	878	0	426	835	0	42	57	268	613	113	9
Turn Type	Prot	NA		Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									Free			6
Actuated Green, G (s)	2.6	25.4		12.3	35.1		9.2	9.2	82.4	17.5	17.5	17.5
Effective Green, g (s)	2.6	25.4		12.3	35.1		9.2	9.2	82.4	17.5	17.5	17.5
Actuated g/C Ratio	0.03	0.31		0.15	0.43		0.11	0.11	1.00	0.21	0.21	0.21
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	55	1077		512	1417		197	208	1583	729	395	336
v/s Ratio Prot	0.02	c0.25		c0.12	0.25		0.02	c0.03		c0.18	0.06	
v/s Ratio Perm									0.17			0.01
v/c Ratio	0.73	0.82		0.83	0.59		0.21	0.27	0.17	0.84	0.29	0.03
Uniform Delay, d1	39.5	26.3		34.0	18.1		33.3	33.5	0.0	31.1	27.2	25.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	37.9	4.9		11.1	0.6		0.5	0.7	0.2	8.7	0.4	0.0
Delay (s)	77.4	31.2		45.1	18.8		33.9	34.3	0.2	39.8	27.6	25.7
Level of Service	E	C		D	B		C	C	A	D	C	C
Approach Delay (s)		33.2			26.9			9.4			37.2	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	82.4	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	644	60	378	712	407	226	330	770	443	98	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.0	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	1.00	1.00	0.97	1.00	1.00
Frt	1.00	0.99		1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3494		3433	3346		1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3494		3433	3346		1770	1863	1583	3433	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	700	65	411	774	442	246	359	837	482	107	50
RTOR Reduction (vph)	0	7	0	0	87	0	0	0	0	0	0	41
Lane Group Flow (vph)	58	758	0	411	1129	0	246	359	837	482	107	9
Turn Type	Prot	NA		Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									Free			6
Actuated Green, G (s)	3.4	23.2		12.3	32.1		18.2	18.2	88.2	16.5	16.5	16.5
Effective Green, g (s)	3.4	23.2		12.3	32.1		18.2	18.2	88.2	16.5	16.5	16.5
Actuated g/C Ratio	0.04	0.26		0.14	0.36		0.21	0.21	1.00	0.19	0.19	0.19
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	68	919		478	1217		365	384	1583	642	348	296
v/s Ratio Prot	0.03	0.22		c0.12	c0.34		0.14	c0.19		c0.14	0.06	
v/s Ratio Perm									0.53			0.01
v/c Ratio	0.85	0.82		0.86	0.93		0.67	0.93	0.53	0.75	0.31	0.03
Uniform Delay, d1	42.2	30.6		37.1	26.9		32.3	34.4	0.0	33.9	30.9	29.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	60.8	6.1		14.3	12.1		4.9	29.7	1.3	4.9	0.5	0.0
Delay (s)	103.0	36.7		51.4	39.0		37.1	64.1	1.3	38.8	31.4	29.4
Level of Service	F	D		D	D		D	E	A	D	C	C
Approach Delay (s)		41.3			42.1			23.0			36.9	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	88.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	196	16	28	272	2	20	0	46	15	0	13
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	213	17	30	300	2	22	0	50	16	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									4			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	302			230			614	602	222	617	610	301
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	302			230			614	602	222	617	610	301
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			94	100	94	96	100	98
cM capacity (veh/h)	1259			1337			387	401	818	369	397	739

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	9	230	30	302	72	30
Volume Left	9	0	30	0	22	16
Volume Right	0	17	0	2	50	14
cSH	1259	1700	1337	1700	1173	481
Volume to Capacity	0.01	0.14	0.02	0.18	0.06	0.06
Queue Length 95th (ft)	1	0	2	0	5	5
Control Delay (s)	7.9	0.0	7.8	0.0	11.3	13.0
Lane LOS	A		A		B	B
Approach Delay (s)	0.3		0.7		11.3	13.0
Approach LOS					B	B

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	36.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	593	23	39	319	6	8	1	50	13	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	645	25	42	347	7	9	1	54	14	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									4			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	353			670			1095	1099	657	1111	1109	350
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	353			670			1095	1099	657	1111	1109	350
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			95	99	88	91	100	100
cM capacity (veh/h)	1205			921			184	202	465	158	200	693

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	2	670	42	353	64	16
Volume Left	2	0	42	0	9	14
Volume Right	0	25	0	7	54	2
cSH	1205	1700	921	1700	548	176
Volume to Capacity	0.00	0.39	0.05	0.21	0.12	0.09
Queue Length 95th (ft)	0	0	4	0	10	8
Control Delay (s)	8.0	0.0	9.1	0.0	15.6	27.5
Lane LOS	A		A		C	D
Approach Delay (s)	0.0		1.0		15.6	27.5
Approach LOS					C	D

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	49.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	783	71	412	549	366	41	55	259	592	109	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.0	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	1.00	1.00	0.97	1.00	1.00
Frt	1.00	0.99		1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3495		3433	3327		1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3495		3433	3327		1770	1863	1583	3433	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	851	77	448	597	398	45	60	282	643	118	43
RTOR Reduction (vph)	0	7	0	0	111	0	0	0	0	0	0	34
Lane Group Flow (vph)	42	921	0	448	884	0	45	60	282	643	118	9
Turn Type	Prot	NA		Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									Free			6
Actuated Green, G (s)	2.6	25.3		12.3	35.0		9.2	9.2	82.7	17.9	17.9	17.9
Effective Green, g (s)	2.6	25.3		12.3	35.0		9.2	9.2	82.7	17.9	17.9	17.9
Actuated g/C Ratio	0.03	0.31		0.15	0.42		0.11	0.11	1.00	0.22	0.22	0.22
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	55	1069		510	1408		196	207	1583	743	403	342
v/s Ratio Prot	0.02	c0.26		c0.13	0.27		0.03	c0.03		c0.19	0.06	
v/s Ratio Perm									0.18			0.01
v/c Ratio	0.76	0.86		0.88	0.63		0.23	0.29	0.18	0.87	0.29	0.03
Uniform Delay, d1	39.7	27.0		34.5	18.7		33.5	33.8	0.0	31.2	27.1	25.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	46.0	7.3		15.7	0.9		0.6	0.8	0.2	10.3	0.4	0.0
Delay (s)	85.8	34.3		50.2	19.6		34.1	34.5	0.2	41.6	27.5	25.6
Level of Service	F	C		D	B		C	C	A	D	C	C
Approach Delay (s)		36.6			29.1			9.5			38.6	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	82.7	Sum of lost time (s)	18.0
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	676	63	397	748	427	237	347	809	465	103	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.0	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	1.00	1.00	0.97	1.00	1.00
Frt	1.00	0.99		1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3494		3433	3346		1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3494		3433	3346		1770	1863	1583	3433	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	61	735	68	432	813	464	258	377	879	505	112	52
RTOR Reduction (vph)	0	7	0	0	87	0	0	0	0	0	0	42
Lane Group Flow (vph)	61	796	0	432	1190	0	258	377	879	505	112	10
Turn Type	Prot	NA		Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									Free			6
Actuated Green, G (s)	3.5	23.7		12.3	32.5		18.3	18.3	89.1	16.8	16.8	16.8
Effective Green, g (s)	3.5	23.7		12.3	32.5		18.3	18.3	89.1	16.8	16.8	16.8
Actuated g/C Ratio	0.04	0.27		0.14	0.36		0.21	0.21	1.00	0.19	0.19	0.19
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	69	929		473	1220		363	382	1583	647	351	298
v/s Ratio Prot	0.03	0.23		c0.13	c0.36		0.15	c0.20		c0.15	0.06	
v/s Ratio Perm									0.56			0.01
v/c Ratio	0.88	0.86		0.91	0.98		0.71	0.99	0.56	0.78	0.32	0.03
Uniform Delay, d1	42.6	31.1		37.9	27.9		32.9	35.3	0.0	34.4	31.2	29.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	69.1	7.8		22.0	19.9		6.4	42.2	1.4	6.1	0.5	0.0
Delay (s)	111.7	38.9		59.8	47.8		39.4	77.4	1.4	40.5	31.7	29.6
Level of Service	F	D		E	D		D	E	A	D	C	C
Approach Delay (s)		44.1			50.8			26.8			38.2	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	89.1	Sum of lost time (s)	18.0
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	206	17	29	290	2	21	0	48	16	0	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	224	18	32	315	2	23	0	52	17	0	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									4			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	317			242			644	631	233	647	639	316
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	317			242			644	631	233	647	639	316
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			94	100	94	95	100	98
cM capacity (veh/h)	1243			1324			369	386	806	351	382	724

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	9	242	32	317	75	33
Volume Left	9	0	32	0	23	17
Volume Right	0	18	0	2	52	15
cSH	1243	1700	1324	1700	1159	462
Volume to Capacity	0.01	0.14	0.02	0.19	0.06	0.07
Queue Length 95th (ft)	1	0	2	0	5	6
Control Delay (s)	7.9	0.0	7.8	0.0	11.5	13.4
Lane LOS	A		A		B	B
Approach Delay (s)	0.3		0.7		11.5	13.4
Approach LOS					B	B

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	37.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	623	24	41	335	6	8	1	53	14	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	677	26	45	364	7	9	1	58	15	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									4			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	371			703			1150	1154	690	1167	1164	367
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	371			703			1150	1154	690	1167	1164	367
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			95	99	87	89	100	100
cM capacity (veh/h)	1188			894			168	187	445	142	184	678

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	2	703	45	371	67	17
Volume Left	2	0	45	0	9	15
Volume Right	0	26	0	7	58	2
cSH	1188	1700	894	1700	521	158
Volume to Capacity	0.00	0.41	0.05	0.22	0.13	0.11
Queue Length 95th (ft)	0	0	4	0	11	9
Control Delay (s)	8.0	0.0	9.2	0.0	16.2	30.7
Lane LOS	A		A		C	D
Approach Delay (s)	0.0		1.0		16.2	30.7
Approach LOS					C	D

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	5.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	239	332	72	30
Demand Flow Rate, veh/h	243	339	73	30
Vehicles Circulating, veh/h	47	31	242	359
Vehicles Exiting, veh/h	342	284	48	11
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.5	6.4	4.9	4.9
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	243	339	73	30
Cap Entry Lane, veh/h	1078	1095	887	789
Entry HV Adj Factor	0.982	0.979	0.986	1.000
Flow Entry, veh/h	239	332	72	30
Cap Entry, veh/h	1059	1073	875	789
V/C Ratio	0.225	0.309	0.082	0.038
Control Delay, s/veh	5.5	6.4	4.9	4.9
LOS	A	A	A	A
95th %tile Queue, veh	1	1	0	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	623	24	41	335	6	8	1	53	14	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	677	26	45	364	7	9	1	58	15	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									4			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	371			703			1150	1154	690	1167	1164	367
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	371			703			1150	1154	690	1167	1164	367
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			95	99	87	89	100	100
cM capacity (veh/h)	1188			894			168	187	445	142	184	678

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	2	703	45	371	67	17
Volume Left	2	0	45	0	9	15
Volume Right	0	26	0	7	58	2
cSH	1188	1700	894	1700	521	158
Volume to Capacity	0.00	0.41	0.05	0.22	0.13	0.11
Queue Length 95th (ft)	0	0	4	0	11	9
Control Delay (s)	8.0	0.0	9.2	0.0	16.2	30.7
Lane LOS	A		A		C	D
Approach Delay (s)	0.0		1.0		16.2	30.7
Approach LOS					C	D

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	5.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	239	332	72	30
Demand Flow Rate, veh/h	243	339	73	30
Vehicles Circulating, veh/h	47	31	242	359
Vehicles Exiting, veh/h	342	284	48	11
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.5	6.4	4.9	4.9
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	243	339	73	30
Cap Entry Lane, veh/h	1078	1095	887	789
Entry HV Adj Factor	0.982	0.979	0.986	1.000
Flow Entry, veh/h	239	332	72	30
Cap Entry, veh/h	1059	1073	875	789
V/C Ratio	0.225	0.309	0.082	0.038
Control Delay, s/veh	5.5	6.4	4.9	4.9
LOS	A	A	A	A
95th %tile Queue, veh	1	1	0	0

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	672	396	64	16
Demand Flow Rate, veh/h	686	404	65	16
Vehicles Circulating, veh/h	57	12	674	406
Vehicles Exiting, veh/h	365	727	68	10
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	12.6	7.0	7.7	5.0
Approach LOS	B	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	686	404	65	16
Cap Entry Lane, veh/h	1067	1116	576	753
Entry HV Adj Factor	0.980	0.980	0.984	1.000
Flow Entry, veh/h	672	396	64	16
Cap Entry, veh/h	1046	1095	567	753
V/C Ratio	0.643	0.362	0.113	0.021
Control Delay, s/veh	12.6	7.0	7.7	5.0
LOS	B	A	A	A
95th %tile Queue, veh	5	2	0	0

Intersection	
Intersection Delay, s/veh	6.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	251	349	75	32
Demand Flow Rate, veh/h	255	356	76	32
Vehicles Circulating, veh/h	50	32	254	377
Vehicles Exiting, veh/h	359	298	51	11
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.7	6.6	5.0	5.1
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	255	356	76	32
Cap Entry Lane, veh/h	1075	1094	876	775
Entry HV Adj Factor	0.982	0.980	0.987	1.000
Flow Entry, veh/h	251	349	75	32
Cap Entry, veh/h	1056	1072	865	775
V/C Ratio	0.237	0.325	0.087	0.041
Control Delay, s/veh	5.7	6.6	5.0	5.1
LOS	A	A	A	A
95th %tile Queue, veh	1	1	0	0

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	705	416	68	17
Demand Flow Rate, veh/h	720	424	69	17
Vehicles Circulating, veh/h	61	12	708	426
Vehicles Exiting, veh/h	382	765	73	10
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	13.8	7.2	8.1	5.1
Approach LOS	B	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	720	424	69	17
Cap Entry Lane, veh/h	1063	1116	557	738
Entry HV Adj Factor	0.980	0.980	0.985	1.000
Flow Entry, veh/h	705	416	68	17
Cap Entry, veh/h	1042	1095	548	738
V/C Ratio	0.677	0.380	0.124	0.023
Control Delay, s/veh	13.8	7.2	8.1	5.1
LOS	B	A	A	A
95th %tile Queue, veh	6	2	0	0

APPENDIX C

- Letter dated February 17, 2015 comparing the proposed Watermark Project Trip Generation to the approved Riverview Office Project Trip Generation.

Darnell & ASSOCIATES, INC.

TRANSPORTATION PLANNING &. TRAFFIC ENGINEERING

February 17, 2015

Marne Bouillon
Kitchell Development Company,
An Arizona Corporation
853 Camino Del Mar, Suite 200

Subject: Trip Generation for the proposed 48 dwelling unit Project located at the southeast corner of Jimmy Durante Boulevard and San Dieguito Drive in the City of Del Mar.

Dear Mr. Bouillon:

In accordance with your authorization, I have prepared Table 1 showing the trip generation for the proposed development of 48 multi-family dwelling units and comparison to the previously approved 23,120 Square Foot General Office project. The 48 dwelling units represent a density of 20.25 dwelling units to the 2.37 acres (48 dwelling units÷ 2.37 acres = 20.25).

To determine the projects trip generation, we reviewed the San Diego Association of Governments Not So Brief Guide of Vehicle Traffic Generation Rates for the San Diego Region (Copy attached). Application of the published vehicular trip rates, the 20.25 dwelling unit per acre project would generate 6 trips per dwelling unit per dwelling unit rate consistent with the multi-family rate for projects more than 20 dwelling units per acre. However to be conservative, we applied the SANDAG Condominium/Multi-Family rate of 8 trips per dwelling unit, which is the trip generation rate for projects with a density of 6 to 20 dwelling units per acre.

Figure 1 presents the proposed project site plan and Figure 2 presents the site plan approved for the previously approved Office Space.

Table 1 was prepared to show that the proposed residential project will generate 384 daily, 31 AM peak and 39 peak vehicles. Further review of Table 1 shows that the proposed project will generate 78 fewer daily vehicles, 24 fewer AM peak and 29 fewer PM peak hour vehicles.

Please call if you have any questions or need additional information.

Sincerely,

DARNELL & ASSOCIATES, INC.

Bill E Darnell

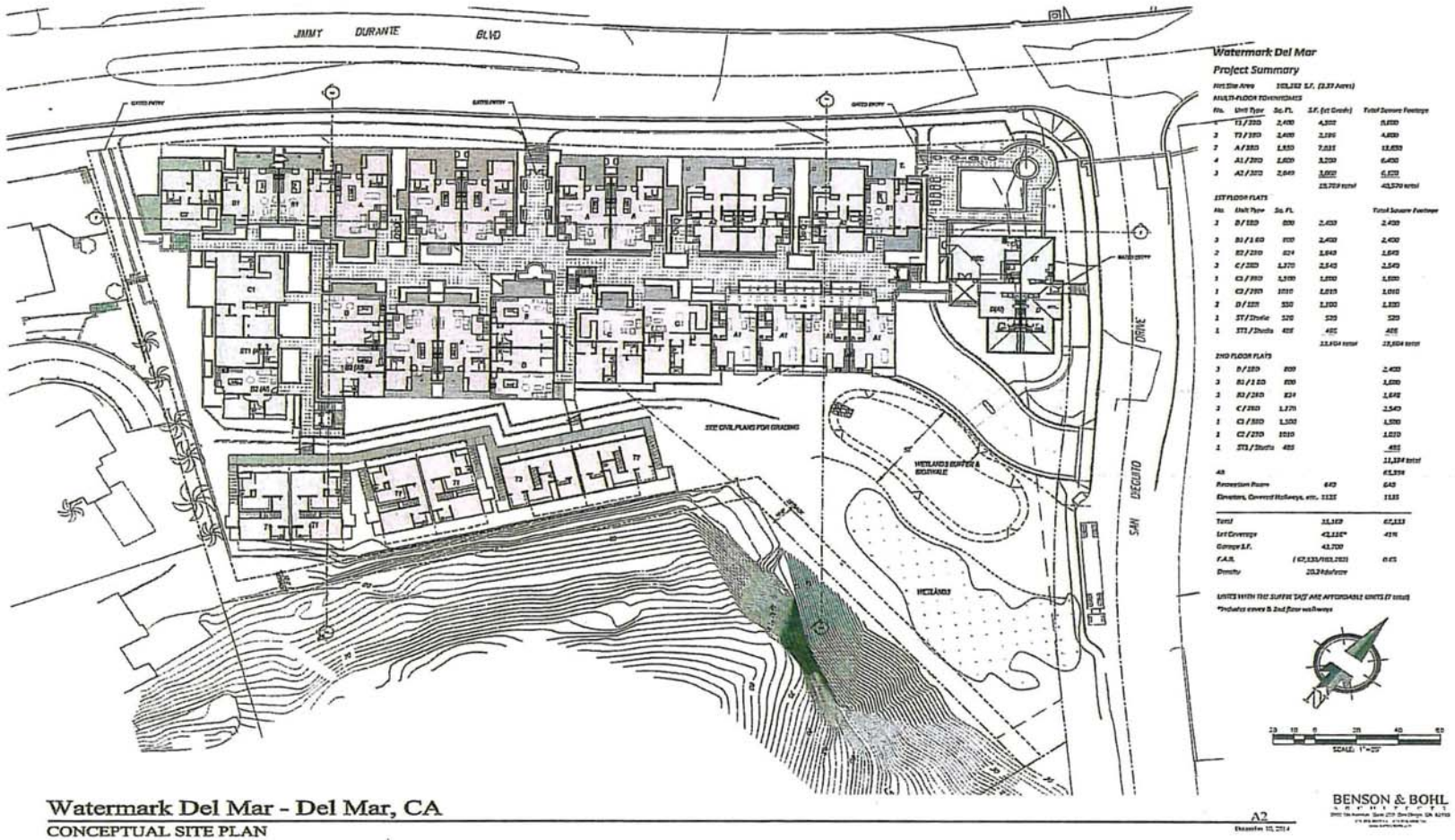
Bill E. Darnell, P.E.
RCE: 22338
BED/jam

Bill E Darnell
2/17/2015

Table 1 - Trip Generation Rates & Calculations				
Land Use		**Rates**	**Entering (In)**	**Exiting (Out)**
General Office	ADT	20 /per 1000 sq ft	50 %	50%
	AM	14% /of daily traffic	90%	10%
	PM	13% /of daily traffic	20%	80%
Residential	ADT	8 /per DU	50%	50%
	AM	8% /of daily traffic	20%	80%
	PM	10% /of daily traffic	70%	30%

Trip Generation Calculations								
Land Use	**Density**	**ADT**	**AM**			**PM**		
			Total	**In**	**Out**	**Total**	**In**	**Out**
Approved Project								
General Office	23,120 sq ft	462	65	59	6	60	12	48
Proposed Project								
Residential	48 DU	384	31	6	22	39	27	12
	Net Change	**(78)**	**(-24)**	**(-53)**	**+19**	**(-29)**	**+15**	**(-36)**

Number rounding may occur in spreadsheet background, ADT = Average Daily Traffic, DU = Dwelling Units, Rates per ITE, Sixth Edition, sq ft = Square Feet, (xx) = Reduction in traffic



Watermark Del Mar - Del Mar, CA

CONCEPTUAL SITE PLAN

A2

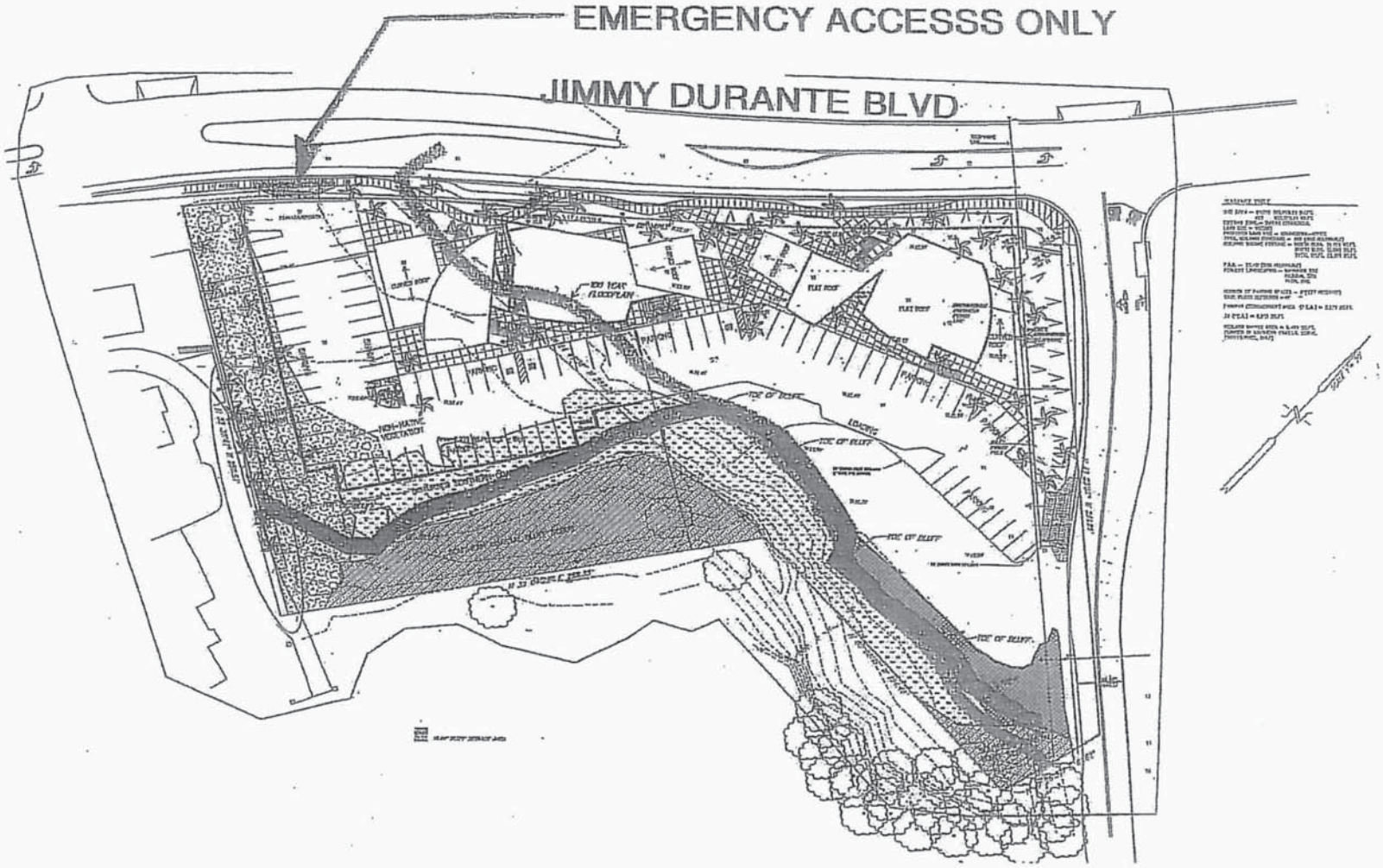
Darnell & ASSOCIATES, INC.

TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

150201 – Water Mark Del Mar 02/17/2015

FIGURE 1

PROPOSED RESIDENTIAL SITE PLAN



Darnell & ASSOCIATES, INC.
TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

150201 – Water Mark Del Mar 02/17/2015

FIGURE 2

APPROVED OFFICE SITE PLAN

(NOT SO)

BRIEF GUIDE OF VEHICULAR TRAFFIC GENERATION RATES FOR THE SAN DIEGO REGION

APRIL 2002

SANDAG
401 B Street, Suite 800
San Diego, California 92101
(619) 699-1900 • Fax (619) 699-1950

NOTE: This listing only represents a *guide* of average, or estimated, traffic generation "driveway" rates and some very general trip data for land uses (emphasis on acreage and building square footage) in the San Diego region. These rates (both local and national) are subject to change as future documentation becomes available, or as regional sources are updated. For more specific information regarding traffic data and trip rates, please refer to the San Diego Traffic Generators manual. *Always check with local jurisdictions for their preferred or applicable rates.*

LAND USE	TRIP CATEGORIES (PRIMARY:DIVERTED:PASS-BY)[1]	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)	HIGHEST PEAK HOUR % (plus IN:OUT ratio) Between 6:00-9:30 A.M.		Between 3:00-6:30 P.M.		TRIP LENGTH (Miles)[2]
AGRICULTURE (Open Space)	[80:18:2]	2/acre**					10.8
AIRPORT	[78:20:2]						12.5
Commercial		60/acre, 100/flight, 70/1000 sq. ft.* **	5%	(6:4)	6%	(5:5)	
General Aviation		6/acre, 2/flight, 6/based aircraft* **	9%	(7:3)	15%	(5:5)	
Heliports		100/acre**					
AUTOMOBILE[5]							
Car Wash							
Automatic		900/site, 600/acre**	4%	(5:5)	9%	(5:5)	
Self-serve		100/wash stall**	4%	(5:5)	8%	(5:5)	
Gasoline	[21:51:28]						2.8
with/Food Mart		160/vehicle fueling space**	7%	(5:5)	8%	(5:5)	
with/Food Mart & Car Wash		155/vehicle fueling space**	8%	(5:5)	9%	(5:5)	
Older Service Station Design		150/vehicle fueling space, 900/station**	7%	(5:5)	9%	(5:5)	
Sales (Dealer & Repair)		50/1000 sq. ft., 300/acre, 60/service stall* **	5%	(7:3)	8%	(4:6)	
Auto Repair Center		20/1000 sq. ft., 400/acre, 20/service stall*	8%	(7:3)	11%	(4:6)	
Auto Parts Sales		60/1000 sq. ft.**	4%		10%		
Quick Lube		40/service stall**	7%	(6:4)	10%	(5:5)	
Tire Store		25/1000 sq. ft., 30/service stall**	7%	(6:4)	11%	(5:5)	
CEMETERY		5/acre*					
CHURCH (or Synagogue)	[64:25:11]	9/1000 sq. ft., 30/acre** (quadruple rates for Sunday, or days of assembly)	5%	(6:4)	8%	(5:5)	5.1
COMMERCIAL/RETAIL[5]							
Super Regional Shopping Center (More than 80 acres, more than 800,000 sq. ft., w/usually 3+ major stores)		35/1000 sq. ft.,[c] 400/acre*	4%	(7:3)	10%	(5:5)	
Regional Shopping Center (40-80acres, 400,000-800,000 sq. ft., w/usually 2+ major stores)	[54:35:11]	50/1000 sq. ft.,[c] 500/acre*	4%	(7:3)	9%	(5:5)	5.2
Community Shopping Center (15-40 acres, 125,000-400,000 sq. ft., w/usually 1 major store, detached restaurant(s), grocery and drugstore)	[47:31:22]	80/1000 sq. ft., 700/acre* **	4%	(6:4)	10%	(5:5)	3.6
Neighborhood Shopping Center (Less than 15 acres, less than 125,000 sq. ft., w/usually grocery & drugstore, cleaners, beauty & barber shop, & fast food services)		120/1000 sq. ft., 1200/acre* **	4%	(6:4)	10%	(5:5)	
Commercial Shops	[45:40:15]						
Specialty Retail/Strip Commercial		40/1000 sq. ft., 400/acre*	3%	(6:4)	9%	(5:5)	4.3
Electronics Superstore		50/1000 sq. ft**			10%	(5:5)	
Factory Outlet		40/1000 sq. ft.**	3%	(7:3)	9%	(5:5)	
Supermarket		150/1000 sq. ft., 2000/acre* **	4%	(7:3)	10%	(5:5)	
Drugstore		90/1000 sq. ft.**	4%	(6:4)	10%	(5:5)	
Convenience Market (15-16 hours)		500/1000 sq. ft.**	8%	(5:5)	8%	(5:5)	
Convenience Market (24 hours)		700/1000 sq. ft.**	9%	(5:5)	7%	(5:5)	
Convenience Market (w/gasoline pumps)		850/1000 sq. ft., 550/vehicle fueling space**	6%	(5:5)	7%	(5:5)	
Discount Club		60/1000 sq. ft., 600/acre* **	1%	(7:3)	9%	(5:5)	
Discount Store		60/1000 sq. ft., 600/acre**	3%	(6:4)	8%	(5:5)	
Furniture Store		6/1000 sq. ft., 100/acre**	4%	(7:3)	9%	(5:5)	
Lumber Store		30/1000 sq. ft., 150/acre**	7%	(6:4)	9%	(5:5)	
Home Improvement Superstore		40/1000 sq. ft.**	5%	(6:4)	8%	(5:5)	
Hardware/Paint Store		60/1000 sq. ft., 600/acre**	2%	(6:4)	9%	(5:5)	
Garden Nursery		40/1000 sq. ft., 90/acre**	3%	(6:4)	10%	(5:5)	
Mixed Use: Commercial (w/supermarket)/Residential		110/1000 sq. ft., 2000/acre* (commercial only) 5/dwelling unit, 200/acre* (residential only)	3% 9%	(6:4) (3:7)	9% 13%	(5:5) (6:4)	
EDUCATION							
University (4 years)	[91:9:0]	2.4/student, 100 acre*	10%	(8:2)	9%	(3:7)	8.9
Junior College (2 years)	[92:7:1]	1.2/student, 24/1000 sq. ft., 120/acre* **	12%	(8:2)	9%	(6:4)	9.0
High School	[75:19:6]	1.3/student, 15/1000 sq. ft., 60/acre* **	20%	(7:3)	10%	(4:6)	4.8
Middle/Junior High	[63:25:12]	1.4/student, 12/1000 sq. ft. 50/acre**	30%	(6:4)	9%	(4:6)	5.0
Elementary	[57:25:10]	1.6/student, 14/1000 sq. ft., 90/acre* **	32%	(6:4)	9%	(4:6)	3.4
Day Care	[28:58:14]	5/child, 80/1000 sq. ft.**	17%	(5:5)	18%	(5:5)	3.7
FINANCIAL[5]	[35:42:23]						3.4
Bank (Walk-In only)		150/1000 sq. ft., 1000/acre* **	4%	(7:3)	8%	(4:6)	
with Drive-Through		200/1000 sq. ft., 1500/acre*	5%	(6:4)	10%	(5:5)	
Drive-Through only		250 (125 one-way)/lane*	3%	(5:5)	13%	(5:5)	
Savings & Loan		60/1000 sq. ft., 600/acre**	2%		9%		
Drive-Through only		100 (50 one-way)/lane**	4%		15%		
HOSPITAL	[73:25:2]						8.3
General		20/bed, 25/1000 sq. ft., 250/acre*	8%	(7:3)	10%	(4:6)	
Convalescent/Nursing		3/bed**	7%	(6:4)	7%	(4:6)	
INDUSTRIAL							
Industrial/Business Park (commercial included)	[79:19:2]	16/1000 sq. ft., 200/acre* **	12%	(8:2)	12%	(2:8)	9.0
Industrial Park (no commercial)		8/1000 sq. ft., 90/acre**	11%	(9:1)	12%	(2:8)	
Industrial Plant (multiple shifts)	[92:5:3]	10/1000 sq. ft., 120/acre*	14%	(8:2)	15%	(3:7)	11.7
Manufacturing/Assembly		4/1000 sq. ft., 50/acre**	19%	(9:1)	20%	(2:8)	
Warehousing		5/1000 sq. ft., 60/acre**	13%	(7:3)	15%	(4:6)	
Storage		2/1000 sq. ft., 0.2/vault, 30/acre*	6%	(5:5)	9%	(5:5)	
Science Research & Development		8/1000 sq. ft., 80/acre*	16%	(9:1)	14%	(1:9)	
Landfill & Recycling Center		6/acre	11%	(5:5)	10%	(4:6)	

(OVER)

MEMBER AGENCIES: Cities of Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach, Vista and County of San Diego.
ADVISORY/LIAISON MEMBERS: California Department of Transportation, County Water Authority, U.S. Department of Defense, S.D. Unified Port District and Tijuana/Baja California.

Darnell & Associates, Inc.

May 30, 2017

Marne Bouillon
Kitchell Development Company,
1555 Camino Del Mar, Suite 307
Del Mar, California 92014

D&A Ref. No: 150201

Subject: Traffic Comparison of the proposed 48 Condominium Unit Residential Project Located at the Southeast Corner of Jimmy Durante Boulevard and San Dieguito Drive in Del Mar, California.

Dear Mr. Bouillon:
In accordance with your authorization, Darnell & Associates, Inc. (D&A) has compared the trip generation for the proposed 48 Unit Project shown in Figure 1 to the 38 Unit Plan shown in Figure 2 included in the DEIR for the project. Table 1 summarizes the trip generation for the proposed 48 Units and the 38 Unit Alternative.

Table 11 - Trip Generation Rates And Calculations Summary

Trip Generation Rates

Land Use	Daily Rate	AM Peak Hour % of Daily Trips (In:Out Split)	PM Peak Hour % of Daily Trips (In:Out Split)
Residential	8 trips/DU	8% (2:8)	10% (7:3)

Project Trip Generation

Land Use	Total No. DU Units	Total Daily Trips	AM Peak Hour Trips (In : Out)			PM Peak Hour Trips (In : Out)		
			Total	In	Out	Total	In	Out
Proposed Project	48 DU	384	28	6	22	36	25	11
Alternative Project	38 DU	304	24	5	19	30	21	9
Net Change	10 DU	80	4	1	3	6	4	2

DU = Dwelling Unit

Review of Table 1 shows that the DEIR Alternative generates 80 fewer Daily vehicles, 4 fewer AM Peak Hour vehicles and 6 fewer PM Peak hour vehicles. The reduction of 80 Daily, 4 AM Peak Hour vehicles and 6 fewer PM Peak hour vehicles generated by the project will not result in any changes in traffic impacts/analysis presented in the Darnell & Associates, Inc. October 21, 2015 Traffic Study for the project.

If you have any questions, please feel free to contact this office.

Sincerely,

DARNELL & ASSOCIATES, INC.

Bill E. Darnell, P.E.

Firm
Principal
RCE: 22338
TR: 539

BED/
jam
150201 – Watermark Del Mar 05/17

5/30/2017
Date

5/30/2017
Date

Watermark Del Mar

Project Summary

Net Site Area 101,282 S.F (2.37 Acres)

MULTI-FLOOR TOWNHOMES

No	Unit Type	Sq. Ft	S.F (at Grade)	Total Square Footage
1	T20 / 2BD	2,282	1,150	2,282
2	T21 / 3BD	3,540	1,277	9,080
2	T22 / 5BD	2,359	1,157	4,718
7	A / 3BD	1,950	7,015	13,650
4	A1 / 2BD	1,600	3,200	6,400
3	A2 / 3BD	2,040	3,060	6,120
			16,869 total	38,250 sub-total

1ST FLOOR FLATS

No	Unit Type	Sq. Ft	S.F (at Grade)	Total Square Footage
3	B / 1BD	800	2,400	2,400
3	B1 / 1 BD	800	2,400	2,400
2	B2 / 2BD	824	1,648	1,648
2	C / 2BD	1,270	2,540	2,540
1	C1 / 3BD	1,500	1,500	1,500
1	C2 / 2BD	1010	1,010	1,010
2	D / 1BR	550	1,100	1,100
1	ST / Studio	400	400	400
1	ST1 / Studio	486	486	486
			13,484 total	13,484 sub-total

2ND FLOOR FLATS

No.	Unit Type	Sq. Ft	S.F. (at Grade)	Total Square Footage
3	B / 1BD	800		2,400
2	B1 / 1 BD	800		1,600
2	B2 / 2BD	824		1,648
2	C / 2BD	1,270		2,540
1	C2 / 2BD	1,010		1,010
1	C3 / 3BD	1,037		1,037
2	ST1 / Studio	486		972
				11,207 sub-total
48 UNITS				62,941 total

Rec Room, Fire Ctrl	600	600
Elevators, Covered Hallways, etc.	1295	1295
Total	35,168	64,838
Lot Coverage	43,185*	41%
Garage S.F	43,700	
F.A.R	(64,838/101,282)	0.63
Density	20.24du/acre	

UNITS WITH THE SUFFIX '(A)' ARE AFFORDABLE UNITS (7 total)

*Includes eaves & 2nd floor walkways

Watermark Del Mar - Del Mar, CA

CONCEPTUAL SITE PLAN - FIRST FLOOR - 48 UNIT PLAN

A2

05-11-17

BENSON & BOHL ARCHITECTS

Darnell & ASSOCIATES, INC.

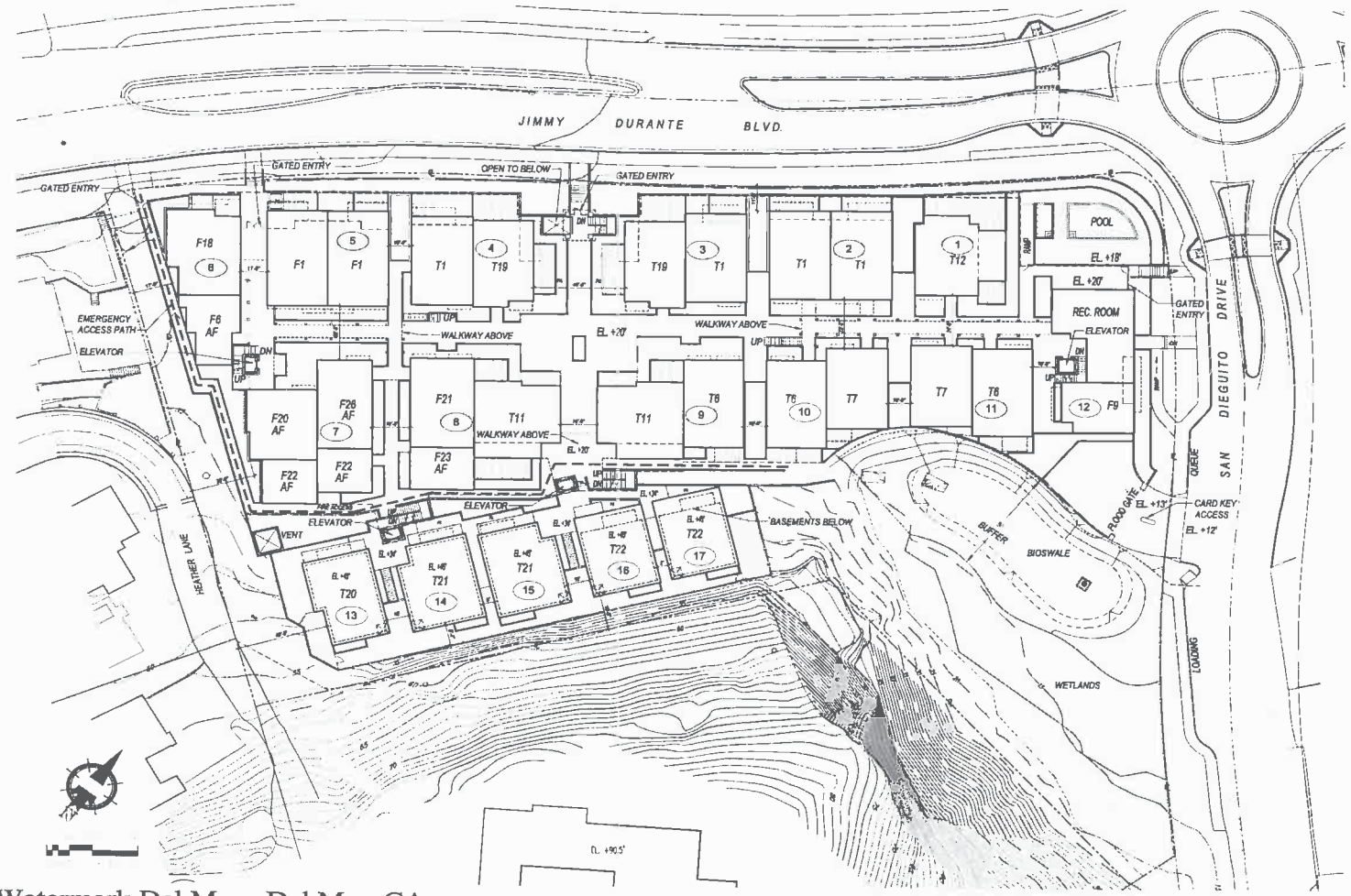
TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

150201 - WATERMARK 05/22/2017

FIGURE 1

WATERMARK DEL MAR – DEL MAR, CA.

CONCEPTUAL SITE PLAN 48 UNIT PLAN



Watermark Del Mar - Del Mar, CA

COMMUNITY RESPONSE ALTERNATIVE - 38 UNIT PLAN

FIRST FLOOR PLAN A2

05-11-17

PROJECT DATA

UNIT TYPE	TOTAL UNIT AREA	NUMBER OF UNITS	TOTAL AREA
F1	1,199	2	2,398
F8	686	2	1,372
F9	730	1	730
F10	880	1	880
F17	1,063	2	2,126
F18	1,207	2	2,414
F20	1,000	1	1,000
F21	1,176	2	2,352
F22	900	2	1,800
F23	560	1	560
F24	1,000	1	1,000
F30	1,300	1	1,300
F31	1,220	1	1,220
T1	2,340	4	9,360
T6	2,180	3	6,540
T7	2,642	2	5,284
T11	2,330	3	6,990
T12	2,364	1	2,364
T18	2,028	2	4,056
T20	2,282	1	2,282
T21	2,540	2	5,080
T22	2,363	2	4,726
27		38	80,668
RECREATION			1,853
TOTAL			82,521
BASEMENTS + GARAGE			62,968
F.A.R.			0.65
LOT COVERAGE *			43%
DENSITY			16 DU/AC GF
NET SITE AREA		2.37 AC	103,282

* INCLUDES EAVES AND 2ND FLOOR WALKWAYS

AF = AFFORDABLE UNIT

BENSON & BOHL ARCHITECTS

Darnell & ASSOCIATES, INC.
TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

150201 - WATERMARK 05/22/2017

FIGURE 2

WATERMARK DEL MAR – DEL MAR, CA

COMMUNITY RESPONSE ALTERNATIVE SITE PLAN 38 UNIT PLAN

APPENDIX L

Fire Protection Memorandum

JENSEN HUGHES
Advancing the Science of Safety

December 22, 2016

Mrs. Anita Pupping
Fire Marshal
Encinitas Fire Department
505 South Vulcan Avenue
Encinitas, California 92024

RE: Request for Alternate Methods, Designs, and Materials
Watermark Del Mar
Corner of San Dieguito and Jimmy Durante Drive
Del Mar, California
JH Project No.: 1GPA14092.000

Dear Anita:

The Watermark Del Mar project has undergone a few changes since you met with the design team last year. This letter provides an update to the Alternate Design Request citing the new applicable codes and standards for this project as well as providing an updated fire protection plan.

Section 503.1.1 of the 2016 California Fire Code (CFC) requires that an approved fire apparatus access roadway extend to within 150 feet of all portions of the building's exterior walls. Due the limited size of the site, a conventional fire department access roadway cannot be provided along the southern boundary of the property and therefore the 150-foot dimension is exceeded. The intent of the 150-foot distance requirement is to limit the length of hose needed to reach any point along the exterior of a building from a water supply CFC Section 503.1.1. Exception 1.2 states that this dimension may be extended when an approved alternate means of fire protection is provided.

Specific fire protection/life safety elements will be provided as an alternate method that will result in a level of protection which is equivalent to the intent of the CFC. The following elements are proposed:

1. A wet standpipe system will be provided for firefighter use. The standpipes will be located such that all areas of the building are within a 150-foot length from the standpipe outlet. The standpipe will be connected to sprinkler system piping in the parking garage and will be connected to the fire department connection.

2. To enhance the performance of the automatic sprinkler system, the system design will be upgraded such that all sprinklers within a unit will be designed to operate at the minimum flow rate or 0.10 gpm/sq. ft. in lieu of a maximum of four sprinklers as required by 2016 National Fire Protection Association (NFPA) 13, Standard for the Installation of Sprinkler Systems. The enhanced flow to all sprinklers within the unit will improve the performance of the sprinkler system and likely will result in fire extinguishment.

3. Two new fire hydrants will be provided, one on Jimmy Durante Blvd and one on San Dieguito Drive.

4. A fire control room will be provided at the main access point on San Dieguito Drive. The fire department connection and a new fire hydrant will be located there as well. Within the room will

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jensenhughes.com

be diagrams and plans which show the details of the project. This will provide information that will improve firefighting activities.

5. Three fire department access points will be provided along Jimmy Durante Blvd. Each will be provided with a Knox Box to allow access to the site. Responding fire apparatus will have the ability to stage at various locations based upon the location of the fire event.

6. A concrete access path will be added to the southern boundary of the project. The path will allow firefighters to safely travel to the southern portions of the project and access the standpipe system.

7. Two-hour fire barriers will be provided between adjacent units in lieu of the one-hour fire barriers required by the 2016 CBC. The enhanced passive fire protection will reduce the potential for a fire to burn beyond the unit of origin. This will facilitate manual firefighting.

The details of the alternate design are also shown on the attached revised fire protection plan.

In summary, JENSEN HUGHES believes the features which will be installed in this project provide an equivalent or higher level of fire protection/life safety to that prescribed in the 2016 California Building Code Section 503.1.1. Approval of this alternate design approach is respectfully requested.

JENSEN HUGHES appreciates the opportunity to assist on this project. If you have any questions, please contact Mark Verrochi at (619) 488-9810 or mverrochi@jensenhughes.com.

Sincerely,

JENSEN HUGHES

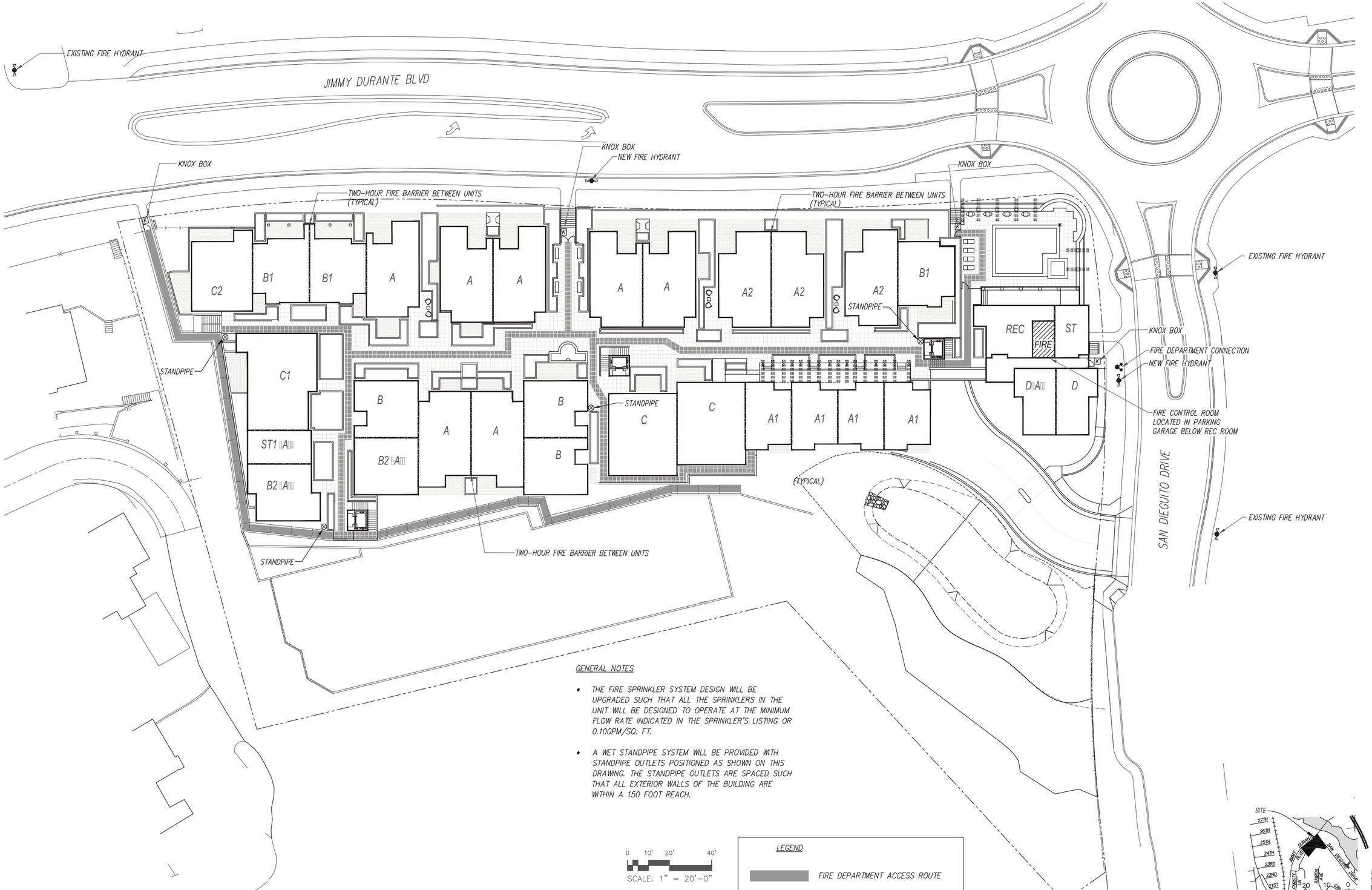
Mark T. Verrochi, M.S.
Senior Consultant

JENSEN HUGHES

Garner A. Palenske, PE
Sr. Vice President

Fire Marshal Email: apupping@encinitasca.gov

cc: Marne Bouillon – Kitchell Development Company mbouillon@kitchell.com
Randall Bohl – Benson & Bohl Architects, Inc. rbohl@bensonbohl.com



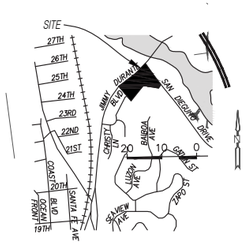
GENERAL NOTES

- THE FIRE SPRINKLER SYSTEM DESIGN WILL BE UPGRADED SUCH THAT ALL THE SPRINKLERS IN THE UNIT WILL BE DESIGNED TO OPERATE AT THE MINIMUM FLOW RATE INDICATED IN THE SPRINKLER'S LISTING OR 0.10GPM/SQ. FT.
- A WET STANDPIPE SYSTEM WILL BE PROVIDED WITH STANDPIPE OUTLETS POSITIONED AS SHOWN ON THIS DRAWING. THE STANDPIPE OUTLETS ARE SPACED SUCH THAT ALL EXTERIOR WALLS OF THE BUILDING ARE WITHIN A 150 FOOT REACH.

0 10' 20' 40'
SCALE: 1" = 20'-0"

LEGEND

FIRE DEPARTMENT ACCESS ROUTE



VICINITY MAP
N.T.S.

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WWW.JENSENHUGHES.COM
JH PROJECT NO.: 2014092-000
(1GPA14092.002.000)

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PROJECT NAME:
WATERMARK DEL MAR

Jimmy Durante Boulevatd and San Dieguito DRive
Del Mar, CA 92014

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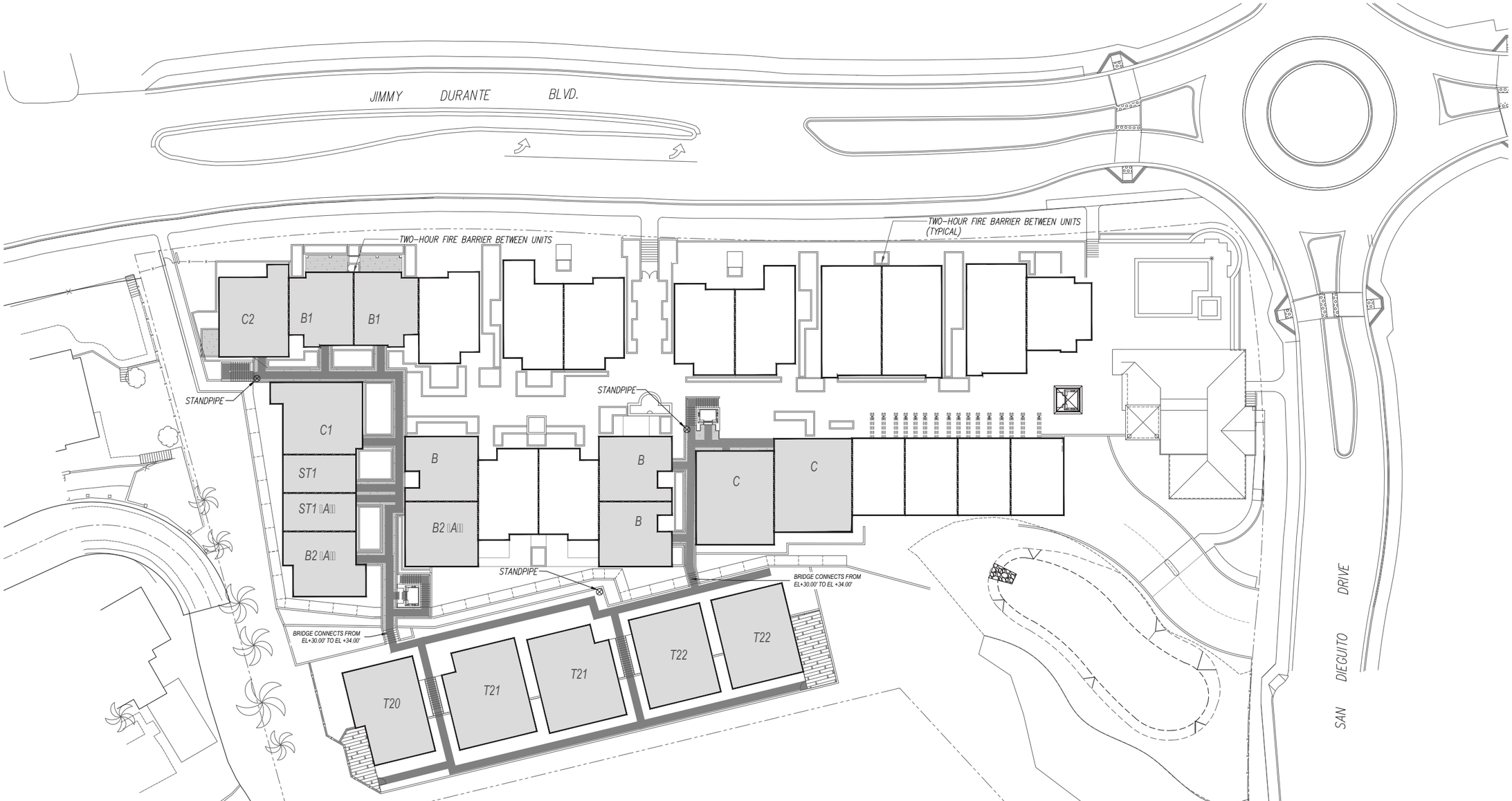
DRAWN BY:	PP
CHECKED BY:	GP
ISSUED FOR:	SUBMITTAL
ISSUE DATE:	06.07.17
PROJECT NUMBER:	1GPA14092
PERMIT #:	

SHEET TITLE:
FIRE PROTECTION PLAN - 48 UNITS PODIUM LEVEL

FP-01



LEGEND

- FIRE DEPARTMENT ACCESS ROUTE
- UNITS WITH ACCESS TO SECOND LEVEL WALKWAY
- UNITS WITH ACCESS TO PODIUM LEVEL ONLY

0 10' 20' 40'

SCALE: 1" = 20'-0"

GENERAL NOTES

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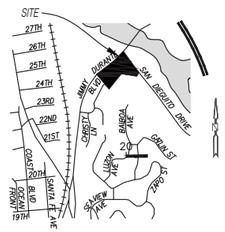

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JH PROJECT NO.: 2014092-000
(1GPA14092.002.000)

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PROJECT NAME:
WATERMARK DEL MAR
Jimmy Durante Boulevatd and San Dieguito DRive
Del Mar, CA 92014

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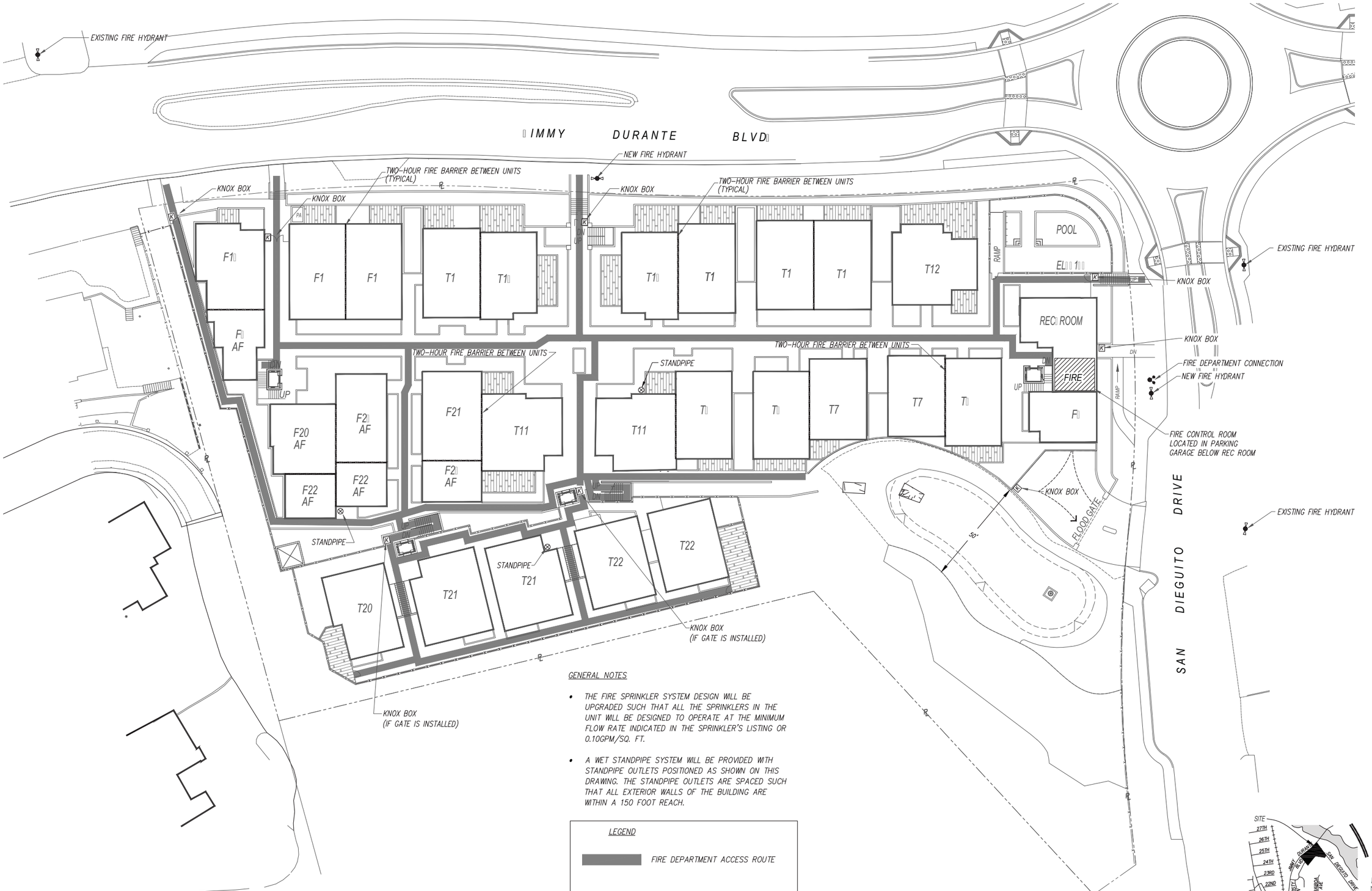
DESIGNED BY:	MTV
DRAWN BY:	PP
CHECKED BY:	GP
ISSUED FOR:	SUBMITTAL
ISSUE DATE:	06.07.17
PROJECT NUMBER:	1GPA14092
PERMIT #:	

SHEET TITLE:
FIRE PROTECTION PLAN - 48 UNITS LEVEL 2

FP-02



GENERAL NOTES

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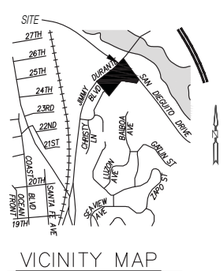
LEGEND

FIRE DEPARTMENT ACCESS ROUTE

0 10' 20' 40'

SCALE: 1" = 20'-0"



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PROJECT NAME:
WATERMARK DEL MAR

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Del Mar, CA 92014

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CHECKED BY:	GP
ISSUED FOR:	SUBMITTAL
ISSUE DATE:	08.02.17
PROJECT NUMBER:	1GPA14092
PERMIT #:	

SHEET TITLE:
FIRE PROTECTION PLAN - 38 UNITS

FP-01

APPENDIX M1 AND M2

Community Plan Consistency Table and Local Coastal Program Land Use Plan Consistency Table

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Overall Goal			
Goal 1	Preserve and enhance the special character of Del Mar, the elements of which are a village-like community of substantially single-family residential character, a picturesque and rugged site, and a beautiful beach.	The Options establish development and design standards to enhance the special character of Del Mar, including development and design regulations for a new multi-family use that preserves sensitive areas on the proposed project site and provides for homes that blend with and enhance the community's overall character with an architectural statement established to create timeless coastal-inspired homes.	The proposed Options are consistent with this goal.
Environmental Management			
Goal 1	Establish without delay a comprehensive program to preserve and acquire permanent open space sufficient to meet the long-range needs of the community, preserve and enhance natural resources, and protect areas and people susceptible to seismic and flooding hazards.	The proposed project site includes a wetland area and a scenic sandstone bluff. Both Options include regulations regarding the siting and orientation of the uses and structures to retain the wetlands with the 50-foot buffer setback authorized for the Riverview Office project on this site. Both Options have been designed to protect the previously undisturbed sandstone bluff formation near San Dieguito Drive, in a way that retains its visibility. Therefore, the design of both Options preserve and protect these sensitive resources. There are also development and design requirements that provide for a partially underground parking structure that allows for structures to be safely maintained above the floodplain areas where they occur on the proposed project site.	The proposed Options are consistent with this goal.
Objective A.	Secure sufficient land as permanent open space to preserve intact the locally and regionally significant natural environmental characteristics of Del Mar: bluffs, beach, canyons, outstanding geological formations, and the San Dieguito Lagoon.	Both Options would preserve natural and undisturbed bluffs within the site, and soften the bluff interface areas with appropriate native landscaping. Both Options would also preserve and protect a wetland area within a 50-foot buffer zone. In addition, both Options would apply grading and erosion and sedimentation control regulations to protect the wetland area and the San Dieguito Lagoon.	The proposed Options are consistent with this objective.
Objective B.	Secure open space necessary to identify Del Mar as a distinct and separate community, and to protect scenic resources.	The southeastern portion of the property that includes previously undisturbed areas of the site would be retained as open space, preserved in a natural condition. The slope interface with the northern edge of the Del Mar coastal bluffs would have landscaped	The proposed Options are consistent with this goal.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		slopes that use appropriately scaled native plant material and decorative treatment that unifies the site with surrounding natural slopes while softening wall facades. The maximum building height would be 26 feet, and building facades and rooflines would be situated to maintain important vistas.	
Objective C.	Secure sufficient open space to meet recognized standards for outdoor recreation and education, including land for trails and small neighborhood parks.	The proposed project site is located in the immediate vicinity of trails along the San Dieguito River shoreline. There are a number of trails and recreational amenities that exist and/or are being planned in the project area, and construction of either Option would not disrupt or prevent public access to any of the recreational facilities within the City of Del Mar (City) on a short-term or long-term horizon. The location of the Options would not interfere with access routes to recreational facilities.	The proposed Options are consistent with this objective.
Policy 1.	Consider the Comprehensive Planning Organization's recreational standard of 15 acres per thousand inhabitants (including in the total the acreage of beach above mean sea level) in defining the needs of Del Mar.	The direct population growth induced by either Option (99 people for Option A or 78 people for Option B) would only minimally increase the use of regional parks and other recreational facilities, and available parkland plus planned parkland is anticipated to accommodate either Options' population increase without resulting in deterioration of facilities.	The proposed Options are consistent with this policy.
Policy 2.	Protect open space acres to satisfy recreational needs or to preserve particularly unique natural features in specific neighborhoods.	Construction of either Options would not disrupt or prevent public access to any of the recreational facilities within the City of Del Mar on a short-term or long-term horizon. Further, both Option A and Option B would include circulation elements designed to promote public access to nearby recreational facilities. In addition, both Options would preserve natural and previously undisturbed bluffs within the project site, and protect and preserve an on-site wetland area in an open space buffer zone. Thus, neither Option would damage the open space areas used for recreational needs, and both Options would preserve the unique natural features on-site and adjacent to the project site.	The proposed Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 3.	Develop a continuous pedestrian loop trail which extends around the perimeter of the City while connecting and passing through areas of natural and scenic value without unnecessarily imposing on residential privacy.	Construction of either Option would not disrupt or prevent public access to the Scenic Loop Trail envisioned in the Community Plan for the City of Del Mar. Both Option A and Option B would include circulation elements designed to promote public access to the River Path Del Mar, the Boardwalk, and the Lagoon Trail, which are segments of the Scenic Loop Trail that provide pedestrian access along the San Dieguito River and Lagoon. In addition, to enhance public access, the project proponent has made a contribution through a development agreement toward the River Path Del Mar.	The proposed Options are consistent with this policy.
Objective D.	Insure that all future development be such as to preserve an atmosphere of openness and access to public open spaces, including the bluffs and beach.	Both Option A and Option B propose the development of a residential neighborhood that would harmonize with surrounding residences, preserve natural undisturbed bluffs and on-site wetlands, and provide occupants with pedestrian linkage and walkability to trails, parks, and beaches.	The proposed Options are consistent with this objective.
Policy 1.	Undertake a comprehensive survey and legal analysis of areas of potential public prescriptive rights throughout the City. Where such rights are believed to exist actively pursue the establishment and recognition of such rights through judicial proceeding as appropriate.	The location of the proposed project site is not adjacent to the shoreline. Development in accordance with the Watermark Del Mar Specific Plan (WDMSP) document for either of the Options would not interfere with any existing or potential public access to the ocean. Adequate access exists nearby. There are public sidewalks and trail opportunities in the immediate project area. To enhance public access, the project proponent has made a contribution through a development agreement toward River Path Del Mar, which is a segment of the San Dieguito segment of the Scenic Loop Trail.	The proposed Options are consistent with this policy.
Objective E.	Protect specific open space areas as shown on the Del Mar Environmental Management Plan.	The Del Mar Environmental Management Plan identifies the San Dieguito Lagoon and floodway as one of five major open space areas. The proposed project site is adjacent to this area and does not propose to disturb this natural resource or its restored wetlands. The southeastern portion of the site includes previously undisturbed areas that would be retained as open space and preserved in a natural condition to protect habitat and existing drainage courses. In addition, a buffer to the wetland would be	The proposed Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		provided on site to create additional separation between the sensitive site areas and future development.	
Policy 1.	Preserve, as open space, areas such as the 100-year floodway and the beach bluffs west of the railroad tracks that are too hazardous to justify permanent construction.	The eastern portion of the proposed project site is located within a 100-year flood hazard area and floodplain, and is within the City's Floodplain Overlay Zone. Both Option A and Option B would include grading activities to raise the elevation of the eastern portion of the site to 1 foot above the base flood elevation of 18 feet above mean sea level. Both Options would also be required to obtain a Floodplain Development Permit from the City, which would allow the property owner to obtain an Elevation Certificate from the Federal Emergency Management Agency as a condition of approval. The Elevation Certificate would verify that the project site is elevated to above the 100-year base flood elevation. Therefore, either Option would no longer be too hazardous for construction. The proposed project site lies approximately 0.13 mile east of the railroad tracks and, therefore, would not apply to this policy.	Both proposed Options include a Community Plan Amendment in order to be consistent with this policy.
Policy 2.	Preserve, as City-owned open space, areas desirable as City parks and preserves.	The proposed project site is currently designated for commercial uses. The City's adopted and certified Housing Element (2013–2021) establishes goals and programs which identify the site for a new residential land use designation at a density of 20 to 25 units per acre. The project site has not been identified for parks and/or preserves, and, therefore, does not need to be preserved.	This policy is not applicable to either Option
Policy 3.	Preserve, as open space, pending possible acquisition by other jurisdictions, areas of regional significance.	The proposed project site is currently designated for commercial uses. The City's adopted and certified Housing Element (2013–2021) establishes goals and programs which identify the site for a new residential land use designation, at a density of 20 to 25 units per acre. The project site has not been identified as an area of regional significance, and, therefore, does not need to be preserved.	This policy is not applicable to either Option.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 4.	Preserve and where necessary acquire easements for the protection of access to the beach and other public open space.	The location of the proposed project site is not adjacent to the shoreline. Development in accordance with the WDMSP document for either Option would not interfere with any existing or potential public access to the beach or the ocean. Adequate access exists nearby. There are public sidewalks and trail opportunities in the immediate project area. To enhance public access, the project proponent made a contribution through a development agreement toward the River Path Del Mar, which is a segment of the San Dieguito segment of the Scenic Loop Trail.	The Options are consistent with this policy.
Policy 6.	Control building, signing and paving on publicly owned open space so such use will not be objectionable to Del Mar residents.	The proposed project site is currently designated for commercial use and is not designated as open space. A wetland area of the project site would be preserved in an open space easement, but public access would not be allowed to this area to preserve the habitat.	The policy is not applicable to either Option
Policy 7.	Open space areas should be managed with particular attention given to situations requiring erosion control and pollution prevention measures.	The southeastern portion of the proposed project site includes previously undisturbed areas. These areas would be retained as open space, preserved in a natural condition to protect habitat and existing drainage courses. Both Options would implement erosion and sediment control measures required by the City, and other pertinent regulations and conditions. The landscape design standards specify the use of low-volume and drip irrigation, with drought-tolerant plant materials to limit the use of irrigation water; this would minimize potential erosion impacts from irrigation systems. Runoff from the property would be controlled by drainage improvements, including a bio-retention basin so that there is no uncontrolled runoff leaving the site that could impact resources in the open space areas.	The Options are consistent with this policy.
Objective F.	Aggressively develop both innovative and conventional means for implementing the open space program.	The southeastern portion of the proposed project site includes previously undisturbed areas. These areas would be retained as open space, preserved in a natural condition to protect habitat and existing drainage courses. Implementation of either Option A or Option B would not inhibit the City from implementing its Open Space Program.	The Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 1.	Insure that the implementation of the Open Space Program be one of the highest priority planning activities within the City government.	The southeastern portion of the proposed project site includes previously undisturbed areas. These areas would be retained as open space and preserved in a natural condition to protect habitat and existing drainage courses. Implementation of either Option A or Option B would not inhibit the City from implementing its Open Space Program.	The Options are consistent with this policy.
Policy 3.	Control the impact of private development on areas designated as having open space sensitivities.	The southeastern portion of the proposed project site includes previously undisturbed areas. These areas would be retained as open space and preserved in a natural condition to protect habitat and existing drainage courses. The residential homes would be located on previously graded and disturbed portions of the property to allow protection of the natural open space resources on the site.	The Options are consistent with this policy.
Policy 4.	Require City approval prior to development of areas designated as neighborhood parks, so that if they are not acquired by the City, the neighborhood will have a reasonable period in which to form an assessment district following development application.	Neither Option is proposing development of an area designated as neighborhood park.	This policy is not applicable to either Option.
Policy 5.	Establish special controls to protect the natural environment in areas of bluffs, slopes, and canyons having special conservation sensitivity. (See Precise Plan for Bluffs, Slopes and Canyons).	The proposed project site has an area with natural, undisturbed, scenic sandstone bluffs on the northeastern portion of the site. The undisturbed bluffs would be preserved as open space. The development footprint of the residential structures of both Option A and Option B would be limited to the areas of the site that have been previously graded or otherwise disturbed. Either Option would ensure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the natural environment, or require the construction of protective devices that would substantially alter natural landforms along the bluffs.	The proposed Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Objective G.	Cooperate with other jurisdictions to coordinate open space acquisition, preservation, and conservation.	Natural open space areas to be permanently preserved would be subject to an open space deed restriction, conservation easement, or open space easement to ensure protection of the designated areas. This should assist in the City's coordination of open space preservation with other jurisdictions.	The Options are consistent with this policy.
Policy 3.	Comprehensive watershed management plans should be developed and implemented for drainage basins in Del Mar. In order to do this, close coordination should take place among the County, the cities, and the various special districts whose decisions and activities affect the County's and Cities' watersheds and other natural resources.	Each of the following measures is required to be incorporated into both Options, and would be documented through conditions of development, with final plan review in accordance with City regulations: A grading plan that incorporates runoff and erosion control procedures and ensures no increase in the peak runoff rate from the fully developed site; runoff controls such as catchment basins, detention basins, and siltation traps; energy dissipating measures at storm drains; or other similar measures. These measures would protect the City's watersheds and other natural resources.	The Options are consistent with this policy.
Policy 4.	Implement urban runoff pollution control measures and programs to attempt to reduce and control the discharge of pollutants into Del Mar's storm drains and local creeks to the maximum extent practicable.	Prior to construction, a Storm Water Pollution Plan (SWPPP) would be prepared to identify treatment control best management practices (BMPs) to infiltrate, filter, and/or treat runoff from the project footprint of either Option to the numeric sizing treatment standards outlined in the City's Standard Urban Stormwater Mitigation Plan. The SWPPP would be prepared prior to project grading, as required by the National Pollutant Discharge Elimination System (NPDES) program regulations as part of Section 402 of the Clean Water Act. The SWPPP would implement BMPs to control and abate the discharge of pollutants in stormwater discharges during construction and operation. Implementation of SWPPP requirements would reduce potentially significant direct and cumulative hydrology and water quality impacts.	The Options are consistent with this policy.
Policy 5.	Reduce the quantity of runoff and discharge of pollutants to the maximum extent practicable by integrating surface runoff controls into new development and	Both Options would incorporate a private storm drain system into project design that would provide stormwater treatment with a proposed bioretention basin prior to connecting to the existing storm drain outlet on San Dieguito Drive. All stormwater runoff	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
	redevelopment land use decisions.	generated by site development would be required to have water quality treatment in accordance with all San Diego Regional Water Quality Control Board's and the City's stormwater management requirements.	
Policy 6.	Support and contribute to the acquisition of areas of open space that have water quality significance by City and County Parks, State Parks, and other agencies and non-profit organizations for permanent preservation.	Both Option A and Option B include circulation elements designed to promote public access to the River Path Del Mar, the Boardwalk, and the Lagoon Trail, which are areas of open space that provide pedestrian access along the San Dieguito River and Lagoon. To enhance public access to the open space areas, the project proponent made a contribution through a development agreement toward River Path Del Mar.	The Options are consistent with this policy.
Policy 8.	Hazard and resource areas with the following characteristics shall be considered questionable and in some areas possibly unsuited for urban development and should only be allowed to develop if development can be done in accordance with the City of Del Mar standards and NPDES requirements: flood prone areas; wetlands; riparian corridors and areas generally with slopes of 25% grade or greater.	Both Options are suitable for urban development and would be completed in accordance with City standards and NPDES requirements. Where habitable structures are built on grade within the flood zone, the established grade would be 18 feet above mean sea level, which is the Base Flood Elevation of the San Dieguito River. There are also development and design requirements that would provide for a partially underground parking structure to allow the structures to be safely maintained above the floodplain areas where they occur on the site. Development would also comply with all applicable provisions of Chapter 30.56 of the Del Mar Municipal Code (Floodplain Overlay Zone), and would require a Floodplain Development Permit. The wetland area would be avoided, protected in place, and buffered from future development by a 50-foot wetland buffer; this buffered area would provide a buffer setback for the previously undisturbed sand stone bluff areas of the site. In addition, the Conditional Use Permit review required for both Options would require the provisions of the Lagoon Overlay and the Bluff, Slope, and Canyon Overlay Zone.	The Options are consistent with this policy.
Policy 9.	Land uses which pose a major threat to water quality, including commercial and industrial uses, such as automobile dismantlers,	Both Options would include a secure off-street parking structure (underground parking). The parking structure for Option A would have 108 stalls for the 48 residential units, and the parking structure for Option B	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
	transportation and vehicle storage facilities, waste transfer disposal facilities, light industries, and other uses that have a significant potential for pollution, shall not be located within the vicinity of streams, reservoirs, or percolation facilities or where pollutants could easily come in contact with flood waters, high groundwater, flowing streams, or reservoirs. Such uses shall be required to reduce any threat of pollution to an insignificant level as a condition of approval.	would have 100 stalls for the 38 residential units. Either parking structure would serve to provide a podium level safely above the base flood elevation for residential units while minimizing impacts and disturbance to groundwater.	
Policy 10.	Participate matter pollution shall be minimized through control over new and redevelopment (including erosion and sediment controls on grading, quarrying, vegetation removal, construction and demolition), industrial processes, parking lots, and other activities which pose such a threat to water quality.	Development in areas adjacent to environmentally sensitive habitat areas has been sited and designed to prevent water quality impacts that would significantly degrade those areas. Options require the provision of a 50-foot buffer adjacent to the existing marsh habitat with control of stormwater runoff, water quality, and siltation effects. All stormwater runoff generated by the chosen Option would be required to have water quality treatment in accordance with all San Diego Regional Water Quality Control Board's and the City's Stormwater Management requirements.	The Options are consistent with this policy.
Objective H.	Conserve the natural character of land, water, vegetative and wildlife resources within the community.	Both Options would preserve natural and previously undisturbed bluffs and protect and preserve on-site wetlands through proposed landscaping plans.	The Option are consistent with this objective.
Policy 1.	Participate in regional and/or statewide efforts to evaluate and control beach and bluff erosion problems.	The southern and southeastern portions of the project site consist of a steep slope (bluff) and are heavily vegetated. At the base of the bluff, the southeastern portion of the site is relatively flat and is sparsely vegetated with non-native ice plant. Proposed building construction would occur in areas on site that are underlain by Delmar Formation and would not encroach on areas considered to be unstable or highly erodible. Under the City of Del Mar Grading Ordinance, prior to the issuance of a grading	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		permit, an erosion control plan approved by the City is required for all work to be performed between November 1 and April 15. Furthermore, the chosen Option would be constructed in accordance with standard engineering and CBC requirements to prevent damage related to erosion and/or expansive materials. All vegetation and irrigation design for on-site graded slopes would be based on recommendations from a qualified landscape architect.	
Policy 2.	Prohibit the encroachment of private development on the public beach.	The proposed project site is approximately 0.3 mile east of beach access, and would not result in encroachment of the public beach.	The Options are consistent with this policy.
Policy 3.	Prohibit the use of private vehicles on the public beach.	The Options do not propose the use of private vehicles on the public beach.	The Options are consistent with this policy.
Policy 4.	Insure that future development results in a minimum disturbance of existing or natural terrain and vegetation and does not create soil erosion, silting of lower slopes, slide damage, flooding problems and/or serve cutting or scarring.	The Options would develop residential units (48 for Option A and 38 for Option B) on a disturbed site, specifically on previously disturbed slopes, to create a hillside terraced neighborhood that blends into the adjacent neighborhood while preserving natural and previously undisturbed bluffs. Natural landscaping would be implemented into the project site, and the chosen Option would implement erosion and sediment control measures required by the City Ordinance, and other pertinent regulations and conditions.	The Options are consistent with this policy.
Policy 5.	Minimize particulate matter pollution that leads to sedimentation of erosion control plans and permits for new and redevelopment projects which pose such a threat to water quality.	All stormwater runoff generated by the project site in post-developed conditions would receive water quality treatment in accordance with all San Diego Regional Water Quality Control Board's and the City's storm water management requirements. Additionally, either Option would be required to implement erosion and sediment control BMPs required by the City Ordinance, and other pertinent regulations and conditions that would reduce surface runoff from resulting in substantial erosion on or off site.	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 6.	Minimize land uses which pose a major threat to water quality-including commercial and industrial uses such as automobile dismantlers, transportation and vehicle storage facilities, waste transfer disposal facilities, light industries, and other uses that have a significant potential for pollution of streams, reservoirs, or percolation facilities or where pollutants could easily come in contact with flood waters, high groundwater, flowing streams, or reservoirs.	Although both Options propose an underground parking garage for residents, both Options would conserve natural areas and provide a 50-foot-wide buffer zone between natural water bodies and the project footprint. The buffer zone would surround the entire on-site coastal brackish marsh area, including southern coastal scrub habitat, and would be protected by a land conservation easement and permanent fencing placed along and outside of the perimeter of the buffer. Use of project design features such as landscaping, drainage swales, and a biofiltration strip, as well compliance with NPDES guidelines and implementation of BMPs identified in the Urban Runoff Threat Assessment, would avoid potential water quality impacts associated with the Options. Furthermore, both Options are residential and would not include development of land uses such as automobile dismantlers, light industrial, or other uses that have the potential for pollution of streams, reservoirs, or percolation facilities.	The Options are consistent with this policy.
Policy 7.	Require commercial and industrial facilities and residential developments which pose a high threat to water quality to reduce any threat of pollution to an insignificant level, as a condition of approval.	The proposed residential Options would conserve natural areas and provide a 50-foot-wide buffer zone between natural water bodies and the project footprint. The buffer zone would surround the entire on-site coastal brackish marsh area, including southern coastal scrub habitat, and would be protected by a land conservation easement and permanent fencing placed along and outside of the perimeter of the buffer. Use of project design features such as landscaping, drainage swales, and a biofiltration strip, as well as compliance with NPDES guidelines and implementation of BMPs identified in the Urban Runoff Threat Assessment, would avoid potential water quality impacts associated with either Option. Additionally, both Options would be subject to the City's implementing ordinances and conditions of approval governing grading practices and drainage and erosion control, including the maintenance of drainage and erosion control measures.	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 8.	Reduce the quantity and duration of runoff and discharge or pollutants to the maximum extent practicable by integrating low impact design features, surface runoff source and treatment controls into new development and redevelopment land use decisions through conditions of approval.	All stormwater runoff generated by the project site in post-developed conditions would receive water quality treatment in accordance with all San Diego Regional Water Quality Control Board's and the City's stormwater management requirements. Both Options would implement erosion and sediment control BMPs required by the City Ordinance, and other pertinent regulations and conditions to reduce surface runoff from resulting in substantial erosion on or off site. Additionally, both Options would conserve natural areas and provide a 50-foot-wide buffer zone between natural water bodies and the project footprint.	The Options are consistent with this policy.
Policy 9.	Implement the City's jurisdictional urban runoff program to maximize pollution prevention and control measures that reduce and control the discharge of pollutants into Del Mar's storm drains, local creeks, beaches, and lagoons to the maximum extent practicable.	A combination of treatment control BMPs would be incorporated to infiltrate, filter, and/or treat runoff from the project footprint of either Option to the numeric sizing treatment standards outlined in the City's Standard Urban Stormwater Mitigation Plan. A SWPPP would be prepared prior to project grading, as required by NPDES program regulations as part of Section 402 of the Clean Water Act. The SWPPP would implement BMPs to control and abate the discharge of pollutants in stormwater discharges during construction and operation. Implementation of SWPPP requirements would reduce potentially significant direct and cumulative hydrology and water quality impacts. An Urban Runoff Threat Assessment form would be submitted with the SWPPP to assess whether the stormwater BMPs for the chosen Option are appropriate. BMPs would be incorporated to provide a long-term solution to potential water quality degradation, from post-construction through operation of the chosen Option. The Urban Runoff Threat Assessment would ensure the effectiveness of the BMPs. The design of both options would include pollution-reducing trash storage, efficient irrigation systems, use of integrated pest management principles, and a bacteria monitoring and treatment program.	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 11.	Minimize or prevent development in hazard and resource areas with the following characteristics: flood potential; wetlands; riparian corridors and areas with a greater than 25% slope.	The proposed project site is within the Bluff, Slope, and Canyon Overlay Zone, and the Lagoon Overlay Zone. Approval of either Option would require a Conditional Use Permit, Floodplain Development Permit, Coastal Development Permit, Design Review Board Permit, and Land Conservation Permit, as well as require conformity with all City's Local Coastal Program regulations regarding floodplains and the Bluff, Slope, and Canyon Overlay Zone.	The Options are consistent with this policy.
Policy 12.	Encourage reductions and modifications to air pollution generating activities and sources to reduce the deposition of air-borne pollutants and improve urban and stormwater runoff water quality.	Both Options would be consistent with any requirements imposed by an air pollution control district or the State Air Resources Board. Both Options are designed to minimize energy consumption and vehicle miles traveled. Project construction would comply with CalGreen standards with energy efficient components; would locate new homes in an infill location, in proximity to the Del Mar Village area and recreational amenities; and would provide pedestrian and cyclist amenities to encourage non-vehicular transportation.	The Options are consistent with this policy.
Objective I.	Retain and enhance natural benefits within the San Dieguito River floodway and lagoon habitat.	The project site is situated near the southern edge of the San Dieguito River and Lagoon. Development within the project site would comply with all applicable provisions of Chapter 30.53 (Lagoon Overlay Zone) and Chapter 30.56 (Floodplain Overlay Zone) of the Del Mar Municipal Code. Both Options would replace the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer that would be designed to protect the wetland habitat on site and buffer it from the proposed development. The quality of the coastal wetlands and its opportunity for biological productivity would be enhanced through the implementation of either Option. Runoff from both Options would be controlled and directed into a bioswale within the wetland buffer area adjacent to the marsh. The buffer area would be revegetated with compatible, non-invasive native species.	The Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 1.	Establish a comprehensive master plan and management program for the lagoon including biological productivity potential, health controls, future water supply, the preservation and enhancement of wildlife, and opportunities for educational and recreational enjoyment.	The project site is situated near the southern edge of the San Dieguito River and Lagoon. Development within the project site would comply with all applicable provisions of Chapter 30.53 (Lagoon Overlay Zone) of the Del Mar Municipal Code, and would require a permit pursuant to the Lagoon Overlay Zone. Runoff from the project site would be controlled and directed into a bioswale within the wetland buffer area adjacent to the marsh. The buffer area would be revegetated with compatible, non-invasive native species. Implementation of either Option would not interfere with the City's management program for the San Dieguito Lagoon.	The Options are consistent with this policy.
Policy 2.	Land use policies established within the San Dieguito River Floodway and Lagoon Habitat should be consistent with the long-range goal of returning the entire area to the natural lagoon condition.	The proposed project site is located south of the San Dieguito River beyond properties on the opposite side of San Dieguito Drive. Neither Option is located in the Floodway Zone, but is located just outside of the Floodway Zone with portions of the project site located within the Floodplain Overlay Zone. Both Options would include a 50-foot wetland buffer that would be designed to protect the wetland habitat and buffer it from the proposed development. This portion of the proposed project site will be left in its natural lagoon condition.	The Options are consistent with this policy.
Policy 3.	Identify public ownership and public use rights in the lagoon and tidelands and restrict therein uses in consistent with such public rights.	The project site is located across San Dieguito Drive from the San Dieguito River and near the southern end of San Dieguito Lagoon. Construction of either Option would not disrupt or prevent public access or use rights to any of the areas surrounding the lagoon. Both Options would include circulation elements designed to promote public access to the River Path Del Mar, the Boardwalk, and the Lagoon Trail, which are public use segments of the Scenic Loop Trail that provide pedestrian access along the San Dieguito River and Lagoon. In addition, to enhance public access, the project proponent has made a contribution through a development agreement toward the River Path Del Mar.	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 4.	Support and continue education with regard to biological resource values of the lagoon ecosystem.	Both Options would include circulation elements designed to promote public access to the River Path Del Mar, the Boardwalk, and the Lagoon Trail, which are public use segments of the Scenic Loop Trail that provide pedestrian access along the San Dieguito River and Lagoon. In addition, to enhance public access, the project proponent has made a contribution through a development agreement toward the River Path Del Mar. River Path Del Mar includes signage and educational elements to educate the public about the biological resource values of the lagoon ecosystem.	The Options are consistent with this policy.
Policy 5.	Require the placement of beach quality sand on Del Mar beaches whenever beach quality sand results from the dredging of the San Dieguito lagoon. If placement within Del Mar is not needed or desirable, consideration shall be given to placement elsewhere within the Oceanside littoral cell or where exceptional biological benefits can be demonstrated.	The Options are not located on a beach.	This policy is not applicable to either Option
Policy 6.	Require the proper disposal of less than beach quality sand in a manner that protects against the pollution of beaches, lagoons, or other waterways and minimizes as much as possible any potentially adverse environmental impacts that could result from the disposal.	The Options do not require the disposal of sand.	This policy is not applicable to either Option
Policy 7.	Prohibit the placement of sand in areas that may result in negative long term impacts including, but not limited to , the filling of wetlands, the closing of the rivermouth, or the disturbance of sensitive habitat near shore or in the lagoon unless exceptional biological benefits can be demonstrated.	Neither Option involves the placement of sand.	This policy is not applicable to either Option

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 8.	Prohibit and development, dredging, protective devices, and/or enhancement that would exacerbate flooding or erosion.	The Options are located within the Floodplain Overlay Zone, and both Options include provisions for development consistent with Floodplain Overlay Zone regulations. Runoff from the developed areas of the site would be into new, on-site storm drain pipes and drainage systems, adequately sized to accommodate the flows and not exacerbate flooding or erosion. Site storm runoff would be directed into a bio-retention basin prior to discharge to an existing public storm drain in the area. A hydrology study and preliminary drainage design plan would be prepared by a licensed civil engineer, and all reports and plans would be subject to the City Engineer's review and approval.	The Options are consistent with this policy.
Policy 9.	Prohibit placement of fill within the effective flow area as delineated using the FESWNS (Federal Highway Administration, 1992) Model.	The Options do not propose to place fill within any effective flow area.	This policy is not applicable to either Option
Policy 10.	Maintain existing public uses of the beach.	Both Options would maintain public use of the beach by creating pedestrian linkages and walkable trails to beaches.	The Options are consistent with this policy.
Policy 11.	Preserve the natural appearance and open space character of the river mouth region.	Wetland areas and coastal bluffs on the project site would be preserved and protected in a 50-foot wetland buffer. Both Options would integrate the natural beauty of the surrounding environment into the project's design vernacular to create a landscape that blends with the natural elements and hillside. Landscape materials and plant palettes were selected to accentuate the coastal-craftsman style of planned architecture while maintaining the natural character of the adjacent wetlands and native landscape. The overall landscape palette would feature native plant species to unify the site with the surrounding landscape. Both Options would also adhere to development and design regulations that preserve sensitive areas on the property and provide for structures that blend with community character. Natural materials and a natural tone color palette would be used.	is the Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 12.	Protect and enhance the biological resources of the river mouth region.	Wetland areas on the project site would be preserved and protected in a 50-foot wetland buffer that would be designed to protect the wetland habitat and buffer it from the proposed development. The quality of the coastal wetlands and its opportunity for biological productivity would be enhanced through the implementation of either Option option. Runoff from the project site would be controlled and directed into a bioswale within the wetland buffer area adjacent to the marsh. The buffer area would be revegetated with compatible, non-invasive native species.	The Options are consistent with this policy.
Policy 13.	Maintain existing east-west public access to the beach from Camino del Mar. Public access shall be enhanced provided that there are no significant negative impacts upon the natural appearance and/or biological resources of the river mouth region.	The proposed project site is located approximately 0.32 mile east of Camino del Mar and would not inhibit east/west public access to the beach from Camino del Mar.	This policy is not applicable to either Option
Policy 14.	Maintain existing lateral, north-south access to the beach without negatively impacting the beauty and biological resources of the river mouth region. Public access shall be enhanced provided that there are not significant negative impacts upon the natural appearance and/or biological resources of the river mouth region.	The Options would not inhibit existing lateral, north/south access to the beach. Both Options would include circulation elements to enhance pedestrian linkages and walkability to trails that surround the San Dieguito River and beaches.	This policy is not applicable to either Option
Policy 15.	Mitigate for impacts that, while beneficial to the biological resources of the San Dieguito Lagoon, adversely impact public access. If lateral access across the river mouth is impacted by Lagoon restoration, access shall be enhanced between the beach and Camino del Mar both north and south of the San Dieguito River, including a pedestrian access connection	The Options would not adversely impact public access. Both Options would provide circulation elements that create pedestrian linkages and enhance walkability to trails that surround the San Dieguito River and Lagoon. The Options would not disrupt or prevent public access to any of the recreational facilities along the river or lagoon on a short-term or long-term horizon because the location of the Options would not interfere with access routes to the recreational facilities.	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
	over San Dieguito River.		
Policy 16.	Preserve and, where necessary, acquire easements for the protection or enhancement of access to the beach and other public open space in the San Dieguito River mouth and Lagoon	The Options would not adversely impact public access. Both Options would provide circulation elements to create pedestrian linkages and enhance walkability to trails that surround the San Dieguito River and Lagoon. The Options would not disrupt or prevent public access to any of the recreational facilities along the river or lagoon on a short-term or long-term horizon because the location of the Options would not interfere with access routes to recreational facilities. In addition, to enhance public access, the project proponent made a contribution through a development agreement toward the River Path Del Mar, which provides and preserves public access to the San Dieguito River.	The Options are consistent with this policy.
Policy 17.	Prohibit adverse environmental impacts from all types of uses and/or pollution including, but not limited to, public access, visual blight, noise, light, air, and water pollution.	All potential public access, visual blight, noise, light, air, and water quality impacts associated with the Options would be mitigated to a level that is less than significant.	The Options are consistent with this policy.
Objective J.	Restore environmentally degraded areas to the high quality standards implied in the objectives above.	Both Options would replace the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer that would be designed to protect the wetland habitat on site and buffer it from the proposed development. The quality of the coastal wetlands and its opportunity for biological productivity would be enhanced through the implementation of either Option. Runoff from the chosen Option would be controlled and directed into a bioswale within the wetland buffer area adjacent to the marsh. The buffer area would be revegetated with compatible, non-invasive native species.	The Options are consistent with this objective.
Objective K.	Require development in areas of archeological significance to be reviewed by the City of Del Mar to insure that such uses do not result in a permanent destruction of any archeological sites or cultural information.	With implementation of the proposed mitigation measures MM-CUL-1 through MM-CUL-3, all potential impacts to archaeological resources, paleontological resources, and human remains would be reduced to less than significant. Therefore, the Options would not result in any significant and unavoidable impacts to	The Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		archaeological and paleontological resources.	
Objective L.	Reduce energy consumption and encourage material recycling.	Construction and the amenities of the chosen Options are designed to minimize energy consumption. Project construction of either Option would comply with CalGreen standards and have energy-efficient components.	The Options are consistent with this objective.
Policy 1.	Encourage the maximum feasible insulation in buildings.	Both Options have been designed to minimize energy consumption. Project construction of either Option would have the maximum feasible insulation in buildings.	The Options are consistent with this policy.
Policy 2.	Encourage energy efficient heating, lighting and ventilation systems and discourage completely air-conditioned buildings in favor of buildings designed to maximize natural temperature regulating conditions (e.g., buildings with windows that open for ventilation).	Both Options have been designed to minimize energy consumption. Both Options would comply with CalGreen standards and have energy efficient components, which include energy efficient heating, lighting, and ventilation systems.	The Options are consistent with the policy.
Policy 3.	Encourage an increased degree of energy self-sufficiency through such means as solar heating, particularly for swimming pools.	The Options may use solar panels in the roof design, and would include installation of solar pool heating.	The Options are consistent with this policy.
Policy 4.	Establish and publicize a local recycling program for solid waste material.	Both Options would include on-site bin/storage areas for recyclable items that are too large for curbside recycling receptacles. These on-site bins would provide further opportunities to recycle, thereby reducing the amount of waste created by the chosen Option.	The Options are consistent with this policy.
Objective M.	Promote the prudent use of water resources by encouraging natural landscaping that requires little watering.	The project landscape design standards for both Options specify the use of low-volume and drip irrigation and drought-tolerant plant materials to limit the use of irrigation water. This would minimize potential erosion impacts from irrigation systems and reduce water consumption.	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 1.	Encourage conservation measures and water recycling programs that eliminate or discourage wasteful uses and urban water runoff.	Under the City of Del Mar Municipal Code, Title 21 – Water Supply, regulations relating to water conservation are addressed, and both Options would be in conformance.	The Options are consistent with this policy.
Policy 2.	Maximize a development's previous landscaping footprint by reducing lawn areas, promoting turf that requires low irrigation, and taking advantage or permeable material areas (i.e. mulch, gravel, porous pavers).	The landscape design guidelines establish regulations and general requirements for project landscaping. Both Options would use predominantly drought-tolerant plants that require minimal irrigation and maintenance.	The Options are consistent with this policy.
Policy 3.	Strategically plant and increase use of deciduous shade trees, evergreen trees, and drought tolerant native vegetation, as appropriate.	The landscape design guidelines establish regulations and general requirements for project landscaping. Both Options would use predominantly drought-tolerant plants that require minimal irrigation and maintenance. Plant species for distinct areas of the site are drought tolerant native vegetation.	The Options are consistent with this policy.
Policy 4.	Implement water conservation measures in buildings and landscaping site design.	As part of the landscape design guidelines, it is specified that the site landscape shall use predominantly drought-tolerant plants, which require minimal irrigation and maintenance.	The Options are consistent with this objective.
Objective N.	Support gasoline conservation activities such as car-pooling and public transportation.	Both Options have been designed to minimize gasoline consumption and vehicle miles traveled by locating new homes in an infill location in proximity to the Del Mar Village area and recreational amenities. In addition, it would provide pedestrian and cyclist amenities to encourage non-vehicular transportation. Bicycle amenities are required for future site development, including storage areas for residents' bicycles and connection points to the existing bikeways, per standards of the WDMSP document.	The Options are consistent with this objective.
Objective O.	Minimize the loss of life and destruction of property from seismic and geological occurrences.	Both Options would ensure stability and structural integrity, and would neither create nor contribute to geologic instability or destruction of the site or surrounding areas. The structures of either Option would be located on previously graded and disturbed portions of the property to allow protection of the natural undisturbed sandstone bluffs. Both Options would follow specific	The p Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		geotechnical recommendations to address existing conditions at the site. Such recommendations would be provided in conjunction with detailed grading plans for the design of the chosen Option in accordance with City engineering standards. General techniques to address future development of the site would likely include remedial grading, including complete removal of talus and placed fill soils, removal and re-compaction of other near-surface soils, ground improvement techniques (such as stone columns) and/or special foundation design (i.e., driven piles, auger-cast piles, or structural mat foundations), and dewatering during site construction or grading.	
Policy 1.	Develop a well-coordinated disaster plan, which includes preparation for earthquakes, Tsunamis and storm waves.	During construction, a traffic control plan would be prepared and made a standard condition of approval. The plan would include provisions for construction times and control plans for allowance of bicyclists and pedestrians along Jimmy Durante Boulevard and San Dieguito Drive throughout construction. The plan would also include provisions for the allowance of emergency vehicle passage at all times. Upon implementation, project traffic would operate at acceptable levels of service for the region. Operation of either Option would not impede any roadways that would serve as evacuation routes during an emergency.	The Options are consistent with this policy.
Policy 2.	Supplement and update geologic information available to the City.	Both Options would follow the specific geotechnical recommendations provided by a geotechnical engineer to address existing conditions at the site. Such recommendations would be provided to the City in conjunction with detailed grading plans for the project designs of the two Options in accordance with the City's engineering standards. This information would supplement and update the geologic information available to the City.	The Options are consistent with this policy.
Objective P.	Ensure public safety within the San Dieguito River Flood Plain.	The project site is located with the Floodplain Overlay Zone, and both Options include provisions for development consistent with Floodplain Overlay Zone regulations. This includes protection for all	The Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		habitable spaces, which must be at or above the base flood elevation. In developing the regulations, consideration was given to planning for future flood hazard avoidance. A safety factor was used of 2 feet above the base flood elevation as the criteria for structures to be located on podium construction. Structures to be built on-grade at the corner adjacent to the intersection would be located at the base flood elevation to ensure flood hazard avoidance.	
Policy 1.	Prohibit structures in the floodway.	The Options are not located in the Floodway Zone, but are located just outside of the Floodway Zone; portions of the project site are located within the Floodplain Overlay Zone as described above.	This policy is not applicable to t either Option
Policy 2.	Locate proposed development so as to eliminate the need for protective construction such as seawalls, retaining walls, or flood control devices.	Both Options would include perimeter retaining walls within the property facing Jimmy Durante Boulevard and San Dieguito Drive that are a component of the planted yard areas between the street and building or podium setback areas. Both Options also have development and design requirements for the partially underground parking structure to allow for structures to be safely maintained above the floodplain areas where they occur on the site. In developing the Options, consideration was given to planning for future flood hazard avoidance. To ensure flood hazard avoidance, a safety factor was used of 2 feet above the base flood elevation as the criteria for structures to be located on podium construction. Structures built on-grade at the corner adjacent to the intersection would be located at the base flood elevation.	Both project Options include a Community Plan Amendment to be consistent with this policy.
Policy 3.	Discourage landfill, land removal, and structures within the flood plain that would limit water-holding capacity or impede water movement so as to adversely affect other property.	Portions of the project site are located within the Floodplain Overlay Zone. Both Options would include provisions for development consistent with Floodplain Overlay Zone regulations. This includes protection for all habitable spaces, which must be at or above the base flood elevation. In developing the regulations for the Options, consideration was given to planning for future flood hazard avoidance. A safety factor was used of 2 feet above base flood elevation as the criteria for structures to be located on	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		podium construction. Structures to be built on-grade at the corner adjacent to the intersection would be located at the base flood elevation to ensure flood hazard avoidance. Neither Option would adversely affect other property and this would be verified through the Conditional Letter of Map Revision and Letter of Map Revision issued by FEMA.	
Policy 4.	Development in the flood-fringe shall sustain periodic flooding without creating public burdens by aggravating the flood problem or impeding flood storage capacity.	Portions of the project site are located within the Floodplain Overlay Zone. Both Options would include provisions for development consistent with Floodplain Overlay Zone regulations. This includes protection for all habitable spaces, which must be at or above the base flood elevation. In developing the regulations for the Options, consideration was given to planning for future flood hazard avoidance. A safety factor was used of 2 feet above base flood elevation as the criteria for structures to be located on podium construction. Structures to be built on-grade at the corner adjacent to the intersection would be located at the base flood elevation to ensure flood hazard avoidance.	The Options are consistent with this policy.
Policy 5.	Water quality protection measures set forth throughout this Community (General) Plan are the result of United States Environmental Protection Agency legislation under the Clean Water Act. The intent of these measures is to protect the health and safety of humans, as well as to protect the beneficial uses of receiving waters.	The water quality protection measures for both Options are consistent with measures required by the Clean Water Act.	The Options are consistent with this policy.
Transportation Element			
Goal 2	Minimize the impact of the automobile on the character of Del Mar and emphasize a more pedestrian oriented environment, safer sidewalks, landscaped buffer zones, and alternate means of transportation.	Both Options would provide all parking within the underground parking structure, therefore automobiles would not be seen from the public right-of-way. Both Options would offer multiple pedestrian/cyclist access points along Jimmy Durante Boulevard and San Dieguito Drive to facilitate future residents' ability to connect	The Options are consistent with this goal.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		to existing sidewalks and scenic walkways along the San Dieguito River, in addition to accessing potential work locations and services without using an automobile. Both Options would require bicycle amenities, including storage areas for bicycles, and connection points to existing bikeways. These amenities would help foster alternate means of transportation.	
Objective A.	Encourage a pedestrian-oriented, non-motorized community by developing a system of bicycle rights-of-way and pedestrian paths, and discouraging high speed traffic along city streets.	Neither Option would change or affect the existing bikeways along the project frontage of Jimmy Durante Boulevard. Both Options would provide non-automobile circulation and amenities for pedestrians and cyclists within the development, including connectivity to existing, adjacent sidewalks and bicycle routes that link with trails and other coastal access.	The Options are consistent with this objective.
Policy 1.	Redesign Camino del Mar to improve its appearance as a scenic coastal route and accommodate low-speed vehicular traffic.	The project site is located 0.32 mile east of Camino del Mar. Neither Option would change or affect Camino del Mar.	This policy is not applicable to either Option
Policy 2.	Improve the safety of Camino del Mar pedestrian crossings, particularly in the north and south ends of the community.	The project site is located 0.32 mile east of Camino del Mar. Neither Option would change or affect Camino del Mar.	This policy is not applicable to either Option
Policy 3.	Provide a continuous north-south bicycle network through the City.	Neither Option would change or affect the existing bikeways along the project frontage of Jimmy Durante Boulevard. Both Options would provide non-automobile circulation and amenities for pedestrians and cyclists within the development, including connectivity to existing, adjacent sidewalks and bicycle routes that link to trails and other coastal access.	The Options are consistent with this policy.
Policy 4.	Develop a continuous pedestrian loop trail which extends around the perimeter of the City while connecting and passing through areas of natural and scenic value without unnecessarily imposing on residential privacy.	Construction of the proposed project would not disrupt or prevent public access to the Scenic Loop Trail envisioned in the City of Del Mar Community Plan. Both Options would include circulation elements designed to promote public access to the River Path Del Mar, the Boardwalk, and the Lagoon Trail, which are segments of the Scenic Loop Trail that provide pedestrian access along the San Dieguito River and Lagoon. In addition, to enhance public access to a	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		segment of the Scenic Loop Trail, the project proponent has made a contribution through a development agreement toward the River Path Del Mar.	
Policy 5.	Preserve and improve pedestrian access to and along beaches and sea cliffs by use of all public rights-of-way and prescriptive public easement.	The project site is located at the corner of the intersection of Jimmy Durante Boulevard and San Dieguito Drive, which is not adjacent to the shoreline. Development in accordance with the WDMSP document for either Option would not interfere with any existing or potential public access to the ocean. Adequate access exists nearby. There are public sidewalks and trail opportunities in the immediate project area.	The Options are consistent with this policy.
Policy 6.	Encourage all unimproved public rights-of-way to be used solely for pedestrian movement unless absolutely necessary for vehicular access.	Adjacent public rights-of-way, outside the project site boundaries, may be used for grading, landscape, and hardscape to provide for an integrated streetscape, screening of the parking structure, and pedestrian and/or bicycle connections, subject to compliance with applicable provisions of the Del Mar Municipal Code Chapter 22.38, Encroachment Permits. These are almost solely for pedestrian movement.	The Options are consistent with this policy.
Objective B.	Facilitate the movement of traffic in a safe and uncongested manner consistent with a pedestrian-oriented community.	Both Options would offer multiple pedestrian/cyclist access points along Jimmy Durante Boulevard and San Dieguito Drive that would facilitate connection to existing sidewalks and scenic walkways along the San Dieguito River, in addition to potential work locations and services without using an automobile. During construction, a traffic control plan would be prepared and made a standard condition of approval. The plan would include provisions for construction times and control plans for allowance of bicyclists and pedestrians along Jimmy Durante Boulevard and San Dieguito Drive throughout construction. The plan would also include provisions for the allowance of vehicle passage at all times. Upon implementation, project traffic would operate at acceptable levels of service for the region. Operation of either Option would not impede any roadways and would not contribute to congestion. Vehicular access to the proposed project site would be	The Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		provided from a single driveway on San Dieguito Drive. The location of the driveway would be in approximately the same location as the existing driveway currently in use for fairground, racetrack, and event parking. By providing appropriate vehicular access to and from the project site, the chosen Option would promote movement of traffic in a safe and uncongested manner, consistent with a pedestrian-oriented community.	
Policy 1.	Encourage the development of an improved intersection design at Via de la Valle, Stevens Street, Turd Road and Jimmy Durante Boulevard.	The project site is approximately 1 mile from the intersection of Via de la Valle and Jimmy Durante Boulevard, and this intersection would continue to operate at a level of service B with the addition of project traffic. Therefore, neither Option would impact this intersection.	The Options are consistent with this policy.
Objective C.	Encourage alternate solutions to the transportation needs of Del Mar such as local transit and delivery systems and regional rapid transit.	Both Options would offer a cyclist-friendly environment with multiple access points for residents. Additionally, both Options would establish alternative transportation modes (i.e., access points for bicycles/pedestrians) designed to ensure protection of sensitive resources and retention of the small-town, scenic qualities of Del Mar.	The Options are consistent with this objective.
Policy 1.	Consider the feasibility of a local transit system serving residential areas, the downtown commercial area, the beach, the fairgrounds and racetrack, and railroad station.	The project site is located directly south of the fairgrounds and racetrack. Construction of either Option would not inhibit implementation of a local transit system serving this area.	The Options are consistent with this policy.
Policy 2.	Support the expansion of convenient bus or other transit service between Del Mar and downtown San Diego.	Implementation of either Option would not inhibit the expansion of bus or other transit service between Del Mar and downtown San Diego.	This policy is not applicable to either Option.
Policy 3.	Encourage and participate in the initiation of a long-range regional multi-modal transportation system.	Implementation of either Option would not inhibit the initiation of a long-range regional multi-modal transportation system.	This policy is not applicable to either Option
Objective D.	Reduce the level of noise created by major transportation routes in the community.	The main source of noise on the project site is traffic noise. Noise modeling of the proposed project Options found that neither Option would increase the noise level along the roads in the vicinity of the project site. Therefore, there would be no audible or measurable increase in average traffic noise	The Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		levels. Neither project Option is anticipated to result in significant traffic noise increases or cause an exceedance of applicable traffic noise standards.	
Policy 1.	Limit the speed of vehicular traffic along City Streets, particularly Camino del Mar.	Vehicular access to the proposed project site would be provided from a single driveway on San Dieguito Drive. The location of the driveway would be in approximately the same location as the existing driveway currently in use for fairground, racetrack, and event parking. By providing appropriate vehicular access to and from the project site, the chosen Option would promote movement of traffic in a safe manner that limits the speed of vehicular traffic along San Dieguito Drive and Jimmy Durante Boulevard, consistent with a pedestrian-oriented community.	The Options are consistent with this policy.
Policy 2.	Encourage sound reduction construction techniques in new buildings within the 65 decible boundaries adjacent to Camino del Mar and the railroad right-of-way.	The proposed project site is located approximately 0.32 mile east of Camino del Mar and is not adjacent to the railroad right-of-way.	This policy is not applicable to either Option
Objective E.	Minimize air pollution by encouraging alternatives to the use of the automobile.	Both Options would reduce vehicle miles traveled by locating new homes in an infill location in proximity to the Del Mar Village area and recreational amenities. Both Options would also provide pedestrian and cyclist amenities for future residents to encourage non-vehicular transportation. Neither Option would change or affect existing bikeways along the project frontage of Jimmy Durante Boulevard. Both Options would provide non-automobile circulation and amenities for pedestrians and cyclists within the development, including connectivity to existing, adjacent sidewalks and bicycle routes that link with trails and other coastal access.	The Options are consistent with this objective.
Objective F.	Work to reduce transportation related sources of water pollution, particularly in storm water runoff.	Both Options have requirements for controlled runoff from the site, incorporating drainage improvements, including a bio-retention basin, so that there is no uncontrolled runoff leaving the site that could impact resources and properties located downstream. These control	The Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		measures would limit the potential for any adverse effects from transportation-related sources of water pollution.	
Policy 1.	Seek to promote the reduction of vehicle-miles-traveled, thereby reducing congestion and reducing air and water pollution.	Both Options would reduce vehicle miles traveled by locating new homes in an infill location in proximity to the Del Mar Village area and recreational amenities. Both Options would also provide pedestrian and cyclist amenities for future residents to encourage non-vehicular transportation. Neither Option would change or affect existing bikeways along the project frontage of Jimmy Durante Boulevard, and would provide non-automobile circulation and amenities for pedestrians and cyclists within the development. Both Options would also provide connectivity to existing, adjacent sidewalks and bicycle routes that link with trails and other coastal access, thereby reducing vehicular congestion and reducing air and water pollution from vehicles.	The Options are consistent with this policy.
Community Development Element			
Goal 3	Preserve and enhance Del Mar's special residential character and small town atmosphere with its harmonious blending of buildings and landscape in proximity to a beautiful shoreline.	The design standards for both Options are provided to enhance the northern gateway to the City of Del Mar and provide a uniquely Del Mar architectural statement to residents and visitors. The architectural elements reflect those found throughout existing residential and commercial structures: the use of brick similar to the Del Mar library, siding found throughout the community on residential and commercial structures, liberal application of trellis work and architectural carpentry, and a mixture of stone and plaster wall materials found throughout the coastal community. Landscaping criteria would combine drought-tolerance with aesthetic impact, and emphasize the site's coastal character while addressing the climactic requirements of the various site conditions.	The Options are consistent with this goal.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Objective A.	Maintain a low density residential character and allow only one and two story low mass intensity development in residential areas.	Both Options would create a new land use designation and zone that would allow for multi-family residential uses within the 20 to 25 dwelling units per acre range under Option A and 16 dwelling units per acre range under Option B. Option A would be at the low end of the range specified by the current Housing Element as being necessary to achieve the City's housing goals at this site. Both Options would maintain the standard for one- and two-story development, with a maximum allowable height of 26 feet.	The Options are consistent with this objective.
Policy 1.	Enact appropriate land use controls consistent with the Community Development Plan.	Both Options would redesignate the project site as Specific Plan, and the new designation would allow for residential development at a density of 24 dwelling units per acre under Option A and 16 dwelling units per acre under Option B. Both Options would also involve a Community Plan Amendment, Zoning Code Amendment, and Local Coastal Program Amendment to reflect the Specific Plan and ensure consistency across all applicable planning documents. Both Options would be consistent with the City's Housing Element since Option A would include seven affordable housing units, and Option B would include six affordable housing units, and either Option would help alleviate the City's affordable housing shortage as identified in the San Diego Association of Governments' 2010–2020 Regional Housing Needs Assessment. As required in California Government Code Sections 65454 and 65455, the proposed WDMSP for either Option would be consistent with the City's Zoning Code, including Sections 30.29 through 30.80, which constitute the Del Mar Local Coastal Program's implementing ordinances. Consistency would be achieved either through adherence to the existing Local Coastal Program ordinances or through amendments to the Municipal Code as detailed in the Specific Plans.	With adoption of the Community Plan Amendment, Zoning Code Amendment, and Local Coastal Program Amendment, both Options would be consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 2.	Limit floor area allowances and require adequate side yards in single family and duplex neighborhoods to conform to the norm of existing development in established neighborhoods of like usage.	Both Options are for a multi-family structure, not a single-family or duplex neighborhood. The design guidelines regulate the appearance of the multi-family structures, with a specification that the buildings adjacent to the street have the character of separate structures as found throughout the community, and prohibit a single, large, monolithic building.	This policy is not applicable to either Option.
Policy 3.	Limit excessive scale and bulk by establishing the maximum floor area to lot ratio in multiple family neighborhoods.	The design guidelines regulate the appearance of the multi-family structures, with a specification that the buildings adjacent to the street have the character of separate structures as found throughout the community, and prohibit a single, large, monolithic building. The bulk and scale of both Options would be minimized with consideration of the density goals for the site, along with the desire to preserve the overall physical characteristics of the site. The location and layout for the units in the slope areas supports the ability to provide affordable housing units and building separation and character. If these units were eliminated to achieve the density specified by the Housing Element, it would be necessary to add them onto the podium level, which could increase the bulk and scale of those buildings and create the appearance of more monolithic structures.	The Options are consistent with this policy.
Policy 4.	Limit building height to two stories in all residential areas, prohibit three story facades, and encourage single story development in areas where two-story construction would be disruptive to neighborhood character and scale of development	Both Options maintain the standard for one- and two-story development.	The Options are consistent with this policy.
Policy 5.	Prevent further massing of closely spaced residential structures along Camino del Mar south of the commercial area by requiring substantially wider side yards.	The project site is located 0.32 mile east of Camino del Mar.	This policy is not applicable to either Option

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 6.	Establish sufficient controls on yard requirements of irregularly shaped lots and lots which lack street frontage to overcome tendency toward overcrowding, loss of privacy to nearby lots and blockage of views.	The design guidelines for both Options establish regulations for the property facing Jimmy Durante Boulevard and San Dieguito Drive. Landscaping along the street frontage would be used to reinforce the residential character of the development.	The Options are consistent with this policy.
Objective B.	Insure that future development, whether commercial or residential, does not detract from high quality vistas and terrain, either by blocking views or disturbing natural topography mature trees, or native growth.	Both Options would change existing views of the project site. Instead of a vacant, relatively flat site with no trees and an ascending plateau of dirt, passing motorists would view the eclectic mix of coastal-inspired architecture, varied in finishes, colors, and materials, past a perimeter wall and native landscaping. Development of either Option would not necessitate removal of existing bluffs, and all proposed residential development would occur on previously disturbed slopes to preserve natural, undisturbed bluffs on site. Since the project site is located in an area that is bounded by existing urban development, views of the San Dieguito River, Lagoon, and ocean from Jimmy Durante Boulevard would not be affected, and the project's architectural features and landscape plan would contribute to the pleasing visual character envisioned along Jimmy Durante Boulevard. The project site does not provide public views to the ocean. However, there are public views of the undisturbed coastal bluffs on the southern portion of the site, which comprise part of the overall background visible from and across the San Dieguito River. These existing views would be retained from and across the San Dieguito River. These bluff areas can also be seen from the streets approaching the site from the north and west. The toe of the bluff area would be preserved as open space in accordance with the WDMSP document for each Option. The development footprint of the residential structures would be limited to the areas of the site that have been previously graded and disturbed.	The Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 1.	Strengthen height controls to protect scenic vistas from both private and public areas. Construction in areas of view sensitivity should require design approval to insure protection, in an equitable manner, of the right to view scenic vistas from both near and far.	Both Options provide guidelines and standards for implementation of the development, including a maximum building height of 26 feet above the established grade. The project site does not provide public views to the ocean. However, there are public views of the undisturbed coastal bluffs on the northeastern portion of the site, which comprise part of the overall background visible from and across the San Dieguito River. Based on the building area allowed, these existing views would be retained from and across the San Dieguito River. These bluff areas can also be seen from the streets approaching the site from the north and west. The toe of the bluff area would be preserved as open space in accordance with the WDMSP document for each Option. With this maximum height, no scenic vistas related to views of the San Dieguito River or the coastal bluffs would be affected.	The Options are consistent with this policy.
Policy 2.	Where possible, the creation of new viewpoints should be encouraged from public and commercial spaces.	Both Options would be a residential use and not a public or commercial space. The location of the development footprint was designated in accordance with the WDMSP documents for each Option and would preserve the scenic and visual qualities of the scenic bluffs, plus the character and the open space appearance of the area.	This policy is not applicable to either Option
Policy 3.	Where possible, encourage the preservation and reclamation of view corridors through the judicious trimming of mature trees and vegetation.	Since the project site is located in an area that is bounded by existing urban development, views of the San Dieguito River, Lagoon, and ocean from Jimmy Durante Boulevard would not be affected. The WDMSP landscape design guidelines for both Options establish regulations and general requirements for project landscaping, including mature trees and vegetation. The specific size and planting specifications on the final landscape plans would be reviewed for conformance with the landscaping plan, and trimming of mature trees and vegetation would be encouraged.	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Objective C.	Adopt strong positive controls to prevent future commercial development which is incompatible with the existing residential character of the community.	The project site is currently designated for commercial uses in the North Commercial (NC) Zone. The proposed project options identified this site for a new residential land use at a density of 20 to 25 units per acre under Option A and 16 dwelling units per acre under Option B. The proposed WDMSP documents for the two Options were prepared to provide the legislative actions for assigning a new residential land use designation and zone for the property, with associated regulatory development criteria and guidelines for a specific project design.	The Options are consistent with this objective.
Objective D.	Preserve existing and insure adequate housing for diverse age and socio-economic groups within the community.	The overriding objective of both project options is to implement the Housing Element that was certified for 2013–2020, which identified a need for affordable housing within Del Mar and identified the project site to be developed with residential uses at 20 to 25 units per acre. Option A ensures that this site provides 48 housing units that includes seven affordable housing units, and Option B ensures that this site provides 38 housing units that includes six affordable housing units. Both Options would provide affordable housing units to help meet the City's goals for such units.	The Options are consistent with this objective.
Policy 1.	Protect existing moderate cost housing from unnecessary redevelopment to more expensive housing by maintaining strict floor area to lot area limitations.	Both Options propose new development on a vacant site and do not propose to redevelop existing, moderate-cost housing.	This policy is not applicable to either Option
Policy 2.	Facilitate provision of housing opportunities for senior citizens close to the Village Center with easy access to services, facilities and transit.	The project site is not in proximity to the Village Center.	This policy is not applicable to either Option
Policy 3.	Regulate subdivisions for Condominiums, Community Apartments, Stock Cooperatives and Condominium Conversions to protect the rights of tenants and potential purchasers and to preserve the quality of the	This policy is not applicable to either Option. The City will regulate subdivisions through the mapping process, and condominiums will be required to have CC&Rs.	This policy is not applicable to either Option

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
	existing residential neighborhoods.		
Objective E.	Encourage and facilitate provision of lower cost housing for low and moderate income households.	Option A would provide seven affordable housing units, and Option B would provide six affordable housing units to help meet the City's goals for such units.	The Options are consistent with this policy.
Policy 1.	Maintain active membership in the San Diego County Housing Authority.	This is a goal for the City and is not applicable for to either project Option.	N/A
Policy 2.	Implement a floor area bonus provision to encourage private owners to provide low-income rental units in the R2, RM-East, RM-West, RM Central zones.	The project site is currently located in the North Commercial Zone, not an R2, RM-East, RM-West, or RM Central Zone. However, Option A would provide seven and Option B would provide six affordable housing units.	This policy is not applicable to either Option
Policy 3.	Require an in-lieu fee applied on a per-unit basis to all residential subdivisions and condominium conversions, to establish and maintain a Housing Assistance Fund.	If the site designation is changed from North Commercial to residential without a Specific Plan, the current code requirement would allow payment of a fee in lieu of reserving units (5 units or less) as below-market, affordable rentals. Fees (currently $23,408 per unit) would be put into an affordable housing fund to be used for rental subsidies. With the WDMSP for Option A, the site would provide seven affordable housing units, and with the WDMSP for Option B, the site would provide six affordable housing units.	With the adoption of the Community Plan Amendment, Zoning Code Amendment, and Local Coastal Plan Amendment, both Options would be consistent with this policy.
Objective F.	Protect and enhance human scale, warmth, charm, interest, texture, pedestrian involvement and landscaping.	The design guidelines for both Options address site planning and design elements applicable to the property. The design guidelines seek to create visual interest and variety along the streetscape that would maintain an appropriate scale and pattern of development; provide adequate, usable, safe, and high-quality common areas; and promote development of a highly livable residential community. The guidelines would include regulations for building mass and scale, circulation and pedestrian and streetscape involvement, architectural character, landscaping, exterior materials and finishes, and lighting. Adherence to these design guidelines would ensure that the development protects and enhances the visual environment.	The Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 1.	Encourage harmonious development which is in scale with the character of existing development.	Both Options maintain the standard for one- and two-story development with a maximum allowable height of 26 feet. The design guidelines for each Option regulate the appearance of the multi-family structures, with a specification that the buildings adjacent to streets have the character of separate structures as found throughout the community, and prohibit a single, large, monolithic building.	The Options are consistent with this policy.
Policy 2.	Initiate a tree planting and maintenance program along major city streets.	The conceptual landscape plans for both Options include placement of trees along Jimmy Durante Boulevard. All trees would be compatible with the existing landscape of adjacent properties, particularly at the interface of streets, to create a visually harmonious environment.	The Options are consistent with this policy.
Policy 3.	Discourage the construction of sidewalks and concrete curbs within residential areas unless absolutely necessary for pedestrian safety and/or drainage.	Jimmy Durante Boulevard has a recently constructed continuous sidewalk and pedestrian ramps from south of the San Dieguito River Bridge into Del Mar Village, including along the project frontage. Both Options would provide new sidewalk improvements along the San Dieguito Drive frontage from the intersection of San Dieguito Drive and Jimmy Durante Boulevard to the property corner. The loading area along San Dieguito Drive would include provisions for a pedestrian ramp and associated pedestrian sidewalk to link with pedestrian access to the site. These improvements are necessary to provide pedestrian safety.	The Options are consistent with this policy.
Policy 4.	Initiate a continuous program of replacing overhead utility distribution equipment with an underground system.	Neither Option proposes overhead utility distribution. All utility and mechanical equipment would be screened from view and existing overhead power lines and poles would be undergrounded as part of either Option.	The Options are consistent with this policy.
Policy 5.	Protect notable landmarks and structures of historic value to the community by requiring City approval prior to exterior remodeling or demolition.	Neither Option proposes exterior remodeling or demolition of existing structures. The project site is vacant and there are no known landmarks or historic resources as identified by the State Historic Preservation Officer on the project site.	This policy is not applicable to either Option

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 6.	Preserve old residences and the historic values within the area from 8th to 13th Street near Stratford Court by implementing a historic district zone of a precise plan for the area.	Neither Option proposes demolition or remodeling of old residences with historic value from 8th to 13th Street near Stratford Court.	This policy is not applicable to either Option
Objective G.	Apply the following watershed protection activities to all new development and redevelopment proposals during the planning, project review, and permitting processes.	See Policy 1, below, for project application.	The Options are consistent with this objective.
Policy 1.	Avoid development of areas particularly susceptible to erosion and sediment loss (e.g. steep slopes) and/or establish development guidance that identifies these areas and protects them from erosion and sediment loss. It is general policy to limit grading permits or not allow grading in those areas susceptible to erosion from October through April.	The residential structures would be located on previously graded and disturbed portions of the site, and prior to construction, a SWPPP would be prepared to identify BMPs to minimize off-site sediment transport for the duration of either Option. In addition, grading plans would be subject to City approval, and would require measures to comply with the City's municipal stormwater permit. The City's Municipal Code requires project compliance with the NPDES permit for stormwater discharges and general construction activities, regular cleaning or sweeping of parking lots and impervious areas, and implementation of stormwater BMPs. Both Options would implement erosion and sediment control measures required by the City Ordinance, and other pertinent regulations and conditions. Both Options would also apply the grading and erosion and sedimentation control regulations associated with the Lagoon and Bluff, Slope, and Canyon Overlay Zones.	The Options are consistent with this policy.
Policy 2.	Prevent undue erosion by retaining stormwater flows and peak flows to creek channels by implementing low impact development design features that include maximum pervious surfaces, minimize natural drainage disturbances, and reduce not directly connected impervious surfaces. Regulate	Runoff from the developed areas of the site would be into new, on-site storm drain pipes and drainage systems, adequately sized to accommodate flows. Site storm runoff would be directed into a bio-retention basin prior to discharge to an existing public storm drain. These measures would reduce erosion and pollution downstream.	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
	development near watercourses to reduce erosion and pollution and to provide open natural areas.		
Policy 3.	Preserve or restore areas that provide water quality benefits and/or are necessary to maintain riparian and aquatic biota.	The project site includes a wetland marsh area that would be enhanced by removal of invasives and restoration with additional native species. This area would be included as part of the permanent open space associated with project development, along with a fenced-in buffer area.	The Options are consistent with this policy.
Policy 4.	Promote site development that limits impact on and protects the natural integrity of topography, drainage systems, and water bodies.	Both Options would preserve natural and previously undisturbed bluffs within the project site, and would protect and preserve on-site wetlands within a 50-foot buffered area with a fence.	The Options are consistent with this policy.
Policy 5.	Promote integration of storm water quality protection in construction and post-construction activities at all development sites during permit approval or as a condition of tentative maps by requiring permanent storm water pollution control measures or treatment systems and an ongoing maintenance program, as necessary.	Both Options would promote integration of storm water quality protection in construction and post-construction activities by having permanent storm water pollution control measures or treatment systems and an ongoing maintenance program.	The Options are consistent with this policy.
Goal 4	Focus major retail and office activity into an economically viable, pedestrian oriented and attractive area that serves the needs of both residents and visitors and is well integrated into the residential land uses.	Both Options would provide for a residential neighborhood across from commercial uses on Jimmy Durante Boulevard and San Dieguito Drive. Development in accordance with the WDMSP documents for the two Options would serve to energize these existing uses with the addition of a variety of new residents with easy pedestrian access to these services.	The Options are consistent with this goal.
Objective A.	Encourage quality resident-oriented businesses which serve the cultural, social, recreational and material needs of the local community.	Both Options propose to redesignate an area designated as North Commercial to residential use.	This objective is not applicable to either Options.
Policy 1.	Encourage retail oriented commercial uses within the downtown area.	Both Options propose redesignating an area designated as North Commercial to residential use.	This policy is not applicable to either Option

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Objective B.	Insure that the downtown area is well integrated into the residential fabric of the community.	Neither Option is located in the downtown area.	This objective is not applicable to either Option
Policy 1.	Encourage alternatives to the use of the automobile for tourist access to the downtown.	This is a goal for the City and is not applicable to either project Option.	N/A
Policy 2.	Discourage high volume or evening commercial activity on the perimeter of the downtown area that may be detrimental to the livability of adjacent residential areas.	Both Options propose redesignating an area designated as North Commercial to Specific Plan, which would allow residential use. Thus, neither Option would not include high-volume evening commercial activity on the perimeter of the downtown area.	The Options are consistent with this policy.
Policy 3.	Explore mixed residential-commercial land uses within the commercial area that is adjacent to Stratford Court.	The project site is not located adjacent to Stratford Court.	This policy is not applicable to either Option
Policy 4.	Allow mixed residential-commercial land uses within other areas of the commercially zoned downtown area.	The project site is not located within the commercially zoned downtown area.	This policy is not applicable to either Option
Policy 5.	Establish strict limits on noise within the downtown area.	The proposed project site is located outside of the main downtown area. The main source of noise on the project site upon implementation would be traffic. Noise modeling of the Options found that there would be no audible or measurable increase in average traffic noise levels. The project Options are not anticipated to result in significant traffic noise increases or cause an exceedance of applicable traffic noise standards.	The Options are consistent with this policy.
Objective C.	Create a pedestrian oriented downtown which groups retail services with facilities for civic and community activities.	The proposed project site is located outside of the downtown area. However, it would provide for circulation elements and pedestrian linkages for pedestrians and cyclists making their way into Del Mar Village.	This objective is not applicable to either Option
Policy 1.	Maintain commercial uses composed primarily of retail sales and service establishments and offices which primarily serve local residents.	Both Options propose to redesignate a commercial area to a residential use to encourage the provision of new affordable housing opportunities for persons of low and moderate income in the coastal zone. Both project Options provide for the construction of affordable housing at this site, which	Both project Options include a Community Plan Amendment to be consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		would also implement other state requirements for housing in accordance with the City of Del Mar's adopted Housing Element. This would help maintain the commercial/residential balance.	
Policy 2.	Discourage commercial uses which are automotive oriented (such as drive-in establishments).	Both Options propose to redesignate a commercial area to a residential use. Neither Option proposes an automotive-oriented commercial use.	This policy is not applicable to either Option
Policy 3.	Encourage developments which provide social, cultural and recreational activities.	The podium level of both Option would provide the primary pedestrian circulation to and between the residences, and the social gathering areas for residents and visitors within the project site. Podium-level courtyards and recreational areas would be designed to enhance the residents' experience of these outdoor spaces. Both Options would also include a facility for common recreation for residents, including amenities such as a pool, spa, and recreation center.	The Options are consistent with this policy.
Policy 4.	Develop a pedestrian network which ties all parts of the downtown together in a way which reduces conflicts with the automobile.	Construction of either Option would not disrupt or prevent public access to the downtown area. Both Options would include circulation elements and pedestrian linkages designed to promote walkability and non-vehicular access to the nearby downtown area.	The Options are consistent with this policy.
Objective D.	Maintain architectural design and low mass-intensity scale within the downtown area that is in keeping with the traditional village character of the community.	The project Options are located in the downtown area, thus this objective is not applicable.	This objective is not applicable to either Option
Policy 1.	Promote informality of design with varied and interesting setbacks.	The project Options are located in the downtown area, thus this policy is not applicable.	This policy is not applicable to either Option
Policy 2.	Encourage floor areas and building siting which provides ocean views and open space.	The project Options are located in the downtown area, thus this policy is not applicable.	This policy is not applicable to either Option

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Policy 3.	Limit the height of structures to preserve view corridors while encouraging low mass intensity structures.	The project Options are located in the downtown area, thus this policy is not applicable.	This policy is not applicable to either Option
Policy 4.	Encourage building designs and uses that utilize the advantages of Del Mar's warm, sunny climate.	The project Options are located in the downtown area, thus this policy is not applicable.	This policy is not applicable to either Option
Objective E.	Initiate a beautification program for the downtown area.	The project site is not located in the downtown area, thus this objective is not applicable.	This objective is not applicable to either Option
Policy 1.	Provide benches, mini-parks, and street trees, and require extensive landscaping of private open space and parking areas.	The project Options are located in the downtown area, thus this policy is not applicable.	This policy is not applicable to either Option
Policy 2.	Require undergrounding of all utilities, and the use of low intensity lighting.	The project Options are located in the downtown area, thus this policy is not applicable.	This policy is not applicable to either Option
Policy 3.	Require the removal of inappropriate or out-of-scale signing and encourage signing which is well integrated into building or site design.	The project Options are located in the downtown area, thus this policy is not applicable.	This policy is not applicable to either Option
Objective F.	Encourage the immediate development of a precise plan for the downtown area that includes Camino del Mar circulation, parking, architectural design, and walkways.	The proposed project site is not located in the downtown area that includes Camino del Ma, thus this objective is not applicable.	This objective is not applicable to either Option
Policy 1.	Consider the conversion of Del Mar Lane between 13th and 15th streets into a pedestrian mall.	The proposed project site is not located on Del Mar Lane between 13th and 15th Streets.	This policy is not applicable to either Option
Goal 5	Preserve the economic integrity of the community.	Both Options would provide for residential uses that are designed to be an economic success that can enhance the property values of the surrounding residences and the surrounding commercial properties. Development in accordance with the WDMSP for either Option would be one of the first significant developments in Del Mar in some time, and would represent a significant economic investment in the	The Options are consistent with this goal.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		Jimmy Durante Boulevard corridor. Property values and property tax revenues are anticipated to increase with implementation of the Specific Plan, which would also provide the community with residents who would enhance the supporting economic base of the community.	
Objective A.	Maintain a balanced philosophy toward commercial growth which permits the City's income to keep pace with its expenditures while insuring compatibility with all other goals and objectives of the community plan.	Both Options propose to redesignate a commercial area to a residential use to encourage the provision of new affordable housing opportunities for persons of low and moderate income in the coastal zone. Both Options would construct affordable housing at this site, and would implement other state requirements for housing in accordance with the City's adopted Housing Element. This would help maintain the commercial/residential balance.	The Options are consistent with this objective.
Objective B.	Promote those uses of the commercial area which will be of greatest economic benefit to the community while insuring compatibility with all other goals and objectives of the community plan.	The project site has existing approvals for general commercial (office) development, which has no higher priority than the proposed residential use. Both Options would provide public benefits through its affordable housing provisions. This is a higher priority than commercial use, and implementation of the residential use would serve to energize existing uses with the addition of a variety of new residents with easy pedestrian access to local services. Thus, both Options would provide for residential uses that are designed to be an economic success that can enhance property values of the surrounding residences and the surrounding commercial properties, in addition to providing a use for underutilized vacant parcels. Development in accordance with the WDMSP for either Option would be one of the first significant developments in Del Mar in some time, and would represent a significant economic investment in the Jimmy Durante Boulevard corridor. Property values and property tax revenues are anticipated to increase with implementation of the WDMSP for either Option, which would also provide residents who would enhance the supporting economic base of the community.	The Options are consistent with this objective.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Objective C.	Establish an open space acquisition policy so as to insure compatibility with all goals and objectives of the community plan.	Both Options require that natural open space areas be permanently preserved, subject to an open space deed restriction, conservation easement, or open space easement to ensure protection of the designated area.	The Options are consistent with this objective.
Objective D.	When feasible and appropriate, require an economic analysis on any future proposed community plan revisions.	Both Options would provide for a residential neighborhood across from commercial uses on Jimmy Durante Boulevard and San Dieguito Drive. Development in accordance with the WDMSP document for either Option would serve to energize existing uses with the addition of a variety of new residents with easy pedestrian access to local services. Thus, both Options would provide for residential uses that are designed to be an economic success that can enhance the property values of the surrounding residences and the surrounding commercial properties, in addition to providing a catalyst to underutilized vacant parcels. Development in accordance with the WDMSP document for either Option would be one of the first significant developments in Del Mar in some time, and would represent a significant economic investment in the Jimmy Durante Boulevard corridor. Property values and property tax revenues are anticipated to significantly increase with implementation of the WDMSP for either Option, which would also provide residents who would enhance the supporting economic base of the community.	The Options are consistent with this objective.
Goal 6	Assure continuing public participation in City Planning by developing procedures in which citizens can participate in updating General Plan Goals and Policies and help in implementing programs including consultation and advice on enabling legislation.	One of the key reasons for using a Specific Plan process for this property was to incorporate formal public outreach, in addition to the project's informal extended public outreach, to support the community's goal to enhance public participation. The WDMSP documents for the two Options outline the enhanced public participation process that would be used to initiate, evaluate, and ultimately implement the City's stated objective to provide residential uses and an affordable housing component on the site.	The Options are consistent with this goal.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Housing Element			
Housing Goal 2	To encourage and support the provision of a wide range of housing opportunities by location, type and sales and rental rates in order to meet the existing and future needs of Del Mar.	To implement the Housing Element goal to provide affordable housing opportunities within the City, the Del Mar City Council supported and authorized use of a Specific Plan process for the proposed project site to address and define legislative and discretionary actions and community benefits of either Option	The Options are consistent with this goal.
Policy 2.1	Provide a variety of residential development opportunities to fulfill the City's share of regional housing needs, including single-family residences, townhomes, condominiums, apartments, mixed residential/commercial projects, and second-dwelling units on properties otherwise zoned for single-family use.	Both Options would create a new land use designation and zone that would allow for multi-family residential uses. Option A would be within the 20 to 25 dwelling units per acre range specified in the Housing Element, and Option B would be at 16.1 dwelling units per acre. Both would accommodate a variety of product types (such as townhomes and flats) at these densitys.	The Options are consistent with this policy.
Policy 2.2	Encourage and support the construction of housing for all segments of the community, including those with special needs.	Both proposed project options would provide a multi-family residential development, with Option A consisting of 48 residential units, and Option B consisting of 38 residential units. Both Options would also include affordable housing units (seven for Option A and six for Option B) and a mix of housing types within the community, including two-story townhomes and single-level flats in primarily two-story configurations. The individual units would encompass a variety of floor plans and sizes, ranging from three-bedroom to studio units. Therefore, both Options would provide housing choices for all segments of the community, including those with special needs.	The Options are consistent with this policy.
Policy 2.3	Encourage and support the development of affordable housing by offering incentives for housing projects that provide housing at established affordable sales and rental rates with such incentives to include, but not be limited to: density and floor area ratio bonuses; reduced processing fees; expedited permit processing and reduced parking requirements.	To facilitate the public benefits associated with provision of affordable housing, the WDMSP documents for each Option include development regulations in Chapter 5, some of which are modified from the Del Mar Municipal Code, to serve as incentives to support development of affordable units.	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
Housing Goal 3	To promote equal opportunities for all residents to reside in the housing of their choice and capabilities.	Both Options would provide a multi-family residential development, with Option A consisting of 48 residential units, and Option B consisting of 38 residential units. Both Options would also include affordable housing units (seven for Option A and six for Option B) and a mix of housing types, including two-story townhomes and single-level flats in primarily two-story configurations. The individual units would encompass a variety of floor plans and sizes, ranging from three-bedroom to studio units. Therefore, both Options promote equal opportunities for all residents to reside in this multi-family residential development.	The Options are consistent with this goal.
Policy 3.2	Continue to implement fair housing choices by actively expanding City programs to support a range of housing affordability and by removing impediments to the construction of and access to fair housing.	Both Options would provide a multi-family residential development, with Option A consisting of 48 residential units, and Option B consisting of 38 residential units. Both Options would also include affordable housing units (seven for Option A and six for Option B) and a mix of housing types, including two-story townhomes and single-level flats in primarily two-story configurations. The individual units would encompass a variety of floor plans and sizes, ranging from three-bedroom to studio units. Therefore, both Options would provide fair housing choices.	The Options are consistent with this policy.
Policy 3.3	Continue operating existing programs and add new programs that create incentives for the development of housing in general, and for affordable housing in particular.	In accordance with the WDMSP documents for the two Options, seven affordable dwelling units in Option A and six affordable dwelling units in Option B would be subject to the recordation of a deed restriction committing the property owner and any successors-in-interest to restrictions regarding affordable rental rates and/or purchase prices to families with income levels at 120% of the Area Median Income or less for a period of 55 years from the date of issuance of the Certificate of Occupancy for such residential units. In addition, both WDMSP documents for the two Options provide that a portion of the affordable dwelling units may be sold, deeded, or otherwise transferred at a nominal price to a local non-profit public benefit corporation approved by the City. Such transfer would	The Options are consistent with this policy.

Table 1
Project Options' Consistency with the Community Plan for the City of Del Mar

Goal/Recommendation Number	Goal/Recommendation*	Project [Options A & B]	Project Consistency/ Inconsistency
		provide opportunities for those particular units to be available at even lower affordability rates.	
Housing Programs: Objective #2	Provide adequate sites to achieve a variety of housing types	Both Options would provide a multi-family residential development, with Option A consisting of 48 residential units, and Option B consisting of 38 residential units. Both Options propose a mix of housing types, including two-story townhomes and single-level flats in primarily two-story configurations. The individual units would encompass a variety of floor plans and sizes, ranging from three-bedroom to studio units.	The Options are consistent with this objective.
Program #2	Implement the Community Development Element and Zoning Ordinance (includes land use re-designations and modification of zoning standards to accommodate higher density residential development. 2-: Within 12 months of City Council adoption of the 2013-2021 Housing Element, the City will assign a new land use designation to two adjacent vacant parcels, (APNs 299-10-47, -48) roughly 2.3 acres in size and currently zoned as North Commercial (NC) Zone, to allow, by right, residential development of the properties at a density of 20-25 du/ac. With such density allowance to include a requirement for a percentage of the residential units to be available, long term, at affordable rates, either through dedication to a non-profit housing advocacy organization or through deed restrictions for no less than the minimum duration required under state housing law applicable to affordable dwelling units.	Both proposed project options would provide for multi-family residential uses. Seven affordable units under Option A and six affordable units under Option B would be available, long term, at affordable rates. The proposed project was envisioned as an alternative process to the City applying new land designations to the parcels directly. The Specific Plan process was chosen to ensure that opportunities were provided for the involvement of citizens, public agencies, public utilities, civic education, and other community groups, as the Specific Plan was prepared to encompass the legislative actions to assign new Community Plan, Zoning Map, and Local Coastal Program designations, in addition to the accompanying CEQA documentation. The Del Mar City Council affirmed the use of a Specific Plan for the proposed project site.	The Options are consistent with this program.

* **Source:** City of Del Mar. 1976. The Community Plan for the City of Del Mar, California. March 1976, with 1985 amendments. http://www.delmar.ca.us/DocumentCenter/View/250.

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Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
Goal II-A	Preserve and enhance Del Mar's small town atmosphere with its harmonious blending of architecture, landscape and natural landforms in proximity to a beautiful shoreline.	Both Options would maintain the standard for one- and two-story development with a maximum allowable height of 26 feet. The basis for measuring this height is defined for the Watermark Del Mar Specific Plan (WDMSP) document using the base flood elevation to ensure compliance with Goal III-A while balancing the need for flood hazard protection and limited building height. The intensity of development specifies a maximum permitted density of 20.5 du/acre under Option A, which is at the low end of the range specified by the current Housing Element (20-25 du/acre) as being necessary to achieve the City's housing goals at this site. The maximum permitted density under Option B would 16 du/acre. The design guidelines for both Options further regulate the appearance of the multi-family structures, with a specification that the buildings adjacent to streets have the character of separate structures as found throughout the community, and prohibit a single, large, monolithic building.	Both Options are consistent with this goal.
Policy II-1	Maintain the existing small-scale character of the community and permit only one-and two-story, low intensity development with a maximum allowable height of 26 feet.	Both Options maintain the standard for one- and two-story development with a maximum allowable height of 26 feet. The basis for measuring this height is defined for the Specific Plan using the base flood elevation to ensure compliance with Policy 11-1 while balancing the need for flood hazard protection and limited building height. Option A proposes 48 residential units and Option B proposes 38 residential units on 103,282 square feet, or approximately 2.37 acres of gross land area, or a maximum density for residential uses of 20.24 dwelling units per acre (du/ac), and 16 du/ac, respectively, of the property's gross land area. A density of 20 to 25 du/ac is defined as an objective for this site in the City of Del Mar's Community Plan	Both Options are consistent with this policy.

Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		Housing Element 20132021 (Housing Element). The maximum permitted density of 20.24 du/acre under Option A is at the low end of the range specified by the current Housing Element (20-25 du/acre) as being necessary to achieve the City's housing goals at this site. The design guidelines for both Options further regulate the appearance of the multi-family structures, with a specification that the buildings adjacent to streets have the character of separate structures as found throughout the community, and prohibit a single, large, monolithic building. Proposed building facades and rooflines would provide a variety of architectural elements along Jimmy Durante Boulevard and would maintain important vistas along San Dieguito Drive. The one- and two-story buildings would have a maximum building height of 26 feet above either existing or finished grade when habitable space is constructed on grade.	
Policy II-2	Insure that future development, whether commercial or residential, retains the aesthetic quality of the community by protecting and preserving public views to the ocean and other significant natural resources; and by minimizing the disturbance of natural topography and vegetation.	The project site is located such that there are no public views to the ocean. However, there are public views of the undisturbed coastal bluffs on the northeastern portion of the site, which comprise part of the overall background visible from and across the San Dieguito River. Based on the building area allowed by the WDMSP document, these existing views would be retained from and across the San Dieguito River. These bluff areas can also be seen from the streets approaching the site from the north and west. There is a small area of wetland marsh vegetation at the toe of this bluff area, and both the undisturbed bluffs and the wetland area would be preserved in open space in accordance with the WDMSP document. The	Both Options are consistent with this policy.

Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		development footprint of the residential structures would be limited to the areas of the site that have been previously graded and disturbed. The project would be developed on a disturbed site, and specifically on previously disturbed slopes, to create a hillside terraced neighborhood that blends into the adjacent neighborhood while preserving natural and previously undisturbed bluffs and wetlands. Beach colony architectural elements found throughout Del Mar would be incorporated into the design to provide for compatibility with the broader Del Mar architectural statement. The 26-foot maximum building height and the terraced neighborhood would ensure preservation of any views to the San Dieguito River.	
Policy II-3	Establish controls to prevent office development which is incompatible with the existing residential and visitor-serving character of the community.	The project site presently has a commercial land use designation as North Commercial Zone, which allows for a variety of commercial uses including office uses. The site is also the subject of the Riverview Office Project Final Environmental Impact Report (issued on April 25, 2008, State Clearing House Number 2005061143), and two current discretionary permits (Design Review Board Permit DRB-08-28 and associated Land Conservation Permit LC-08-13) where office uses were proposed. The current Options do not propose office development, but would provide coastal-inspired residential units that would be compatible with existing adjacent residents. Additionally, both Options would preserve natural and previously undisturbed bluffs and protect on-site wetlands.	Both Options are consistent with this policy.
Policy II-4	In order to preserve the small-town scenic qualities of Del Mar; to preserve scenic views and open space; to protect against traffic impacts that would be adverse to both local residents and visitors to	The Options are not located within the Downtown Overlay Zone and the project site is not designated as CC (Central Commercial) on the Land Use Map. However, both Options	The policy is not applicable to either Option.

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	the community; and to preserve an appropriate level of residential serving businesses within the community, the City shall continue to implement the Downtown Overlay Zone Ordinance (Measure B) as it applies to properties designated as CC (Central Commercial) on the Land Use Map (Figure II-A). The provisions of the Downtown Overlay Zone Ordinance are included as Appendix F of this Land Use Plan and are incorporated by reference.	would preserve scenic views of coastal bluffs and protect wetlands on site. It would also minimize the impact of traffic by creating a neighborhood with pedestrian linkages and walkability to trails, parks, beaches, businesses, and restaurants that serve the local community.	
Goal II-C	Preserve the economic integrity of the community.	Either Option would create a high-quality residential neighborhood with pedestrian linkage and walkability to trails, parks, beaches, businesses, and restaurants that serve the local community. The residential neighborhood would be located across from commercial uses on Jimmy Durante Boulevard and San Dieguito Drive. Development in accordance with the WDMSP document would serve to energize these existing uses with the addition of a variety of new residences with easy pedestrian access to these services. Development in accordance with the WDMSP document would allow for the development of a significant residential property that would contribute to the economic viability of the Jimmy Durante Boulevard corridor. Property values and property tax revenues are anticipated to increase with implementation of the project, and the residents provided by either Option would enhance the supporting economic base of the community.	Both Options are consistent with this goal.
Policy II-11	Promote those uses of the City's commercial areas which will be of greatest economic benefit to the community while insuring compatibility with all other goals and objectives of the City's Community Plan and this document.	The addition of 48 units under Option A, or 38 units under Option B, close to shops and restaurants on Camino Del Mar and the Flowers Hill shopping center would increase uses of these commercial areas. Both Options would provide pedestrian linkage and walkability to trails, parks, beaches, businesses, and restaurants serving the local community.	Both Options are consistent with this policy.
C-8	North Hills District: The majority of this district is designated for single-family residential development. The District also contains a small area	The site is in the North Commercial Zone; the BSC Overlay Zone; and the Lagoon Overlay Zone. The site is also	Both Options are consistent with this

Table 2
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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	designated as R2 with the same restrictions for such use as described in the South Beach District. The central portion of this district, as shown on Figure II-A, is designated for RI-10 (Low Density) with a maximum allowable density of 4.3 du/ac. Any future development within this area shall be compatible and harmonious with the existing character of this single family-residential neighborhood. A large portion within this district is located on steep hillside areas above the San Dieguito Lagoon and its watershed. This area is designated for larger lot single family development at RI-40 (Very Low 1 du/ac). Much of the area is also within the Bluff, Slope and Canyon (BSC) Overlay Zone. Accordingly, development within this area shall be designed to minimize the disruption of topography and to preserve the open space character of these highly visible and sensitive areas. All development shall be consistent with the BSC and Open Space Policies of this Land Use Plan, where applicable. Some of the area now assigned the designation of RI-40 has been acquired by public interests. The public acquisition of these areas, as shown on Figure V-A, may warrant the future reassignment of a corresponding land use designation. That area within the district immediately adjacent to the Village Center District is designated as RM-Central (Medium Density Mixed-Central) where residential uses are allowed at a maximum density of 6.3 du/ac. This designation also allows for duplex development on parcels greater than 5,000 square feet with the receipt of a Conditional Use Permit. The district also contains two commercially designated areas, one located near Camino del Mar, south of 9th Street (Professional Commercial-PC) and one in the northern portion of the district adjacent to Jimmy Durante Boulevard (North Commercial-NC).	included in the City of Del Mar's Housing Element as a site for residential zoning designation. The Housing Element was adopted by City Council on May 20, 2013, and certified by the California Department of Housing and Community Development on June 6, 2013. Option A proposes 48 residential units, and Option B proposes 38 residential units, on 103,282 square feet, or approximately 2.37 acres of gross land area, or a maximum density for residential uses of 20.24 du/ac, and 16 du/ac, respectively, of the property's gross land area. Option A's proposed 20.24 du/ac density is at the very low end of the City of Del Mar's Housing Element prescribed density range. A density of 20 to 25 du/ac is defined as an objective for this site in the Housing Element. The proposed project would be a coastal-inspired residential neighborhood, compatible and harmonious with the existing character of the Del Mar community. Option A or Option B would be developed on a disturbed site (currently two vacant parcels used as fairground parking), specifically on previously disturbed slopes, to create a hillside terraced neighborhood that blends into the adjacent neighborhood while preserving natural and previously undisturbed bluffs and on-site wetlands. Option A and Option B would be consistent with the BSC Zone and Open Space Policies of this Land Use Plan, and be approved with a Floodplain Development Permit.	policy.

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	Because of its proximity to the adjacent wetlands and floodprone areas of the San Dieguito River/Lagoon, development in the North Commercial area shall be carefully reviewed for its consistency with the provisions of Chapters III and VI of this Land Use Plan regarding the minimizing of hazards and the preservation of sensitive lands. Much of the northern section of this district also lies within the plan area of the San Dieguito River Valley Regional Open Space Park. All development proposals shall be reviewed for their consistency with the provisions of the San Dieguito River Valley Regional Open Space Park Plan.		
Goal III-A	Establish a comprehensive program to protect shoreline areas susceptible to storm/flooding hazards.	The project site is located within the Floodplain Overlay Zone, and includes provisions for development consistent with the Flood Plain Overlay regulations. This includes protection for all habitable spaces, which must be at or above the Base Flood Elevation. The project will not impact shoreline areas susceptible to storm/flooding hazards. In developing the Specific Plan regulations, consideration was given to planning for future flood hazard avoidance. Acknowledging that flooding has exceeded projected levels in other areas and knowing the potential for future sea level rise, a safety factor of 2 feet above Base Flood Elevation (BFE) was used as the criteria for structures to be located on podium construction. Structures being built on-grade at the corner adjacent to the intersection would be located at the BFE, to assure flood hazard avoidance, while balancing the community interest in minimizing building height at this corner.	Both Options are consistent with this goal.

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
Policy III-1	Protect open space areas as shown on the Del Mar Environmental Management Plan (see Appendix D) through the implementation of the policies of Chapters II and VI of this Land Use Plan. The policies of these Chapters are intended to assure the application of development criteria necessary to preserve the open space sensitivities of the property as described in the Open Space Goals and Objectives on pages 31-32 of the Environmental Management Element of the Del Mar Community Plan.	The existing project site is vacant and heavily disturbed, as it is used as fairground parking. The 2.37-acre site would conserve 0.49 acre of coastal brackish marsh, southern coastal bluff scrub, disturbed southern coastal bluff scrub, and disturbed habitat.	Both Options are consistent with this policy.
Policy III-2	Conserve the natural character of land, water, vegetative and wildlife resources within the community by ensuring that future development minimizes the disturbance of existing or natural terrain and vegetation, and does not create soil erosion, silting of lower slopes, slide damage, flooding problems and/or cutting or scarring, through application of the following policies: a) Regulate development in accordance with the specific Beach Overlay Zone (BOZ), b) Floodway (FW) and Floodplain (FP) Overlay Zone regulations contained within this chapter. c) Review all proposed drainage and irrigation systems for their ability to control runoff and seepage into downstream areas and to ensure that no significant erosion or the associated siltation of downstream resources will occur. d) For purposes of this Land Use Plan, "significant erosion" shall mean e) the likelihood of removal of soil or the cutting, scarring, or drilling of slopes, canyons, or bluff faces, or the silting of lower slopes brought about by runoff from surfaces during irrigation or from rainfall of an intensity and duration less than or equal to that of the 100-year period design storm. f) Regulate development in proximity to coastal bluffs in	The project site is located within the Floodplain Overlay Zone, and includes provisions for development consistent with the FP Overlay regulations. This includes protection for all habitable spaces, which must be at or above the BFE. In developing the Specific Plan regulations, consideration was given to planning for future flood hazard avoidance. Based on recent experience in other communities there flooding has exceeded projected levels, and acknowledging the potential for future sea level rise, a safety factor was used of 2 feet above BFE as the criteria for structures to be located on podium construction. Structures being built on-grade at the corner adjacent to the intersection would be located at the BFE, to assure flood hazard avoidance, while balancing the community interest in minimizing building height at this corner. Both Options would also be subject to the provisions of a Floodplain development permit. Option A and Option B's landscape design standards specify the use of low-volume and drip irrigation, to minimize the use of irrigation water. The Specific Plans also have requirements for controlled runoff from the site, incorporating a bio-retention basin that would further limit the potential for any adverse effects on downstream resources. Option A and Option B's landscape design standards specify the use of low-volume and drip irrigation, with drought-	Both Options are consistent with this policy.

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City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	accordance with the Coastal Bluff Regulations contained within this chapter. g) In addition to the requirements of the Coastal Bluff regulations of this chapter, require the use of drought-tolerant plants in new and redevelopment projects throughout the City in order to minimize potential erosion impacts from irrigation systems and to reduce water consumption.	tolerant plant materials to limit the use of irrigation water which would minimize potential erosion impacts from irrigation systems and reduce water consumption. Option A and Option B are also in the BSC Overlay Zone and would be consistent with all the BSC Policies.	
Policy III-3	Control the development of properties within the BSC Overlay Zone to protect the health, safety and general welfare and to preserve scenic sandstone bluffs, related canyons, steep slopes and their downstream resources. The regulations of the BSC Overlay Zone are cited in Chapter VI of this Land Use Plan entitled, Sensitive Lands.	The project site includes an area with undisturbed, scenic sandstone bluffs on the northeastern portion of the site. These are visible from areas to the north, and comprise part of the overall background visible from and across the San Dieguito River. They can also be seen travelling south on Jimmy Durante Blvd. as one approaches the intersection of San Dieguito Drive. These bluff formations, and the small area of wetland marsh vegetation at the toe of this bluff area, would be preserved in permanent open space in accordance with the WDMSP document. The development footprint of the residential structures under Option A or Option B are being limited to the areas of the site that were previously graded (prior to 1973) or otherwise disturbed. Option A and Option B would also be developed consistent with all BSC policies.	Both Options are consistent with this policy.
Policy III-6	Minimize the loss of life and destruction of property from seismic, geologic, oceanographic and weather related causes by developing a well-coordinated disaster plan which includes preparation for earthquakes, tsunamis, and storm waves.	Because the site is located inland from the ocean at a proposed elevation of 18 feet, it is unlikely that the property would be subject to inundation due to tsunamis during the life of the structure. Additionally, according to the Del Mar Quadrangle Tsunami Inundation Map for Emergency Planning by the California Emergency Management Agency (CalEMA), the University of Southern California, and the California Geological Survey, the project site is located just outside the City of Del Mar's tsunami inundation line. Therefore, the project would not likely be subject to	Both Options are consistent with this policy.

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		inundation by seiche or tsunami. However, both Options are subject to the City of Del Mar's disaster plan resources, and would implement a project emergency evacuation route available to all residents of the development. Either Option would be constructed in accordance with standard engineering and the latest California Building Code and, with the implementation of mitigation measure MM-Geo-1, would be subject to the recommendations of a detailed, site-specific subsurface geotechnical study to be performed prior to construction, consistent with the Del Mar Conditions of Approval. Therefore, Option A or Option B would not impede or contribute to the City's disaster plan.	
Goal III-C	Protect resources and property located downstream from hillside and bluff areas from damage due to uncontrolled runoff.	Any runoff from the bluff areas above the project site would be controlled by drainage improvements, including a bio-retention basin, so that there is no uncontrolled runoff leaving the site that could impact resources and property located downstream. Prior to the issuance of a grading permit, an erosion control plan approved by the City of Del Mar (City) is required for all work to be performed. Both Optoins would be constructed in accordance with standard engineering and CBC requirements to prevent damage related to erosion. Vegetation and irrigation design for on-site graded slopes would be based on recommendations from a qualified landscape architect. Additionally, Conditions of Approval and best management practices to control site runoff and erosion during construction are included as part of Option A and Option B in accordance with current stormwater management practices.	Both Options are consistent with this goal.

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City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		Furthermore, implementation of mitigation measure MM-Geo-1 would require a detailed, site-specific subsurface geotechnical study to be performed prior to construction, consistent with the Del Mar Conditions of Approval.	
Policy III-10	Minimize damage from runoff from all projects within the City by: a. Ensuring that storm drains are designed and provided in such a manner to carry the entire amount of intercepted storm runoff estimated to occur during a storm having a return period of ten years; b. Ensuring the provision of adequate storm drain inlet capacity for the anticipated storm runoff from developed areas within the identified watersheds of San Dieguito and Los Penasquitos Lagoons. c. Ensuring that new development is accompanied by the provision of drainage control measures which control and direct storm flow runoff into existing storm drain systems or into natural drainage courses when approved by the City Engineer and provide new storm drains as necessary to protect from unrestricted flows and runoff. d. Applying the grading, erosion and sedimentation control regulations of the Lagoon Overlay Zone and the BSC Overlay Zone of Chapter VI of this Land Use Plan to those projects located within such overlay zones. In addition, the City shall continue the design and implementation of a comprehensive storm drain system using existing and new measures to assure that the combination of storm drain system capacity and allowable street overflow would adequately carry runoff from a 50-year frequency storm without damaging adjacent property or coastal bluff areas.	Storm runoff from both Options would be collected and routed through a bio-retention basin, prior to discharge to a new storm drain pipe that would connect to an existing storm drain on the south side of San Dieguito Drive. The sizing of the storm drain system, including the inlets, bio-retention basin and all storm drain lines would provide adequate capacity for runoff from site development. In addition, the project site is located within the Lagoon Overlay Zone and the BSC Overlay Zone. The grading, erosion, and sedimentation control regulations associated with those Overlay Zones would be applied to the development without modification.	Both Options are consistent with this policy.
Goal III-D	Minimize risks to life and property associated with flooding and flood waters.	In developing the regulations in the WDMSP document, consideration was given to planning for future flood hazard avoidance to minimize risks to life and property associated	Both Options are consistent with this goal.

Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		with flooding and flood waters. Based on recent experience in other communities where flooding has exceeded projected levels, and acknowledging the potential for future sea level rise, a safety factor was used of 2 feet above base flood elevation as the criteria for structures to be located on podium construction. The WDMSP document includes provisions for development consistent with the Flood Plain Overlay regulations, including protection for all habitable spaces, which must be at or above the base flood elevation. Structures being built on-grade at the corner adjacent to the intersection would be located at the base flood elevation, to ensure flood hazard avoidance, while balancing the community interest in limiting height of structures closest to intersection. The eastern portion of the project site is located within a 100-year flood hazard area and floodplain, and is within the City's Floodplain Overlay Zone. Both Options would include grading to raise the elevation of the eastern portion of the site to 1 foot above the base flood elevation of 18 feet above mean sea level. Both Options would also be required to obtain a Floodplain Development Permit from the City, which would allow the property owner to obtain an Elevation Certificate from the Federal Emergency Management Agency as a condition of approval. The Elevation Certificate would verify that the project site is elevated to above the 100-year base flood elevation. Therefore, Option A and Option B would not expose people or property to water-related hazards such as flooding.	
Policy III-11	Enhance public safety within the San Dieguito River Floodway by: a. Prohibiting the construction of permanent structures on the placement of fill on either a temporary or permanent basis	Neither Option is located in the San Dieguito River Floodway. They are both located just outside of the Floodway Zone, and portions of the project site are located within the Floodplain	Both Options are consistent with this policy.

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	within designated floodway (FW) areas. b. Prohibiting uses in the floodway which would constitute an unreasonable, unnecessary, undesirable, or dangerous impediment to the flow of floodwaters, or which would cause a cumulative increase in the water surface elevation of the base flood of more than one foot at any point. c. Requiring proposed development to be located so as to eliminate the need for protective devices such as seawalls, riprap, retaining walls, or other flood control devices.	Overlay Zone. Both Options include provisions for development consistent with the Floodplain Overlay regulations. This includes protection for all habitable spaces, which must be at or above the BFE. In developing the regulations for the Options, consideration was given to planning for future flood hazard avoidance. A safety factor was used of 2 feet above base flood elevation and for structures to be located on podium construction. Structures to be built on-grade at the corner adjacent to the intersection would be located at the BFE to ensure flood hazard avoidance. All structures, including the parking structure that would be constructed partially below ground, would be maintained above the floodplain areas.	
Policy III-12	Ensure that the development of real property which is subject to floodwaters will not obstruct flood flow; will not create a hazard to life, health, safety, or the general welfare; will reduce the need for the construction of flood control facilities that would be required if unregulated development occurs; and will minimize the cost of flood insurance to Del Mar residents. The following Floodplain (FP) Overlay Zone policies shall be applied to all applications for a Floodplain Development Permit. A Floodplain Development Permit shall be required for any new construction or substantial improvement to existing structures within the FP Overlay Zone designated on Figure III-F. This overlay zone incorporates floodplain areas designated on the Federal Insurance Rate Map (FIRM) for the area as prepared by the Federal Emergency Management Agency and updated in 1986. That map is included as Figure 111-E. Applications for Floodplain Development Permits shall be reviewed for consistency with the following requirements to be assured that new development will: a. Be anchored to prevent flotation, collapse, or lateral	Development under both Options is required to comply with all of the listed Floodplain (FP) Overlay Zone policies, which shall be verified through design plans prior to issuance of a Floodplain Development Permit.	Both Options are consistent with this policy.

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy; b. Be constructed with materials and utility equipment resistant to flood damage; c. Use methods and practices that minimize flood damage; d. Have the lowest floor (including basement) of any residential structure elevated to or above the base flood elevation; e. Have the lowest floor (including basement) of any nonresidential structure elevated to or above the base flood level or, together with attendant utility and sanitary facilities, be flood-proofed below the base flood level to the extent that the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, as certified by a registered professional engineer or architect; f. When located in an area of shallow flooding (Zones AO and VO on the community's FIRM), have the lowest floor (including basement) elevated to or above the depth number indicated on the most current FIRM; or if there is no depth number on the most current FIRM, be elevated at least two feet above the highest adjacent grade. As an alternative, nonresidential structures, together with attendant utility and sanitary facilities, may be flood proofed to that level as specified in subsection "e" above; g. When located in Zones AO and AH on the FIRM, have adequate drainage paths around structures situated on sloping ground, to guide floodwaters around and away from said structures; h. Where a non-residential structure is to be flood-proofed, have the design and methods of construction in accordance with accepted standards of practice for flood-proofing or		

Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	include the specific elevation in relation to mean sea level to which such structures are flood-proofed; i. Have all new and replacement water supply and sanitary sewage systems designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters; j. Have on-side waste disposal systems located to avoid impairment to them, or contamination from them, during flooding; k. Have all electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. l. Have all fully enclosed areas below the lowest floor that are subject to flooding designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters with designs certified by a registered professional engineer or architect; or have at least two openings no more than one foot above grade with a total net area of at least one square inch per square foot of flooded area. m. Not require the construction of flood protective works, including, but not limited to, artificial flood channels, revetments or levees.		
Goal IV-A	Provide physical and visual access to coastal recreation areas for all segments of the population without creating a public safety concern, overburdening the City's public improvements, degrading the City's natural resources, or causing substantial adverse impacts to adjacent private properties.	The project site is not adjacent to the shoreline. Development in accordance with the WDMSP documents would not interfere with any existing or potential public access to nearby coastal recreation areas. Both Options would include circulation elements designed to promote public access to the River Path Del Mar, the Boardwalk, and the Lagoon Trail, which are areas of open space that provide pedestrian	Both Options are consistent with this goal.

Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		access along the San Dieguito River and Lagoon. There are public sidewalks and trail opportunities in the immediate project area. To enhance public access, the project proponent has made a contribution through a development agreement toward River Path Del Mar, which is a segment of the San Dieguito segment of the Scenic Loop Trail. Development of the structures is limited to disturbed areas of a vacant project site and will not degrade the wetland and coastal bluff areas that will be preserved in open space on the property. The proposed development is located in a manner that is consistent with development patterns in the area, which includes residential homes stepping gradually up this hillside, and the overall form, scale and character of the bluff/ridge landform would be retained under both Options.	
Goal IV-B	Give priority to pedestrian and bicycle traffic as opposed to automobile traffic through application of the following policies and pursue the increased use of alternate transportation modes to regionally significant areas within Del Mar. Examples of "alternate transportation modes" include: bicycle, pedestrian, bus, shuttle service, and railroad.	Neither Option would change or affect the existing bikeways along the project frontage of Jimmy Durante Boulevard. Bicycle amenities are required for future site development including storage areas for resident bicycles, and connection points to the existing public bikeways, per standards of the WDMSP documents. Both Options would provide for a residential neighborhood that minimizes the impact of traffic by creating a neighborhood with pedestrian linkages and walkability to trails, parks, beaches, businesses, and restaurants within the community. Both Options are designed to be pedestrian/cyclist friendly; pedestrians and cyclists would have a variety of access points. In addition to the parking structure ramp, an additional pedestrian/cyclist entry point is designed for San Dieguito Drive. A stepped central pedestrian/cyclist access point is	Both Options are consistent with this goal.

Table 2
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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		designed at the center of project site on Jimmy Durante Boulevard. This entry would serve as the main pedestrian entry point to the neighborhood with its centralized positioning and entry surrounded by trellis works and landscaping. Two additional pedestrian/cyclist entry points would be provided at each end of the project site along Jimmy Durante Boulevard. The western-most entry point would provide access to the walking route to the Plaza Del Mar and downtown area. The eastern-most pedestrian/cyclist entry would provide access to the San Dieguito Lagoon and riverside strolling opportunities.	
Policy IV-15	Retain and maintain existing bikeways including those along Coast Boulevard, Camino del Mar, Jimmy Durante Boulevard and Via de la Valle.	Neither Option would change or affect the existing bikeways along the project frontage of Jimmy Durante Boulevard. Bicycle amenities are required for future site development including storage areas for resident bicycles, and connection points to the existing public bikeways, per standards of the Specific Plan. Both Options are designed to be pedestrian/cyclist friendly; pedestrians and cyclists would have a variety of access points. In addition to the parking structure ramp, an additional pedestrian/cyclist entry point is designed on San Dieguito Drive. A stepped central pedestrian/cyclist access point is designed at the center of proposed project site on Jimmy Durante Boulevard. This entry would serve as the main pedestrian entry point to the neighborhood with its centralized positioning and entry surrounded by trellis works and landscaping. Two additional pedestrian/cyclist entry points would be provided at each end of the site along Jimmy Durante Boulevard. The western-most entry point would provide access to the walking route to Del Mar Plaza and the downtown area. The eastern-most pedestrian/cyclist entry	Both Options are consistent with this policy.

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		would provide access to the San Dieguito Lagoon and riverside strolling opportunities. The project does not propose removal of any existing bikeways.	
Policy IV-19	The improvement or establishment of alternative transportation modes shall be designed to assure protection of sensitive resources and the retention of the small-town scenic qualities of Del Mar.	Refer to Goal IV-B.	Both Options are consistent with this policy.
Goal IV-C	Preserve existing views and view corridors from public vantage points to the maximum extent possible without preventing reasonable use of private property.	Both Options would change existing views of the project site. Instead of a vacant, relatively flat site with no trees and an ascending artificial plateau of dirt, the passing motorist or pedestrian would view a mix of coastal-inspired architecture varied in finishes, colors, and materials past a perimeter wall and native landscaping. Neither Option would necessitate removal of existing bluffs, and all proposed residential development would occur on previously disturbed slopes and preserve natural, undisturbed bluffs on site. Since the project site is located in an area that is bounded by existing urban development, views of the San Dieguito River, Lagoon from Jimmy Durante Boulevard would not be affected, and the Options' architectural features and landscape plan would contribute to the pleasing visual character envisioned along Jimmy Durante Boulevard. The project site does not provide public views to the ocean. However, there are public views of the undisturbed coastal bluffs on the northeastern portion of the site, which comprise part of the overall background visible from and across the San Dieguito River. These existing views would be retained from and across the San Dieguito River. These bluff areas can also be seen from the streets approaching the site from the north and west. The toe of the bluff area would be preserved in open space in accordance with the WDMSP	Both Options are consistent with this policy.

Table 2
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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		document. The development footprint of the residential structures would be limited to the areas of the site that have been previously graded and disturbed. Both Options provide guidelines and standards for implementation, including a maximum building height of 26 feet above the established grade. With this maximum height, no view corridors to the San Dieguito River or the coastal bluffs would be affected. The project site does not provide public views to the ocean. However, there are public views of the undisturbed coastal bluffs on the northeastern portion of the site, which comprise part of the overall background visible from and across the San Dieguito River. These existing views would be retained from and across the San Dieguito River. These bluff areas can also be seen from the streets approaching the site from the north and west. The toe of the bluff area would be preserved as open space in accordance with the WDMSP documents.	
Policy IV-26	Retain and enhance the views of San Dieguito Lagoon along Jimmy Durante Boulevard and San Dieguito Drive through the application of scenic view easements and related view preservation restrictions for any development proposals located along the sides of such roadways within scenic view corridors.	Refer to Goal IV-C.	Both Options are consistent with this policy.
Policy IV-27	Continue to implement the process of design review for new construction projects in order to preserve views of community-wide importance and enhance the small-town village atmosphere of Del Mar.	Development on the project site shall be subject to compliance with the applicable standards of review and review processes contained in the Del Mar Municipal Code Chapter 23.08, the Del Mar Design Review Ordinance, and any amendments thereto. In addition to compliance with the Design Review Ordinance, development of the project shall be in compliance with the Design Guidelines in Chapter 6 of the WDMSP documents. The Design Guidelines include a maximum building height of 26 feet above the established	Both Options are consistent with this policy.

Table 2
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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		grade. Therefore, both Options would be subject to a process of design review to ensure that the implementation of either Optionwould be consistent with the design guidelines and standards.	
Policy IV-28	In order to protect the scenic resources of the City, no roof top signs shall be allowed. Freestanding monument signs shall be allowed but shall be limited to a maximum height of three feet in cases where front-yard buildings setbacks of less than 20 feet are provided and 8 feet in cases where front yard building setbacks of 20 feet or greater are provided. Freestanding pole or roof signs are not permitted. In addition, all new development or redevelopment shall provide a minimum of 15% landscape coverage for commercial sites and 30% landscape coverage for residential sites.	The Options' design guidelines state that identification may be provided at the project driveway entrance. This may be provided on monument signage in accordance with the provisions of Del Mar Municipal Code, Chapter 30.84, including verification that adequate vehicular and pedestrian sight distance is maintained. The WDMSPs landscape design guidelines establish regulations and general requirements for project landscaping. The specific size and planting specifications on final landscape plans will be subject to City review.	Both Options include a Local Coastal Amendment in order to be consistent with this policy.
Policy IV-30	The City shall apply the following Off-Street Parking Regulations to new projects and redevelopment projects to assure that the parking needs generated by new development are provided on site. Dwelling Units: (b) Multiple-family 1) For each studio or one bedroom unit a. Garage parking for one automobile. 2) For each two or three bedroom unit b. Garage parking for one automobile with on-site parking for one additional automobile, or garage parking for two automobiles.	Both Options' parking standards implement these Off-Street Parking Regulations, with the addition of requirements for guest parking. All required parking spaces are to be within the parking garage structure, to include a cumulative total for residential units within the project as follows: • Studio or 1 Bedroom Unit 1 space per unit • 2 or 3 Bedroom Unit 2 spaces per unit • 4 or more Bedroom Unit 3 spaces per unit • Guest Parking (Option A) 0.25 space per unit • Guest Parking (Option B) 0.50 space per unit	Both Options are consistent with this policy.

Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	3) For each four or more bedroom unit c. Garage parking for two automobiles with additional on-site parking for one automobile, or garage parking for three automobiles.	Both Options would provide one stall for each studio and one-bedroom unit, and two stalls for each two-bedroom and three-bedroom unit. Additionally, Option A would provide guest parking stalls at a ratio of one stall per four units and Option B would provide guest parking stalls at a ratio of one stall per two units. Option A allows for tandem parking and Option B does not.	
Goal V-A	It is the goal of the City to provide a system of public parks and recreational facilities that will support the year-round needs of both residents and visitors to the area. The parks and recreation system shall encompass a full range of activities for people of all ages, physical conditions, and socio-economic situations. The Park and Recreation System shall closely interrelate with other recreation Facilities and areas within the region and provide for outdoor recreational opportunities that are compatible with the unique character of the City and the sensitive habitat it contains.	The project site is located in the immediate vicinity of trails along the San Dieguito River shoreline. There are a number of trails and recreational amenities that exist and/or are being planned in the project area, and construction of either Option would not disrupt or prevent public access to any of the recreational facilities within the City on a short-term or long-term horizon because the location of either Option would not interfere with access routes to these facilities. The direct population growth induced by Option A (99 people) or Option B (78 people) would only minimally increase the use of regional parks and other recreational facilities, and available parkland plus planned parkland is anticipated to accommodate the population increase under either Option without resulting in deterioration of facilities. Both Options also include additional pedestrian and cyclist linkages to recreational amenities.	Both Options are consistent with this goal.
Policy V-6	Encourage private recreational uses which supplement public recreation areas.	Both Options would provide recreational amenities such as a pool, spa, lounge, and recreation area for use by residents. The recreation area is specifically sited to provide for an aesthetically pleasing vista to the project from the intersection of Jimmy Durante Boulevard and San Dieguito Drive. The single-story building that would house the recreation room was sized to enhance and support the view to the existing sand stone bluff farther along San Dieguito Drive, and would serve as a gathering point with an attractive view over the pool, spa, and lounge area.	Both Options are consistent with this policy.

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City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
Goal VI-A	Preserve Del Mar's steep sloping hillsides and downstream resources.	Sensitive undisturbed bluffs are designated in the WDMSP documents as permanent open space. Development would occur on a disturbed site, specifically on previously disturbed slopes. Construction would involve grading of disturbed slopes; however, both Options would preserve natural and previously undisturbed bluffs on site, and be required to have approval through a Conditional Use Permit, Coastal Development Permit, Design Review Board Permit, and Land Conservation Permit. Runoff from the developed areas of site would be into new, onsite storm drain pipes and drainage systems, adequately sized to accommodate the flows. Site storm runoff would be directed into a bio-retention basin prior to discharge to an existing public storm drain in the area. A hydrology study and preliminary drainage design plans would be prepared by a licensed civil engineer, and all reports and plans are subject to City Engineer review and approval. Therefore, downstream resources would be preserved and protected.	Both Options are consistent with this goal.
Policy VI-1	Preserve and protect sensitive slopes and associated bluff and canyon areas and, their downstream resources through the application of the following BSC Overlay Zone Regulations. C. Allowable Uses. Unless specified herein, allowable uses in the BSC Overlay Zone shall be those uses and accessory uses allowed by the underlying land use designation and zone specified in Figure II-A, subject to the regulations and restrictions of this Land Use Plan.	The underlying land use designation and zone are being modified with this Local Coastal Program Amendment to allow for multi-family residential uses rather than Professional Commercial uses on the project site. Sensitive undisturbed bluff and wetland areas onsite are designated in the project site as permanent open space. The project site is within the City's BSC Overlay Zone, and the grading, erosion, and sedimentation control regulations associated with those Overlay Zones would be applied to the development of the project without modification. Development would occur on a disturbed site, specifically on previously disturbed slopes. Construction would involve grading of disturbed slopes, which would have the potential	Both Options are consistent with this policy.

Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		to result in erosion, changes in topography, and/or unstable soil conditions. However, both Options would preserve natural and previously undisturbed bluffs on site, and be required to have approval through a Coastal Development Permit, Design Review Board Permit, and Land Conservation Permit.	
Goal VI-1 D.	In addition to the submittal requirements for all other permits/authorizations required, application submittals for projects located within the BSC Overlay Zone shall include, at a minimum: 1. A slope analysis prepared by a licensed civil engineer which indicated the existing topography of the site shown in (minimum) two foot interval contours and an indication, through shading or other visible means, the areas of the property comprised of slopes 25% grade or greater. Said computation of slope gradient shall be calculated between individual contour lines, rather than by averaging across multiple contour lines. 2. A calculation of the areas, expressed in square feet, or acres as appropriate, of each contiguous area of slopes of 25% grade or greater and the total area in such slopes as determined through the requirements of the slope analysis per subsection D-1 above. 3. A geological reconnaissance survey and preliminary engineering geology report. Said report shall include the findings of a subsurface investigation of those areas of the site wherein development is proposed and shall be sufficient to identify the nature and magnitude of any unstable conditions in such areas. The report shall also include any alternatives or mitigation measures necessary to offset unstable conditions or hazards.	Both Options would provide all required submittal requirements for the BSC Overlay Zone permits/authorizations.	Both Options are consistent with this goal.

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City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	Unless otherwise required by the Planning Director, these submittal requirements shall not apply to new or redevelopment projects which clearly do not involve any potential for new grading, construction, or expansion of the footprint of existing structures into steep slope areas as defined herein or into the steep slope setback areas required pursuant to the provisions of this Land Use Plan. When waived by the Planning Director, the requirement for provision of this information may be subsequently reinstated by the responsible discretionary agency reviewing the project, at the time of such review.		
VI-1 E.	Within the BSC Overlay Zone, no building, improvement, structure, or portion thereof shall be erected, constructed, converted, established, altered or enlarged, nor shall any lot or premises be excavated or graded for any purpose, including but not limited to in-ground structures such as swimming pools, or spas, or cleared of vegetation, unless in accordance with this Land Use Plan and the following: 1. In order to preserve viewsheds and the open space appearance of the area from a distance, no structure shall exceed a height of 14 feet as measured pursuant to the provisions of the Del Mar Municipal Code unless it is found that scenic viewsheds and the open space appearance of the area will be less affected by structures of a greater height. 2. New development shall be sited and designed to minimize grading and alteration of natural topography and shall be subservient to and complement the natural topography of the area. Protection of the natural values of the surrounding topography and landscape shall take precedence over architectural values. 3. Construction, grading or other encroachment of any kind on substantial slopes exceeding twenty-five percent grade, or within twenty feet of the top and ten feet of the bottom of	1. The project site includes an area with undisturbed, scenic sandstone bluffs on the northeastern portion of the site that are visible from areas to the north, and comprise part of the overall background view shed from and across the San Dieguito River. The location of the development footprint designated in accordance with the WDMSP documents would preserve views of these bluffs along with the character and the open space appearance of the area from a distance. The undisturbed bluffs can also be seen travelling south on Jimmy Durante Blvd. as one approaches the intersection of San Dieguito Drive. These bluff formations, and the small area of wetland marsh vegetation at the toe of this bluff area, would be preserved in permanent open space in accordance with the WDMSP documents. The buildings at the intersection corner are limited to a single story, to have a lower scale and additional visual openness at this intersection. The project allows for additional height above 14	Both Options include a Local Coastal Plan Amendment in order to be consistent with this policy.

Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	substantial slopes exceeding twenty-five percent grade or the construction of structures which overhang such slopes or slope setbacks, shall be prohibited, except when specific encroachments are allowed in accordance with the following policies. For purposes of this section, "substantial slopes" shall mean: Any areas of slopes with a gradient of 25% or greater on a site where the total elevation differential within such slope areas themselves is 20 feet or more, or where such slopes on site adjoin contiguous slopes of 25% or greater on adjoining property and together involve an elevation differential of 20 feet or more: "Substantial slopes" shall include smaller, isolated pockets of area with less than 25% grade when surrounded by contiguous "substantial slopes" located either entirely or partially on site. 4. Encroachments within the slope areas and steep slope setbacks specified above shall be allowed only when it is found that there is no feasible alternative siting or design which eliminates or substantially reduces the need for such construction or grading, and it is found that the bulk and scale of the proposed structure have been minimized to the greatest extent feasible commensurate with preserving the physical characteristics of the site. For purposes of this section, "encroachment" shall constitute any activity which involves grading, construction, placement of structures or materials, paving, removal of native vegetation (including clear-cutting for brush management purposes), or other operation which would render the area incapable of supporting native vegetation or being used as wildlife habitat. Any and all activities regulated through the subsequent paragraphs of this section, with the exception of paragraph 14, shall count toward the total steep slope encroachment allowance for a site. When clear-cutting on	feet, which is needed in order to achieve the affordable housing goals at higher density for this property, and the height measurement from the podium level is necessary to achieve compliance with floodplain safety regulations. The construction of buildings on this site would limit visibility of the slope areas that can currently be seen beyond the vacant property from Jimmy Durante Boulevard. However, this screening effect would exist whether the structures were 14 feet in height or taller, due to the angle of views from the street. 2. While much of the project site has been previously graded, the areas of natural topography onsite are designated by the Specific Plan to be outside any site grading, and left undisturbed and preserved. One of the key considerations for design was to protect the undisturbed sandstone bluff formation near San Dieguito Drive, in a way that retains its visibility. The Site is located along the lower portions of a much larger bluff/ridge formation that extends offsite. Development is located in a manner that is consistent with development patterns in the area, which includes residential homes stepping gradually up this hillside. The overall form, scale and character of the bluff/ridge landform would be retained with either Option. 3. The development footprint would be located within previously disturbed and graded areas of the property. The development area near the slopes is necessary to accommodate the density per the	

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	an existing undeveloped site is required by written order of the Del Mar Fire Department to protect an existing principal structure on an adjacent site, an exception to the encroachment. Allowances, not to exceed 30 feet from said principal structure, may be allowed… 5. Run-off from impervious surfaces shall be discharged directly into existing or new and adequately designed publicly-owned discharge and drainage systems which can be shown to have sufficient capacity to handle all anticipated drainage flows associated with the proposed project. In the even that no public discharge or drainage systems are available in the immediate vicinity, an alternate system may be allowed if it is found by the Planning Director in consultation with the City Engineer that such alternative will serve the convey such drainage and run-off to a clearly defined legal natural drainage course which can be shown to have adequate capacity to handle all anticipated drainage flows without adverse impact. All design and plans for drainage improvements shall be prepared by a licensed civil engineer and shall be subject to the review and approval of the City Engineer. 6. Construction, irrigation and landscaping shall harmonize with the natural as well as the man-made environment. 7. No primary scenic views or scenic views from public streets, roads or pedestrian trails shall be obstructed, unless it is found that there is no feasible alternative siting which eliminates or significantly reduces the obstruction. In such cases, the bulk and scale of the proposed structure shall be minimized to the greatest extent feasible, commensurate with preserving the physical characteristics of the site. 8. In order to maximize and preserve natural open space, natural landforms and views, projects involving more than	Housing Element, and to provide public benefits associated with the project, including affordable housing, while preserving the most sensitive areas of the site. 4. The bulk and scale of the Options have been minimized with consideration for the density goals for the site, along with the desire to preserve the overall physical characteristics of the site. The location and layout for the units in the slope areas supports the ability to provide both affordable housing units and provide for building separation and character. If these units were eliminated, in order to achieve the density specified by the Housing Element, it would be necessary to add them onto the podium level, which would increase bulk and scale of those buildings structures and creating the appearance of more monolithic structures. 5. Runoff from the developed areas of site would be into new, onsite storm drain pipes and drainage systems, adequately sized to accommodate the flows. Site storm runoff would be directed into a bio-retention basin prior to discharge to an existing public storm drain in the area. A hydrology study and preliminary drainage design plans would be prepared by a licensed civil engineer, and all reports and plans are subject to City Engineer review and approval. 6. The building architectural design uses earthen tones, natural materials, and design elements	

Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	one dwelling unit on a lot shall be clustered on the flatter portions of the site, if determined to be practicable and desirable. "Clustering" in this context shall mean the siting of dwelling units in proximity to each other so as to maximize the amount of undeveloped open space. A clustered project within this overlay zone may disregard existing interior lot lines and is not bound to comply with the minimum lot size, width, depth and setback provisions of the underlying Del Mar Zoning Ordinance. A suitable site plan showing the clustered proposal shall be submitted for subdivisions and multiple unit construction projects in this overlay zone. 9. Temporary and/or permanent erosion control measures shall be provided in order to control erosion both during and after project implementation. Where necessary to minimize sediment from runoff waters draining from the land undergoing development, sediment basins, debris basins, de-silting basins, or silt traps shall be designed and installed to the satisfaction of the City Engineer in conjunction with initial grading operations and maintained by the developer and/or property owner. 10. The removal of native vegetation, when allowed pursuant to the findings required in this policy, shall be limited to the minimal amount necessary to implement projects and shall be indicated on erosion control plans. 11. The protection of areas or vegetation designated for retention in their natural state shall be accomplished through the installation of protective temporary and/or permanent fencing around such designated areas prior to the commencement of grading and/or development activities on site. For protection of designated trees or other major vegetation, said fencing shall be placed so as to protect the root zones of the vegetation to be protected.	found elsewhere in the Del Mar community. Landscape materials use native materials in all interface areas with natural slopes, and naturalized, drought-tolerant plant materials throughout the site. 8. The residential homes of both Options would be located on previously graded and disturbed portions of the property, in order to allow protection of the natural, undisturbed sandstone bluffs and the wetland marsh area at the toe of the bluff slope. While some of these previously graded areas include sloping topography, the overall design of the project accommodates the hillside residential development pattern in the area, preserves views and natural open space resources of the property. 9. Erosion control measures are required by the grading ordinance, and would be implemented at the project site during construction. The bio-retention basin as designed would assist in providing long-term sediment control from the Site. 10. As previously noted, development footprint of both Options are limited to areas of the site that have been previously graded and disturbed. Where vegetation has regrown in those areas, the removal of native vegetation would be limited to the footprint of the development. 11. Protective fencing would be provided during construction activities.	

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	12. All native vegetation approved for removal shall be replaced with drought tolerant, fire retardant, native or naturalizing substitute vegetation of sufficient size and quantity to provide soil stabilization. 13. All private alleys and driveways within the Bluff, Slope and Canyon Overlay Zone shall be designed to follow the natural contours of hillsides so as to minimize cut and fill grading. In an effort to minimize grading, such alleys and driveways may incorporate innovative designs and dimensions subject to the review and approval of the City Engineer. To minimize destruction or damage of significant vegetation, alleys and driveways shall be designed to avoid major trees, with such trees to be retained in traffic islands where necessary. 14. Encroachment into steep slope areas shall be permitted for the construction of, or improvement to, public streets and alleys. Public streets and alleys within the Bluff, Slope and Canyon Overlay Zone shall be designed to follow the natural contours of hillsides so as to minimize cut and fill grading. In an effort to minimize grading, such streets and alleys may incorporate innovative designs and dimensions subject to the review and approval of the City Engineer. To minimize destruction or damage of significant vegetation, streets and alleys shall be designed to avoid major trees, with such trees to be retained in traffic islands where necessary. 15. Paths and trails which provide public access opportunities, shall be encouraged in hillside areas, when designed in such a fashion so as to minimize disturbance of areas of steep slopes and natural vegetation. 16. To protect the visual resources of hillside areas, the City shall encourage the undergrounding of all new utility lines and new utility line extensions for projects within the Bluff, Slope and Canyon Overlay Zone when such	12. The landscape design guidelines establish regulations and general requirements for landscaping. As part of these requirements, it is specified that the Site landscape shall use predominantly drought-tolerant plants, which require minimal irrigation and maintenance. The specific size and planting specifications on final landscape plans would be conformance with this standard. 16. All onsite utility line service extensions for the site development would be installed underground.	

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City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
	undergrounding would not be detrimental to the sensitive hillside areas or to themselves.		
VI-1 F.	All development within the BSC Overlay Zone shall observe the following grading and landscaping policies: 1. All projects involving grading shall be subject to the submittal of an erosion and sedimentation control plan. Said plan shall insure that the project will not result in an increase in peak runoff from the site over the greatest discharge expected during a 10-year, 6-hour frequency storm. Runoff control shall be accomplished by a variety of measures, including but not limited to: on-site catchment basins, detention basins, siltation traps and energy dissipators. Grades should be designed to produce runoff equal to or less than the natural flow expected prior to grading or construction activities, or shall direct any increased flows to improved drainage facilities and/or natural drainage courses, when such facilities or drainage courses are of adequate design and capacity to handle and all discharge and anticipated flows. The required erosion and sedimentation control plan and any proposals to increase flows shall be subject to review and approval of the City Engineer. 2. All erosion control measures shall be subject to detailed maintenance arrangements. Said arrangements shall assure the on-going repair and maintenance of approved control measures to assure continued and effective erosion control. The maintenance and repair of such measures shall be the responsibility of the applicant or their successors in interest. The agreements shall be secured prior to the release of permits and shall be recorded against the deed for the property.	Development within the project site would be required to comply with these policies. No modification in these policies are proposed.	Both Options are consistent with this measure.

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City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

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	3. For projects involving a total or more than 25 cubic yards or cut and/or fill grading operations, no grading shall occur from November 15 to March 31. 4. All grading and cut and fill areas shall be landscaped either during or immediately after construction to prevent erosion and to increase slope stability.		
VI-1 G.	Areas to be retained in their natural state pursuant to the application of these Bluff, Slope and Canyon Regulations shall be subject to conditions to ensure the protection of the designated area(s) from future encroachment, disturbance or degradation. Said conditions shall include the recordation of an open space deed restriction, conservation easement or open space easement to assure protection of the designated area and to serve notice to the property owner, subsequent owners or interested parties of the restrictions in effect on such property.	Natural open space areas to be permanently preserved would be subject to an open space deed restriction, conservation easement or open space easement to assure protection of the designated area.	Both Options are consistent with this goal.
Goal VI-B	Preserve, protect and, where feasible, enhance the wetland areas of Del Mar.	The project site includes a wetland marsh area which would be enhanced by removal of invasives and restoration of additional native species be included as part of the permanent open space associated development, along with a fenced buffer area. Both Options would avoid on-site wetlands, protect them in place, and preserve a 50-foot wetland buffer in between the wetlands and the proposed development. Although the City's Local Coastal Program Implementing Ordinances call for all new development projects located on property that includes wetland habitat to include a continuous wetland buffer of 100 feet, the California Department of Fish and Wildlife found that the proposed 50-foot buffer was adequate because (1) the wetland on site is a small wetland; (2) it does not serve as a wildlife corridor; (3) while the wetland may be hydraulically connected to the San Dieguito River, it is isolated from it by	Both Options are consistent with this goal.

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City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		developed land; and (4) a fence is proposed along the outside perimeter of the buffer. The proposed location for the biofiltration basin under both Options would be located within the 50-foot wetland buffer zone. The biofiltration basin would be a vegetated surface water system that would filter water through vegetation and soil prior to discharge. Water quality treatment will be achieved through filtration, sedimentation, sorption, biochemical processes, and plant uptake. Locating the basin within the buffer is consistent with the Local Coastal Program because it would not in any way compromise buffer performance. Surface planting and management would be consistent with traditional buffer construction and management. The biofiltration basin would also prevent uncontrolled runoff from leaving the project site, which would limit the potential for any adverse effects on downstream resources. In addition, the biofiltration basin would assist in providing long-term sediment control from the project site.	
Policy VI-3	Ensure the protection of the wetlands of the Los Penasquitos Lagoon and San Dieguito Lagoon and their sensitive upland habitat by requiring that all development activities taking place in lagoon and uplands areas, designated on the Lagoon Overlay Zone Map (Figure VI-B), conform to the wetland preservation regulations of this chapter. In addition, the City shall implement the Bluff, Slope and Canyon Overlay Zone regulations of this Land Use Plan to protect sensitive wetland habitat from the impacts of upland development which lies outside of the Lagoon Overlay Zone but within the watershed of the San Dieguito and Los Penasquitos Lagoons.	The project site includes a small Coastal Brackish Marsh, a wetland habitat that contains one sensitive plant species (Southwestern Spiny Rush), but otherwise has a low diversity of vegetation species. This wetland is proposed to be avoided, protected in place, and buffered from the proposed development by the replacement of the existing parking area with an enhanced 50-foot wetland buffer. This buffer width is considered appropriate at this location given the small size of the wetland; the fact that the existing wetland buffer area is an unvegetated dirt parking lot that would be enhanced with native vegetation; the design of the project would include fencing to limit human access, and has	Both Options are consistent with this policy.

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		an access road and raised podium at the edge of the new buffer providing additional separation between residential and the wetland.	
Policy VI-4	To protect the biological and visual resources of wetland areas, the City shall encourage the undergrounding of all new utility lines and new utility line extensions for projects within the Lagoon Overlay Zone when such undergrounding would not be detrimental to the wetlands or to the sensitive resources located in the upland areas adjacent to such wetlands.	All on-site utility line service extensions for the project would be installed underground and existing power lines that run over the property would be undergrounded as well.	Both Options are consistent with this policy.
Policy VI-6	The viewsheds of the San Dieguito and Los Penasquitos Lagoons shall be preserved and protected through the application of the following criteria into the design of new and redeveloped projects within the viewshed areas of the San Dieguito and Los Penasquitos Lagoons, respectively. a. Compatibility of design with the existing and desired character of the surrounding area; b. Recognition of views, climate and the nature of outside activities in the design of exterior spaces; c. Design of buildings to be subservient to the natural terrain; and d. Consideration of views from the lagoon and the surrounding roadways in the landscape and structure design. The review of projects within the specified viewsheds shall be conditions to ensure continued conformity with the criteria listed herein. Such conditions shall include but are not limited to recorded view corridor easements or restrictions.	The project site is located such that there are no viewsheds to San Dieguito Lagoon. However, there are views of the undisturbed coastal bluffs on the northeastern portion of the site, which comprise part of the overall background visible from and across the San Dieguito River. Based on the building area allowed by the Specific Plan, these existing views would be retained from and across the San Dieguito River. These bluff areas can also be seen from the streets approaching the site from the north and west. There is a small area of wetland marsh vegetation at the toe of this bluff area, and both the undisturbed bluffs and the wetland area would be preserved in open space in accordance with the WDMSP documents. The development footprint of the residential structures under both Options would be limited to the areas of the site that have been previously graded and disturbed. Both Options would be developed on a disturbed site, and specifically on previously disturbed slopes, to create a hillside terraced neighborhood that blends into the adjacent neighborhood while preserving natural and previously undisturbed bluffs and wetlands. Beach colony elements found throughout Del Mar would be incorporated into the design to provide for compatibility with the broader Del Mar	Both Options are consistent with this policy.

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		architectural statement. Furthermore, the 26-foot maximum building height along with the terraced neighborhood would ensure preservation of any views of the bluffs from the San Dieguito River.	
	Wetland Preservation Regulations		
2.	Permitted Uses in Wetland Buffer Areas. Permitted uses in wetland buffer areas shall be limited to: a. Passive recreational access paths and viewpoints within the upland half of the buffer, only when designed to assure no adverse impacts to adjacent wetland areas.	The project site includes a small coastal brackish marsh, a wetland habitat that contains one sensitive plant species (southwestern spiny rush), but otherwise has a low diversity of vegetation species. This wetland is proposed to be avoided, protected in place, and buffered from the proposed development by replacement of the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer. This buffer width is considered appropriate at this location given the small size of the wetland, the fact that the existing wetland buffer area is an unvegetated dirt parking lot that would be enhanced with native vegetation, and the design of both Options would include fencing to limit human access and have an access road (rather than residential units) at the edge of the new buffer to provide additional separation between residential uses and the wetland. The proposed location for the biofiltration basin under both Options would be located within the 50-foot wetland buffer zone. The biofiltration basin would be a vegetated surface water system that would filter water through vegetation and soil prior to discharge. Water quality treatment will be achieved through filtration, sedimentation, sorption, biochemical processes, and plant uptake. Locating the basin within the buffer is consistent with the Local Coastal Program because it would not in any way compromise buffer performance. Surface planting and management would be consistent with traditional buffer construction and	Both Options are consistent with this regulation.

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City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		management. The biofiltration basin would also prevent uncontrolled runoff from leaving the project site, which would limit the potential for any adverse effects on downstream resources. In addition, the biofiltration basin would assist in providing long-term sediment control from the project site.	
5.	Provision of Wetland Buffers: a. To protect wetland areas, all new construction projects which are located on property which includes or lies in proximity to wetland habitat, as shown in Figure V - B, shall include the provision of a continuous wetland buffer. The buffer shall be l00-feet in width with permitted uses in the wetland buffer limited to those cited in Wetland Regulation #3 of this Chapter. The buffer shall be measured landward from the boundary of wetlands as delineated pursuant to the requirements of this chapter. b. A wetland buffer of less than 100 feet in width shall be allowed only when, due to physical constraints such as the size and dimensions of the property, such buffer of a lesser width will protect the resources of the adjacent wetlands, based on site-specific factors. Such factors shall include, but not be limited to, the type and size of the development proposed; mitigation measures provided (such as planting of vegetation or construction of fencing); elevation differentials between the proposed development and wetland boundaries; or other similar factors which will serve to contribute to the purposes of a wetland buffer area. Proposals for mitigation measures for wetland buffers less than 100 feet in width shall be referred to representatives of the California Department of Fish and Game for a recommendation. In no event shall the wetland buffer be less than 50 feet in width.	Refer to Regulation 2, above.	Both Options are consistent with this regulation.

Table 2
City of Del Mar Local Coastal Program – Land Use Plan Consistency Table

Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
6.	Retained Open Space/Conditions of Development. Areas to be retained in or restored to their natural state pursuant to the application of these wetland preservation regulations shall be subject to conditions to ensure the future protection of the designated area(s) from encroachment, disturbance or degradation. Said conditions shall include the recordation of an open space deed restriction, conservation easement or open space easement on wetland buffer areas and an irrevocable offer to dedicate open space easement to assure protection of the designated wetland area and to serve notice to the property owner, subsequent owners or interested parties of the restrictions in effect on such property.	Natural open space areas to be permanently preserved will be subject to an open space deed restriction, conservation easement or open space easement to assure protection of the designated area and subject to conditions to ensure the future protection of the designated area from encroachment, disturbance or degradation.	Both Options are consistent with this measure.
7.	Siting and Construction Practices. All buildings or other improvements proposed to be placed or erected, and all grading activities proposed to be undertaken adjacent to wetland or wetland buffer areas shall be located so as not to contribute to increased sediment loading of the wetland or wetland buffer, cause disturbance to its habitat values, or otherwise impair the functional capacity of the wetland or wetland buffer.	Each of the following measures is required to be incorporated into both Options, and will be documented through conditions of development, with final plan review in accordance with City of Del Mar regulations. 1. The applicant shall provide a grading plan prepared by a registered civil engineer that incorporates runoff and erosion control procedures to be utilized during all phases of project development. 2. The grading plan shall be designed to assure that there will be no increase in the peak runoff rate from the fully developed site over the greatest discharge that would occur from the existing undeveloped site as a result of the intensity of rainfall expected during the six-hour, ten-year design storm. 3. Runoff control shall be accomplished by establishing on-site or at suitable locations nearby, catchment basins, detention basins, and siltation traps along with energy dissipating measures at the terminus of storm drains, or other similar measures	Both Options are consistent with this measure.

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		of equal or greater effectiveness. 4. Sediment basins (debris basins, desilting basins, or silt traps) shall be installed in conjunction with the initial grading operations and maintained through the development process as necessary to remove sediment from runoff waters draining from the land undergoing development. Areas disturbed but not completed prior to November 15, including graded pads and stockpiles, shall be suitably prepared to prevent excessive soil loss during the rainy season. 5. The use of vegetation as a means to stabilize soils and control site erosion shall be accomplished pursuant to plans and specifications prepared by a licensed landscape architect or other qualified professional. 6. All graded slopes shall be stabilized prior to November 15, by the planting of vegetation. Vegetative erosion control may include but is not limited to, seeding, mulching, fertilization, and irrigation within sufficient time prior to November 15 to provide landscape coverage that is adequate to achieve the provisions of this policy. 7. For projects involving a total of more than 25 cubic yards of cut and/or fill grading operations, no grading shall occur from November 15 to March 31. 8. Temporary erosion control measures, shall include the use of berms, interceptor ditches, sandbagging, hay bales, filtered inlets, debris basins, silt traps, or other similar means of equal or greater effectiveness.	

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8.	Drainage and Erosion Control. All development activities on project sites within the Lagoon Overlay Zone shall be subject to conditions for the provision of measures to minimize and control runoff and the associated erosion and sedimentation of downstream areas. Runoff from developed sites shall be either directed towards existing storm drain systems or retained on-site in settling ponds or other drainage/erosion control measures.	Refer to 7, above.	Both Options are consistent with this measure.
9.	Where the provision of erosion and/or drainage control measures is required pursuant to the policies of this section, the responsibility for maintenance for such measures shall rest with the applicant unless such responsibility is assumed by another agency or party found acceptable by the Planning Director. The responsibility for maintenance and a detailed maintenance program shall be included in an agreement(s) recorded against the deed for the property. The arrangements shall provide for the on-going repair and maintenance of approved control measures to assure continued effective erosion/drainage control. The agreements, and any associated cash deposits, bonding or letters of credit deemed necessary to assure on-going maintenance shall be secured prior to the release of permits	Maintenance of all erosion and drainage control measures would be in accordance with the policies of this section, and documented in the required agreement(s) with the applicant.	Both Options are consistent with this measure.
10.	Runoff from the projects within the Lagoon Overlay Zone shall be controlled and directed to ensure that neither toxic materials nor excess nutrients flow into lagoon areas.	Site runoff from the project site would be controlled through the new storm drain system on site, which would incorporate filtration for stormwater from parking areas, and a bio-retention basin for runoff prior to discharge to the existing storm drain.	Both Options are consistent with this measure.
11.	New or redevelopment projects within the Lagoon Overlay Zone shall include the retention of the maximum amount of native vegetation on the site. Revegetation of sites within the Lagoon Overlay Zone shall include the use of non-invasive, drought tolerant species native to the San Diego coastal region and which are compatible with adjacent wetland habitat species. Landscape plans including their associated berms, planters and fences shall also be designed to minimize the disruption of view corridors from public roadways and parks.	The landscape design guidelines establish regulations and general requirements for landscaping. As part of these requirements, it is specified that the site landscape use predominantly drought-tolerant plants that require minimal irrigation and maintenance. Plant species for distinct areas of the site are listed in the WDMSP documents.	Both Options are consistent with this measure.

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		The interface with natural open space areas is specifically addressed by the WDMSP guidelines. For the coastal brackish marsh area at the southeast corner of the site, invasive plant material within this existing wetland would be removed and appropriate native plant material would be planted to enhance the wetland area. Within the remaining slope areas, invasive plant material would be removed and replanting would include appropriate native plant material, including southern coastal bluff scrub that may be accented with Torrey pine trees.	
Policy VI-4	To protect the biological and visual resources of wetland areas, the City shall encourage the undergrounding of all new utility lines and new utility line extensions for projects within the Lagoon Overlay Zone when such undergrounding would not be detrimental to the wetlands or to the sensitive resources located in the upland areas adjacent to such wetlands.	All on-site utility line service extensions for the site would be installed underground and existing power lines that run over the property would be undergrounded as well.	Both Options are consistent with this measure.
Coastal Act Section 300001.5			
Article 2	Public Access	The project site is located at the southeastern corner of the intersection of Jimmy Durante Boulevard and San Dieguito Drive, which is not adjacent to the shoreline. Development in accordance with the WDMSP documents would not interfere with any existing or potential public access to the ocean (Section 30211). Adequate access exists nearby (Section 30212). There are public sidewalks and trail opportunities in the immediate project area. In addition, the developer has made a contribution through a development agreement toward River Path Del Mar to enhance public access in the area that exists directly across the street from this property. Development in accordance with the WDMSP documents complies with Sections 301210 through 30214.	Both Options are consistent with this article.

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Article 3	Recreation	Sections 30220 through 30224 do not apply to either Option. The project site does not include areas suited for water-oriented recreational activities, oceanfront land, upland areas necessary to support coastal recreational uses, or opportunities for facilities that would increase recreational boating use. The site has existing approvals for general commercial (office) development, which has no higher priority than the proposed residential use. Both Options provide for public benefits through its affordable housing provisions.	Both Options are consistent with this article.
Article 4	Marine Environment	The project site includes a very small area (0.10 acre) of coastal brackish marsh, a wetland habitat that contains a sensitive plant species (southwestern spiny rush). This wetland is proposed to be avoided, protected in place, and buffered from the proposed development by replacement of the existing unvegetated dirt parking lot with an enhanced 50-foot wetland buffer. A permanent fence with signage would be erected along the edge of the wetland buffer. Invasive vegetation species within this wetland area would be removed, and the area would be replanted using compatible natives to further enhance the wetland area (Section 30230). The quality of this coastal wetlands and its opportunity for biological productivity would be enhanced through project implementation. Runoff from the project site would be controlled and directed into a bioswale within the wetland buffer area adjacent to the marsh. The marsh itself would continue to function and flow as it currently does. No runoff from the project would be directed into the marsh, and the buffer area would be revegetated with compatible native species (Section 30231).	Both Options are consistent with this article.

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		Sections 30232 through 30236 do not apply, as there would be no development or transportation of crude oil, gas, petroleum products, or hazardous substances; no diking, filling, or dredging of open coastal waters, wetlands, estuaries, or lakes; no effect on commercial fishing and recreational boating industries; no construction that alters natural shoreline processes; and no channelizations, dams, or other substantial alterations of rivers and streams	
Article 5	Land Resources	To the extent that environmentally sensitive habitat areas are identified on the project site, both Options would provide for protection of environmentally sensitive habitat areas against any significant disruption of habitat values (Section 30240). However, no environmentally sensitive habitat areas have been identified onsite. Development in areas adjacent to environmentally sensitive habitat areas would be sited and designed to prevent impacts that would significantly degrade those areas, and would be compatible with the continuance of those habitat areas. Both Options require the provision of a buffer adjacent to the existing marsh habitat with control of stormwater runoff, water quality, and siltation effects, where no buffer currently exists, and would limit the potential for impact to the habitat areas on site. Sections 30241 through 30243 do not apply, as the project site does not have timberlands, prime agricultural land, or existing agricultural uses, and is not suitable for agricultural use. There are no known archaeological or paleontological resources on the project site as identified by the State Historic Preservation Officer. In recognition that many properties in coastal areas have the potential for subsurface	Both Options are consistent with this article.

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		archaeological resources, a program of monitoring during grading activities would be implemented for the project site (Section 30244).	
Article 6	Development	The project site is located within, and contiguous with, existing developed areas able to accommodate it with adequate public services and where it would not have significant adverse effects, either individually or cumulatively, on coastal resources (Section 30250). The project site includes an area with undisturbed, scenic sandstone bluffs on the northeastern portion of the site that are visible from areas to the north, and comprise part of the overall background viewshed from and across the San Dieguito River. The location of the development footprint designated in accordance with the WDMSP documents would preserve the scenic and visual qualities of these bluffs, along with the character and the open space appearance of the area from a distance (Section 30251). The undisturbed bluffs can also be seen travelling south on Jimmy Durante Boulevard approaching the intersection of San Dieguito Drive. These bluff formations, and the small area of wetland marsh vegetation at the toe of this bluff area, would be preserved as permanent open space in accordance with the WDMSP documents. The buildings at this intersection would be a single story and have a lower scale and additional visual openness. Both Options define a development footprint to accommodate the density per the Housing Element; provide public benefits associated with the project, including affordable housing; and to preserve the most sensitive areas of the site. The development would be located within previously disturbed	Both Options are consistent with this article.

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		and graded areas. Both Options would allow for a modified height measurement from the podium level, necessary to achieve compliance with floodplain safety regulations. The resulting building height would not affect views of the ocean or scenic coastal areas, but would allow for the square footage needed to achieve the affordable housing goals at higher density for this property. Although much of the project site has been previously graded, the areas of natural topography are designated by the WDMSP documents to be outside of any site grading, and to be left undisturbed and preserved. One of the key considerations for the project design was to protect the undisturbed sandstone bluff formation near San Dieguito Drive in a way that retains its visibility. The site is located along the lower portions of a much larger bluff/ridge formation that extends off site. The overall form, scale, and character of the bluff/ridge landform would be retained with either Option. Both Options would maintain and enhance public access to the coast by providing non-automobile circulation and amenities for pedestrians and cyclists within the development, including connectivity to existing, adjacent sidewalks and bicycle routes that link with trails and other coastal access. Both Options require adequate parking facilities on site for residents and guests, and incorporates on-site recreational facilities to serve the recreational needs of residents (Section 30252).	

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		The project provides standards to minimize the potential for adverse impacts (Section 30253): (a) The project site is situated partially within the 100-year floodplain of the San Dieguito River. To minimize risks to life and property in these areas, the WDMSP regulations were established for flood hazard avoidance. Based on recent experience in other communities where flooding has exceeded projected levels, and acknowledging the potential for future sea level rise, a safety factor was used of 2 feet above base flood elevation as the criteria for structures to be located on podium construction. Structures being built on-grade at the corner adjacent to the intersection would be located at the base flood elevation to ensure flood hazard avoidance while balancing the community interest in minimizing building height at this corner. (b) Both Options would ensure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area, or in any way require construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The residential homes of the project would be located on previously graded and disturbed portions of the project site to protect the natural, undisturbed sandstone bluffs and the wetland marsh area at the toe of the bluff slope. (c) Both Options would be consistent with any requirements imposed by an air pollution control district or the California Air Resources Board.	

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Number	Goal or Policy*	Project Consistency	Consistent or Inconsistent?
		(d) The construction and amenities of both Options were designed to minimize energy consumption and vehicle miles traveled. The project construction would comply with CalGreen standards and energy efficient components, would locate new homes in an infill location in proximity to the Del Mar Village area and recreational amenities, and would provide pedestrian and cyclist amenities for future residents to encourage non-vehicular transportation. (e) The project site is not a visitor destination points for recreational uses. Sections 30254 through 30255 do not apply, as the project site does not involve public works facilities, sewage treatment plant development, or a coastal-dependent development.	
Article 7	Industrial Development	Sections 30260 through 30265.5 do not apply, as neither Option would involve any industrial development.	This article is not applicable to either Optoin.

* **Source:** City of Del Mar. 2001. City of Del Mar Local Coastal Program Implementing Ordinances. Certified by the California Coastal Commission on September 11, 2001. http://www.delmar.ca.us/DocumentCenter/View/262.

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