Partially Recirculated Draft Environmental Impact Report

Carlton Oaks Country Club and Resort Project

Comparsion Draft *(All Revisions Incorporated in ~~Strikeout~~/Double Underline)*

JULY 2026

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ES Executive Summary

ES.1 Introduction

This Executive Summary provides an overview of the Partially Recirculated Draft Environmental Impact Report (EIR) prepared for the proposed Carlton Oaks Country Club and Resort Project (project), prepared in compliance with the California Environmental Quality Act (CEQA). As detailed in Section 1.1, Partial Recirculation, of Chapter 1, Introduction, the Draft EIR for the project was circulated by the lead agency (City of Santee) for a 45-day public review and comment period from June 10, 2025 through July 24, 2025, in compliance with the California Environmental Quality Act (CEQA) Guidelines Section 15085. During this time, numerous comment letters were received from government agencies, interested parties, and private individuals. This Draft EIR is being partially recirculated to document unmapped sensitive vegetation communities and updated mapping for jurisdictional aquatic resources occurring on the project site. In addition to minor editorial and clerical revisions, the Project Description of the Partially Recirculated Draft EIR has been revised to clarify details related to the following project elements: off-site improvements, trail segments, bridge descriptions, floodway improvements, roadway vacations, and required easements/permits. Figures have also been updated and added to the Project Description to reflect these revisions. Because additional analyses of impacts related to biological resources have been completed, select portions of the Draft EIR are being recirculated to provide the public with a meaningful opportunity to comment on this environmental topic including the following:

- Chapter ES, Executive Summary
- Chapter 1.0, Introduction
- Chapter 2.0, Project Description
- Section 3.3, Biological Resources
- The following appendices are included:
  - Appendix E, Revised Biological Survey Report, including revised subappendix I, Updated Jurisdictional Delineation Report, replacement of subappendix K, Conceptual Habitat Mitigation and Monitoring Plan, with subappendix K, Proposed On-Site Mitigation Overview, and addition of subappendix O, Hydrology Memorandum. All other sub-appendices of Appendix E, Revised Biological Survey Report have not been revised, and can be found at the following link: https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club
  - Appendix S, Revised Planned Development District Standards
  - Appendix T, Comparison of Biological Impacts

A summary of revisions to the above-mentioned sections is detailed in Section 1.1.1, Summary of Revisions, of Chapter 1, Introduction. Additionally, to facilitate review of the Partially Recirculated Draft EIR, two versions of the Partially Recirculated Draft EIR and associated appendices have been recirculated: a clean version and a comparison version. The clean version of the Partially Recirculated Draft EIR presents a version without strikeout/underline revisions that incorporates all revisions without visible markup. The comparison version of the Partially Recirculated Draft EIR presents a version that shows deletions marked with ~~strikeout~~ and with additions or moved text shown with double underline.

The City of Santee is the CEQA lead agency for the EIR and, as such, has the primary responsibility for evaluating the environmental effects of the proposed project and considering whether to approve or disapprove the proposed project in light of these effects. The City of San Diego is a responsible agency, as defined under State CEQA Guidelines Section 15381, because a portion of the project site is within the City of San Diego's jurisdiction, and the City of San Diego is responsible for approving the applicable discretionary permits.

As required by CEQA, this Draft EIR does the following: (1) describes the proposed project, including its location, objectives, and features; (2) describes the existing conditions at the project site and nearby environs; (3) analyzes the direct, indirect, and cumulative adverse physical effects that would occur on the existing conditions should the proposed project be implemented; (4) identifies feasible means of avoiding or substantially lessening the significant adverse effects; (5) provides a determination of significance for each impact after mitigation is incorporated; and (6) evaluates a reasonable range of feasible alternatives to the proposed project that would meet the basic project objectives and reduce a project-related significant impact.

This Executive Summary covers the following topics: (1) project description; (2) areas of controversy/issues raised by agencies and the public; and (3) issues to be resolved, including significant environmental effects and consideration of alternatives to the proposed project.

ES.2 Project Description

ES.2.1 Overview

Carlton Oaks Golf Course ownership and Lennar Homes, as joint project proponents, are proposing to redevelop the existing 1950s-era Carlton Oaks Country Club facility into a modern destination resort with residential accessory uses (i.e., the proposed project). The project site is located on approximately 165 acres, and the project would include the following components: (1) demolition of the existing Carlton Oaks Golf Course; (2) redesign of the golf course; (3) reconstruction of the clubhouse with a new pro shop, practice area, and learning center structure; (4) construction of a hotel and associated cottages; (5) construction of residential accessory uses consisting of two residential neighborhoods with open space areas; and (6) construction of related on-site infrastructure. The proposed project would include demolition of the existing Carlton Oaks Golf Course clubhouse, restaurant/bar, pro shop, hotel and hotel cottages, and surface parking lots.

Approximately 3.5 acres consist of areas outside of the project site that would be developed with improvements associated with the project and are located either in the City of San Diego or City of Santee (off-site improvement areas). The off-site improvement areas and the project site make up the CEQA Study Area.

ES.2.2 Project Location

The project site is approximately 165 acres spanning the City of Santee and City of San Diego. Approximately 3.5 acres outside of the project site would be developed with improvements associated with the project. These areas are located in either the City of San Diego or the City of Santee (off-site improvement areas). The off-site improvement areas and the proposed project site make up the CEQA Study Area, with a total of approximately 169 acres. The project site is north of State Route (SR-) 52, where it travels in an east–west direction, south of single-family and multifamily residential development lining Carlton Oaks Drive, east of West Hills Parkway and SR-52 (where it traverses in a northwest–southeast direction), and adjacent to the San Diego River Trail.

Approximately 100.6 acres of the project site occurs in the City of Santee, and approximately 64.2 acres occurs in the City of San Diego (East Elliot Community). Project components, including the proposed clubhouse, hotel, residential development, and the majority of the golf course, would be within the City of Santee. Project components within the City of San Diego would include a portion of the redesigned golf course (64.05 acres), driveway access to the proposed Residential West development from West Hills Parkway, widening and restriping of medians, and installing a raised concrete median on West Hills Parkway to provide access to the proposed residential neighborhood, a landscape easement (approximately 0.4 acres~~) along~~), and trail segments within the ~~widened portion~~Cities of ~~West Hills Parkway, and a portion of a graded bench (for future trail use) as well as a new Project Trail Segment in the southwestern portion of the site.~~Santee and San Diego.

ES.2.3 Project Objectives

State CEQA Guidelines Section 15124(b) requires project descriptions to contain a statement of objectives that includes the underlying purpose of the proposed project. The objectives of the proposed project are identified below:

1. Provide a high-quality, mixed-use recreational resort that will enhance the experience of its users by integrating the country club and related amenities with the golf course and open-space areas to provide a resort-like setting for the facilities and offer views of the golf course from the facilities.
2. Develop a mixed-use, recreation-related country club resort consistently with the principles of the City of Santee *General Plan* (1984) that offers a high-quality resort setting and recreation-related amenities and uses that are consistent with other high-quality resorts in the region.
3. Provide a golf course with a professionally designed layout that can be used by a broad range of players, enhance the golfers' experiences, and meet the needs of the broader tourism market.
4. Provide a golf course that has improved drainage flows, reduced accumulation of surface water on the site, requires less water usage, and avoids environmentally sensitive areas, when feasible.
5. Provide additional economic revenue for the City of Santee and County of San Diego through the generation of sales, transient occupancy, and property taxes by expanding the event facilities, adding residential units, and upgrading the hotel units.
6. Invigorate the local economy by providing additional employment and business opportunities associated with operation of the proposed project.
7. Provide high-quality housing opportunities that help satisfy regional housing needs.
8. Locate the residential uses in a manner that will serve as a transition from the adjacent residential neighborhoods by providing comparable housing products.
9. Foster future economic sustainability of the Carlton Oaks Country Club and Resort by providing residential accessory uses that will result in a diversification of its customers and enhance membership opportunities to activate the facilities and the site year-round.
10. Design a development that is compatible with the San Diego River and includes links to existing and planned trails to the east and west of the project site.
11. Provide a mixed-use recreational facility that will provide similar lifestyle experiences (i.e., residential units) as other high-quality resorts in the region.

ES.3 Areas of Known Controversy/Issues Raised by Agencies and the Public

State CEQA Guidelines Section 15123 requires the summary of an EIR to include areas of controversy known to the lead agency, including issues raised by agencies and the public. The City of Santee circulated a Notice of Preparation (NOP) on June 7 through July 8, 2024, to solicit agency and public comments about the scope and content of the environmental analysis.

A total of 50 comment letters were received during the NOP public review period. The primary issues raised related to aesthetics and visual resources, air quality, biological resources, cultural resources, hydrology and water quality, land use, noise, recreation, transportation, wildfire, and alternatives. A summary of all comments received is included in Table 1-2 of Chapter 1, Introduction, and the NOP and all NOP comment letters are included as Appendix A of this EIR.

ES.4 Issues to Be Resolved

ES.4.1 Summary of Project Impacts

This Partially Recirculated Draft EIR examines the potential environmental effects of the proposed project, including information related to existing site conditions, analyses of the types and magnitude of individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts. In accordance with Appendix G of the State CEQA Guidelines, the potential environmental effects of the proposed project were analyzed for the following issue areas:

- Aesthetics and Visual Resources
- Air Quality and Health Risks
- Biological Resources
- Cultural and Tribal Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise and Vibration
- Population and Housing
- Public Services
- Recreation
- Transportation and Circulation
- Utilities and Service Systems
- Wildfire

Table ES-1 provides a summary of the project design features (PDFs) that would be included in the proposed project design to help avoid impacts. Table ES-2 provides a summary of the environmental impacts that could result from implementation of the proposed project and feasible mitigation measures that would reduce or avoid the impacts. For each impact, Table ES-2 identifies the significance of the impact before mitigation, applicable mitigation measures, and the level of significance of the impact after the implementation of the mitigation measures. Impacts on agricultural and forestry resources and mineral resources (Threshold 2) are considered to be "Effects Found Not to Be Significant," in accordance with State CEQA Guidelines Section 15128. These issues are discussed further in Chapter 4, Other CEQA Considerations.

ES.4.2 Summary of Project Alternatives

The following alternatives are analyzed in detail in Chapter 5, Alternatives to the ~~Proposed Project.~~proposed project. The objective of the alternatives analysis is to consider a reasonable range of potentially feasible alternatives to foster informed decision-making and public participation. The alternatives to the proposed project are summarized below.

ES.4.2.1 Alternative 1 – No Project Alternative

No Project Alternative is required by CEQA to discuss and analyze potential impacts that would occur if the project were not implemented. Under the No Project Alternative, the site would continue to operate in its current state as the Carlton Oaks Golf Course, and the existing country club facility will continue to operate ~~on PA-2.~~within Residential North. The golf course redevelopment, the construction of the Country Club and Resort, and the residential planning areas would not be implemented. The demolition of the existing Carlton Oaks golf course clubhouse, restaurant/bar, pro shop, hotel and hotel cottages, and surface parking lots (to allow for development of Residential North) would not occur. Ancillary improvements, such as the trail segments, access improvements, and off-site infrastructure improvements, would also not be constructed under this alternative. In other words, the no-project alternative would be the continuation of the existing operations.

ES.4.2.2 Alternative 2 – Reduced Project Alternative

Alternative 2 is referred to as the *Reduced Project Alternative* because of the overall reduced intensity resulting from a reduction in residential units and the elimination of the new resort facilities from the proposed resort ~~planning~~ area ~~(PA 3).~~. Alternative 2 proposes fewer residential units overall and would not develop new resort facilities, thereby reducing the development footprint; as such, it would also incorporate components of the suggested alternatives provided by the Wildlife Agencies that incrementally avoid or otherwise minimize direct and indirect impacts on sensitive biological resources and wildlife-movement areas. As discussed in greater detail within Section 5.5.2, Analysis of Alternative 2 – Reduced Project Alternative, this alternative was designed to reduce the development footprint and avoid or minimize impacts from potentially occurring at the Residential West site and resort sites. The Wildlife Agencies also requested the following:

- An "alternative that does not involve grade changes within the floodplain or floodway, or changes to the channels, and which do not require armoring or other stabilization techniques, which further impact stream functions."

Alternative 2 and Alternative 3 meet this criterion.

- An "alternative that avoids impacts to stream, wetland, and riparian areas."

The project itself already substantially avoids direct permanent impacts to the San Diego River and associated riparian areas. Alternative 2 would eliminate the proposed development at Residential West and the proposed resort area and also would not implement the golf course redesign. This would eliminate the small amount of wetland/riparian impacts associated with the western portion of Residential North and would also eliminate the temporary impacts along Sycamore Canyon Creek. Alternative 2 fits these requirements.

- An "alternative that does not reduce the width of the wildlife movement corridor."

The wildlife movement corridor is more restricted along Sycamore Canyon Creek in the western portion of the project site (the location of Residential West). Residential North affects this restriction very minimally. Therefore, Alternative 2 (which eliminates Residential West) addresses the concerns of this comment.

- An "alternative that includes a design which consolidates development to the north side of the project site."

Alternative 2 addresses this comment by consolidating development on the northern side and eliminating the development to the west. Alternative 2 also eliminates the proposed resort area, as well as the golf course redesign.

Specifically, under this alternative, no residential units would be constructed at Residential West. The project's proposed resort facilities would not be built within ~~PA-3~~the proposed resort area, and the golf course would remain as is (i.e., no construction or disturbance at ~~PA-3~~the proposed resort area). The acres available for new residential construction at Residential North would be reduced to 8 acres due to the need to retain the existing country club facilities. The existing country club facilities remain essentially the same because the Residential North parcel is not large enough to reasonably accommodate all of the project's residential units and the resort facilities. It is anticipated that up to 72 units could be constructed within the 8-acre footprint, resulting in an overall net decrease of 170 units. The residential units would be the same multifamily detached product type (9 dwelling units per acre [DU/acre]) as for the proposed project. Amenities at Residential North would include a play structure with resilient surfacing, picnic tables covered by a shade structure, a dog run area, an outdoor pool, pool house, dining tables, chaise lounge chairs, and outdoor showers. The residential uses would still be an accessory to the primary recreational use (golf course). Residents would be able to access recreational and commercial uses at the existing country club and golf course because of its proximity to the Country Club facility and the entrance to the golf course. This will result in a diversification of its customers and enhance membership opportunities to activate the facilities and the site year-round. The following design assumptions for this alternative are summarized as follows:

- Density would be 0 DU/acre at Residential West.
- The project's proposed resort facilities, including the golf course, would not be built (i.e., there would be no construction or disturbance at the proposed resort area).
- Density at Residential North would be 72 units (9 DU/acre) with an overall net decrease in residential density of 170 units.
- The West Hills Parkway trail bench/connection would not be required.
- The eastern emergency vehicle access (EVA) connection via Vista del Verde, and associated reconstruction of bridge between Residential North and the eastern EVA, would likely not be possible because the roadway and bridge would not be built through ~~PA-3~~the proposed resort area due to the size of the development (fewer than 100 units).
- The extension of the Padre Dam Municipal Water District (PDMWD) Public Water Main and the widening of West Hills Parkway would not be required, as no development would occur within Residential West.
- The private utility maintenance road between Residential West and Residential North would not be required.
    - The southeastern Project Trail Segment/connection would change alignment, starting instead at the segment of the planned SANDAG trail located at the boundary of Santee and City of San Diego and traveling north, ending at the property line with Vista del Verde. A sewer lift station would still need to be placed within Residential North.

ES.4.2.3 Alternative 3 – Reduced Resort Alternative

Alternative 3, the Reduced Resort Alternative, is another variation of a reduced project alternative and, like Alternative 2, incorporates components of the suggested alternatives provided by the Wildlife Agencies that incrementally avoid or otherwise minimize direct and indirect impacts on sensitive biological resources and wildlife-movement areas. In addition to the Wildlife Agency-requested features and components discussed for Alternative 2, there was also a request for an "Alternative that would not impede, alter, or otherwise modify existing surface flow, watercourse and meander, or water-dependent ecosystems and natural communities." Alternative 3 fits the parameters of what is being requested by this comment by eliminating all development at Residential North and the ~~Resort~~resort area. This alternative would also not be able to implement the golf course redesign, which means that there would be no development or grading within the vicinity of any existing streams or watercourses.

Specifically, under this alternative, the new Country Club and Resort facilities, including the golf course, would be eliminated from ~~PA 3~~ the proposed resort area(i.e., no construction or disturbance at the proposed resort area). The project would maximize the housing concentration at Residential West by transferring all the residential units from Residential North to Residential West, increasing the density at Residential West to the 22–30 DU/acre range. The residential units would consist of multifamily attached homes. A playground, picnic tables, shade structure, and an overlook area with bench seating would be located along the southwestern boundary of Residential West, and a dog run area with artificial turf and shade trees would be located in the eastern portion of Residential West. The residential uses would still be an accessory to the primary recreational use (golf course). Residents would be able to access recreational and commercial uses at the existing country club and golf course, which will result in a diversification of its customers and enhance membership opportunities to activate the facilities and the site year-round. The private utility maintenance road between Residential West and Residential North would still be built, providing residents with the ability to access recreational and commercial uses at the existing country club and golf course. The roadway will provide an interconnected system of golf cart paths, a multi-use path, and sidewalks that encourage pedestrian and bicycle access to these facilities. Other design assumptions for this alternative include the following:

- The residential density at Residential North would be 0 DU/acre.
- 156 residential units would be added to the 8.7-acre Residential West planning area ~~(PA 1),~~ for a total of 242 units (27.82 DU/acre).
- The project's proposed resort facilities would not be built within ~~PA 3 (~~the proposed resort area~~).~~
- Pursuant to the Wildlife Agency's request to include an alternative which avoids impacts onto existing surface flows, watercourses, water-dependent ecosystems, and natural communities, this alternative would not include the golf course redesign.
- The existing resort and hotel would remain in its existing condition.
- The private utility maintenance road between Residential West and Residential North would be required due to requirements to provide the sewer force main.
- The West Hills Parkway trail bench/connection and widening/roadway improvements on West Hills Parkway would still be required.
- The southeastern Project Trail Segment/connection would change alignment, starting instead at the segment of the planned SANDAG trail located at the boundary of Santee and City of San Diego and travel north ending at the property line with Vista del Verde.

- The eastern EVA connection via Vista del Verde, and associated reconstruction of bridge between Residential North and eastern EVA, would not be possible because ~~PA 3~~the proposed resort area would not be implemented.
- The sewer lift station would remain in its proposed location within Residential West.
- The extension of the PDMWD Public Water Main would not be required.
    - There would be 8.7 acres of usable space for residential (0.3 acres deducted for sewer station).

As discussed in greater detail within Section 5.5.3, Analysis of Alternative 3 – Reduced Resort Alternative, this alternative would contrast with Alternative 2 because it was designed to avoid impacts with the potential to occur on the eastern portion of the project site, at Residential North and the Country Club and Resort.

ES.4.2.4 Alternative 4 – Reduced Footprint Project Alternative

Alternative 4 is referred to as the *Reduced Footprint Project Alternative* because of the overall reduction of the project's development footprint resulting from a reduction in the resort facilities in ~~PA 3~~the proposed resort area, the reduced intensity of development on the Residential North site, and the consolidation of the remaining residential units on the Residential West parcel, which has fewer environmental constraints. Specifically, under this alternative, the acres available for new residential construction at Residential North would be reduced to 16 acres to reduce the overall footprint of the project. It is anticipated that up to 135 units could be constructed within the 16-acre footprint, resulting in an overall net decrease of 21 units and a decrease in the overall footprint of 2.3 acres. The residential units would be the same multifamily detached product type (8 DU/acre) as for the proposed project. To make up for the 21 units lost at Residential North, the density at Residential West would be increased slightly in order to accommodate a total of 107 units on the 9.5-acre footprint. With a density of 11 DU/acre, the multifamily detached product type would not be feasible and would require switching the proposed units at Residential West to a clustered product type. The residential uses would still be an accessory to the primary recreational use (golf course). Residents would be able to access recreational and commercial uses, which will result in a diversification of its customers and enhance membership opportunities to activate the facilities and the site year-round. The private utility maintenance road between Residential West and Residential North would still be built, providing residents with the ability to access recreational and commercial uses at the country club and golf course. The roadway will provide an interconnected system of golf cart paths, a multi-use path, and sidewalks that encourage pedestrian and bicycle access to these facilities. The following design assumptions for this alternative are summarized as follows:

- Density at Residential North would be 135 units (8 DU/acre) on an approximately 16-acre footprint which has been reduced to avoid all biological resources impacts.
- To make up for the reduced density at Residential North, the unit count at Residential West would be increased to 107 units (11 DU/acre), and the product type would switch to a multifamily clustered product that have shared driveways and small yards.
- The footprint of ~~PA 3~~the proposed resort area would be similarly reduced in order to reduce impacts on biological resources. Specifically, the footprint would be reduced by 0.22 acres (to 6.5 acres) in order to avoid impacts on Mule Fat Scrub – Disturbed, Nonnative Riparian, and Southern Cottonwood–Willow Riparian Forest – Disturbed. This alternative assumes that the reduced footprint would still be able to accommodate the clubhouse and restaurant; however, the hotel component would not be included in this alternative.

- The golf course would still be redesigned but to a lesser extent. This would necessarily result in some impacts on biological resources (approximately 0.48 acres); however, the redesign would be necessary because even with the reduced footprint of the Resort Area, the resort would need to eliminate portions of four of the existing holes.
- The West Hills Parkway trail bench/connection and widening/roadway improvements on West Hills Parkway would still be required.
- The eastern EVA connection via Vista del Verde, and associated reconstruction of bridge between Residential North and eastern EVA, would be constructed for secondary access.
- The sewer lift station would remain in its proposed location within Residential West.
  - The extension of the PDMWD Public Water Main would be required.

As discussed in greater detail within Section 5.5.4, Analysis of Alternative 4 – Reduced Footprint Project Alternative, this alternative would contrast with Alternatives 2 and 3 because it would still develop all three planning areas, albeit on reduced footprints, and would still carry out a reduced version of the golf course redesign.

ES.4.2.5 Environmentally Superior Alternative

Pursuant to CEQA, an EIR is required to identify the environmentally superior alternative. Although the No Project Alternative (Alternative 1) reduces the greatest number of significant impacts, CEQA requires that when the environmentally superior alternative is the No Project Alternative, another alternative should be identified. Although all of the alternatives would reduce at least one impact compared to the proposed project, Alternative 2 would reduce impacts to a greater extent than the other alternatives for the issues of air quality and health risk, cultural and tribal cultural resources, energy, population and housing, public services, recreation, utilities, and wildfire. These reduced impacts would occur because Alternative 2 would develop just 72 units total, instead of 242 units, would not develop Residential West; would not develop the resort; and would not require the private utility maintenance road between Residential West and Residential North. Additionally, Alternative 2 would not require the extension of the PDMWD public water main or the widening of West Hills Parkway, nor would it require the construction of the West Hills Parkway trail bench/connection or the eastern EVA connection via Vista del Verde. As such, Alternative 2 would be the environmentally superior alternative.

Table ES-1. Summary of Project Design Features

Project Design Feature	Summary Description of Feature
Sustainability Features	
PDF-1	**California Energy Code.** The project will comply with California Title 24, Part 6 Energy Code (~~2022~~2025, or most recent in effect at the time of building permit application). The following energy-efficient items will be required in all residential units: ~~improved~~ heating, ventilation, and air-conditioning systems with sealed (tight) air ducts; ~~enhanced~~ ceiling, attic, and wall insulation; installed energy-conserving appliances, such as whole-house fans; high-efficiency water heaters (i.e., tankless water heaters); energy efficient three-coat stucco exteriors; energy efficient appliances; programmable thermostat timers; and high-efficiency window glazing.
PDF-2	**CALGreen Code**. As a matter of regulatory compliance, the project will comply with Section 5.106.5.2 of the California Green Building Standards Code (i.e., CALGreen Code) (~~2022~~2025, or most recent in effect at the time of building permit application). The project will provide designated parking for shared vehicles and clean air vehicles at the resort facility and at the project's parks. The project will also implement the latest CALGreen Code standards when building permits are requested.
PDF-3	**Electric-Only Uses**. All uses on site, with the exception of the restaurant, will be "all electric." Natural gas will only be installed for the restaurant's use.
PDF-4	**Energy Star Appliances**. Energy Star-rated appliances will be installed in all residences, and Energy Star-rated appliances, such as refrigerators, will be installed at the hotel and restaurant.
PDF-5	**Low-Flow Water Appliances**. Low-flow toilets, faucets, and shower heads will be installed throughout the entire project.
PDF-6	**Recyclables and Yard Waste**. Areas for storage and collection of recyclables and yard waste will be provided.
PDF-7	**Residential Electric Vehicle Charging**. Every residential dwelling unit garage (242 units) will have Level 2 electric vehicle equipment installed.
PDF-8	**Non-Residential Electric Vehicle Charging.** Forty-five percent of all non-residential parking spaces will be electric vehicle capable (132 spaces), and 33% of these electric-vehicle-capable parking spaces will have electric vehicle charging stations installed (44 units). [*EV capable* means that dedicated electrical-panel capacity and raceway infrastructure will be provided to support a future 40-ampere, 208/240-volt branch circuit for future, dedicated Level 2 electric vehicle equipment.]
PDF-9	**Tree Planting.** Approximately 645 new trees will be planted within the development: 414 new trees in the residential development, 60 new trees on the golf course, and 171 new trees at the hotel site and access road.
PDF-10	**On-Site Solar Energy Generation**. At least 1,168 kilowatts (kW) of solar energy generation will be installed on site (i.e., 1,089 kW on the residential units and 79 kW on the new resort). This exceeds the Sustainable Santee Plan (SSP) requirements. Under the SSP the project will be required to install 1 kW per unit for each multifamily unit, 2 kW per unit for each single-family unit, and 1.5 kW per square foot for commercial buildings. Under the SSP, 236 kW will be required for the multifamily development, 12 kW will be required for the single-family housing units, and roughly 78 kW will be required for the 51,926 square feet of commercial facilities. Given this, the SSP calls for at least 326 kW in total.

Table ES-1. Summary of Project Design Features

Project Design Feature	Summary Description of Feature
Fire Protection Features	
PDF-11	**Fire Protection Measures.** The project proponent will implement the following fire protection measures: ▪ **Ignition-Resistant, Planned, and Maintained Landscape**: All site landscaping of common areas and fuel-modification zones (FMZs) will be subject to strict plant types that are lower-ignition plants, with landscaping closest to structures requiring irrigation to maintain high plant moisture, which equates to difficult ignition. FMZs will be a minimum of 100 feet from the structure outward, which will reduce the risk of an ignition spreading from the project site to adjacent land uses, and also the spread of fire toward on-site structures. Roadside FMZs will extend 50 feet from the roadside on both sides, which will reduce the risk of ignition related to vehicles traveling within the project site, and also provide fire buffered corridors to support safer evacuations. Additionally, twice-annual inspections of FMZs and ongoing maintenance will be implemented to ensure long-term effectiveness of FMZs. Further, the project will benefit from the golf course, which includes irrigated and maintained, low-fuel, highly ignition-resistant landscaping and open water, and functions as a large fuel break. ▪ **FMZ Around Perimeter of Project**: A 100-foot-wide FMZ will be required from each structure outward toward open space areas and will include specifically selected plant species, very low fuel densities (i.e., 30%–50% retention of native plants in outer zones and irrigated inner zones), and ongoing Homeowner's Association (HOA)-funded and -applied maintenance, resulting in a wide buffer between the developed areas and off-site native fuels. All project roads and the ~~steel bridge~~Proposed Resort Bridge at the abutments will also include, at minimum, a 50-foot FMZ. The roadside FMZs will have plant restrictions and maintenance requirements, as detailed in the project's Fire Protection Plan. Roadside FMZs associated with the ~~steel bridge~~Proposed Resort Bridge will be the responsibility of the golf course operator. The golf course operator, as part of maintenance of the golf course, will be responsible for proper brush management, and defensible space will be cleared underneath the ~~bridge~~Proposed Resort Bridge and extending outward from the ~~bridge~~Proposed Resort Bridge. ▪ **Twice-Annual FMZ Inspections**: The HOA for the residential areas and the owner/property management agency of the resort will have a contracted, third-party, City of Santee Fire Department (SFD)-approved FMZ inspector perform two inspections per year to ensure that FMZs are maintained in a condition that is consistent with the City of Santee's and the Fire Protection Plan's requirements. ▪ **Ignition-Resistant Structures**: All structures will be built to the ignition-resistant requirements found in California Building Code Chapter 7A that have been developed and codified as a direct result of post-fire save-and-loss assessments. These measures will result in homes that are designed, built, and maintained to withstand fires and embers associated with wildfires. Ignition-resistant structure design features will include the following: - Exterior walls of all structures and garages will be constructed with approved, noncombustible (e.g., stucco, masonry, approved cement fiber board) or ignition-resistant material from grade to the underside of the roof system. Wood-shingle and shake wall coverings are prohibited. Any unenclosed under-floor areas will have the same protection as exterior walls. Per City of Santee Building Code Chapter 7A, exterior wall coverings will extend from the top of the foundation to the underside of the roof sheathing, and terminate at 2-inch nominal solid-wood blocking between rafters at all roof overhangs, or in the case of

Table ES-1. Summary of Project Design Features

Project Design Feature	Summary Description of Feature
	enclosed eaves, terminate at the enclosure. The underside of any cantilevered or overhanging appendages and floor projections will maintain the ignition-resistant integrity of exterior walls, or projection will be enclosed to grade. - Eaves and soffits will meet the requirements of Surface Feet per Minute (SFM) 12-7A-3 or be protected by ignition-resistant materials or noncombustible construction on the exposed underside, per the City of Santee Building Code. - There will be no use of paper-faced insulation or combustible installation in attics or other ventilated areas. - There will be no use of plastic, vinyl (with the exception of vinyl windows with metal reinforcement and welded corners), or light wood on the exterior. - All roofs will be a Class A–listed and fire-rated roof assembly, installed per the manufacturer's instructions, to the approval of the City of Santee. Roofs will be made tight, with no gaps or openings on ends, in valleys, or elsewhere between the roof covering and decking to prevent intrusion of flames and embers. Any openings on the ends of roof tiles will be enclosed to prevent intrusion of burning debris. When provided, roof valley flashings will not be less than 0.019 inches (No. 26 gage galvanized sheet) corrosion-resistant metal installed over a minimum 36-inch-wide underlayment consisting of one layer of 72-pound American Society for Testing and Materials (ASTM) 3909 cap sheet running the full length of the valley. - No vents will be placed in soffits, cornices, rakes, eaves, or eave overhangs, or between rafters at eaves or in other overhang areas. Gable end and dormer vents will be at least 10 feet from the property lines or provided with alternative designs that are resistant to ember penetration. Vents in allowed locations will be protected with wire mesh having no openings larger than 0.125 inches. Vent openings will not exceed 144 square inches. Vents will be designed to resist the intrusion of burning embers and debris. - Vents will not be placed on roofs unless they are approved for Class A roof assemblies and contain an approved baffle system, such as Brandguard or O'Hagin vents, to stop intrusion of burning material, or are otherwise approved. - Turbine vents are prohibited. - Exterior glazing in windows, sliding glass doors, and garage doors, or decorative or leaded glass in doors, will be dual pane with one tempered pane, glass block, or have a 20-minute fire rating. Glazing will comply with California Building Code Chapter 7A. - Any vinyl frames will have welded corners and metal reinforcement in the interlock area to maintain integrity of the frame certified to ANSI/AAMA/NWWDA 101/I.SI. S 2 97 requirements. - Skylights will be tempered glass. - Rain gutters and downspouts will be noncombustible and designed to prevent the accumulation of leaf litter and debris, which can ignite roof edges. - Doors will conform to SFM 12-7A-1, or will be of approved noncombustible construction, or will be solid-core wood with stiles and rails not less than 1-3/8 inches thick, or have a 20-minute fire rating. Doors will comply with City of Santee Building Code Chapter 7A. Garage doors will be solid-core, 1.75-inch-thick wood or metal to comply with the City of Santee Building Code.

Table ES-1. Summary of Project Design Features

Project Design Feature	Summary Description of Feature
	- Decks and their surfaces, stair treads, landings, risers, porches, and balconies will comply with City of Santee Building Code Chapter 7A and be of ignition-resistant construction; heavy timber; exterior-approved fire-retardant wood; or approved, noncombustible materials. - Decks and overhangs projecting over vegetated slopes are not permitted. Decks will be designed to resist failing from the weight of a firefighter during fire conditions. Plastic or vinyl decking or railings are not allowed. The ends of decks will be enclosed with the same type of material as the remainder of the deck. - Combustible awnings, canopies, or similar combustible overhangs are not allowed. - No combustible fences will be allowed within 5 feet of structures on any lots. The first 5 feet from a structure will be noncombustible or meet the same fire-resistive standards as walls. - All chimneys and other vents on heating appliances using solid or liquid fuel, including outdoor fireplaces and permanent barbeques and grills, will have spark arrestors that comply with the City of Santee Fire Code, which requires that openings do not exceed 0.25 inches. Arrestors will be visible from the ground. - Any liquid propane gas tanks (except small barbecue and outdoor heater tanks), firewood, hay storage, storage sheds, barns, and other combustibles will be located at least 30 feet from structures and, within the FMZ, 30 feet from flammable vegetation. No flammable vegetation will be allowed under or within 30 feet of liquid propane gas tanks, or tanks will be enclosed in an approved, ignition-resistant enclosure with 10 feet clearance of flammable vegetation around it. In no case will a tank be closer than 10 feet from a structure. The City of Santee Fire Code requires 10 feet of clearance of native vegetation, weeds, and brush from under and around liquid propane gas tanks. - Storage sheds, barns, and outbuildings will be constructed of approved, noncombustible materials, including noncombustible Class A roofs, and will be subject to the same restrictions as the main structure on the site. - Any of the above-listed structures (e.g., outbuildings, storage sheds, barns, separate unattached garages) that are 500 square feet or smaller and 10 feet or more from an adjacent structure will not be required to include automatic fire sprinklers. Locations and required FMZs for these smaller structures will be subject to approval of the City of Santee's Fire Marshal and Building Official, based on the size of the structure. ▪ **Interior Fire Sprinklers**: Sprinklers in residences will be designed to provide additional time for occupants to escape the home, and sprinklers in multifamily and commercial structures will be designed to provide structural protection. Fire sprinklers are successful at assisting responding firefighters by either extinguishing a structural fire, or at least containing the fire to the room of origin and delaying flash-over. This benefit also reduces the potential for an open space–vegetation ignition by minimizing the possibility for structural fires to grow large and uncontrollable, resulting in embers that are blown into wildland areas. ▪ **Firefighting Water:** Water will be provided specifically for firefighting throughout the project site with fire hydrants that are accessible to fire engines. The project will provide firefighting water volume, availability, and sustained pressures to the SFD's satisfaction. Additionally, the project will provide the number and location of fire hydrants consistent with SFD Design Standards and the City of Santee Fire Code, and subject to SFD approval.

Table ES-1. Summary of Project Design Features

Project Design Feature	Summary Description of Feature
	▪ **Water Utilities Constructed First:** As required by standard fire code regulations, before any combustible materials are brought onto the site for construction, the project must have all underground utilities in place; fire hydrants operational; water mains, curbs, gutters, sidewalks, and an approved all-weather roadway in place; and interim FMZs established and approved. ▪ **Homeowner Education:** Annual reminder notices will be provided to each homeowner encouraging them to review and be familiar with community evacuation protocols. The HOA will coordinate with local fire agencies to hold an annual fire safety and evacuation preparedness informational meeting. The meeting will be attended by representatives of appropriate fire agencies, and important fire and evacuation information will be reviewed. One focus of these meetings, and of the HOA's annual message, will be on the importance of each resident preparing and being familiar with their own *Ready, Set, Go!* evacuation plan. This proactive educational component of disclosing potential wildfire risks will be incorporated into the HOA's covenants, conditions, and restrictions.
Traffic and Circulation Features	
PDF-12A	**Traffic Control Plan.** A traffic control plan will be prepared by the project proponent and implemented during construction, as required by the City of Santee and City of San Diego public improvement permits, which will be obtained to construct access roads to the residential developments and resort. The traffic control plan will include procedures that will be followed to properly and safely close lanes and redirect traffic, if necessary, during construction. Adherence to the traffic control plan will ensure that emergency response vehicles can safely access the project site and the vicinity, and that project construction will not conflict with established emergency evacuation routes. The traffic control plan will be consistent with the procedures and measures established by the Unified San Diego County Emergency Services Organization and County of San Diego in the *Operational Area Emergency Operations Plan* (2022), which has been adopted by both the City of Santee and City of San Diego. The traffic control plan will also ensure that construction activities comply with the applicable City of Santee ordinances and regulations related to road closures and roadway construction. Furthermore, the traffic control plan will include information on how contractors are to comply with applicable requirements set forth by the County of San Diego's *Multi-Jurisdictional Hazard Mitigation Plan* (2023) for emergency events.
PDF-12B	**Intersection Safety Improvements.** The following improvements, which are included as part of the development footprint, would be made at the following intersections to improve pedestrian and bicycle safety: ▪ *West Hills Parkway and Mast Boulevard.* Bicycle detection (signal software upgrade and/or camera installation, or electro-magnetic loop detectors within the asphalt) to be added to the approaches of the intersection where Class II bicycle lanes are present. ▪ *West Hills Parkway and Carlton Oaks Drive.* Continental cross-walks installed at all legs of the intersection, pedestrian countdown signals installed at each corner of the intersection, and lead pedestrian intervals for all crossing phases of the intersection, if the current signal controller can accommodate it. These improvements are included within the off-site impact area included as part of the proposed project.

Table ES-1. Summary of Project Design Features

Project Design Feature	Summary Description of Feature
	▪ *West Hills Parkway and Mission Gorge Road.* Bicycle detection (signal software upgrade and/or camera installation, or electro-magnetic loop detectors within the asphalt) to be added to the approaches of the intersection where Class II bicycle lanes are present.
Stormwater and Pollution Control Features	
PDF-13	**Stormwater Pollution Prevention Plan.** A project-specific Stormwater Pollution Prevention Plan (SWPPP) in compliance with the effective Construction General Permit and Jurisdictional Runoff Management Programs for the City of Santee and City of San Diego will be prepared and implemented. The SWPPP will identify which construction best management practices (BMPs) will be implemented to prevent stormwater runoff, and will include a monitoring plan for measuring BMP effectiveness. BMPs will include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The construction SWPPP will also specify properly designed, centralized storage areas that will keep these materials out of the rain. When grading will be conducted during the rainy season, the primary BMPs selected will focus on erosion control (i.e., keeping sediment in place), and then on sediment control (i.e., keeping sediment on site). Measures will include a range of stormwater control BMPs, such as installing erosion-control materials (e.g., silt fences, staked fiber rolls, geofabric) to prevent silt runoff to storm drains and waterways, as well as sediment basin BMPs (e.g., sediment basins, check dams, sediment traps).
PDF-14	**Storm Water Quality Management Plan.** A Priority Development Project Storm Water Quality Management Plan (SWQMP) will be prepared that identifies site design and source- and pollutant-control best management practices (BMPs) to reduce the discharge of pollutants to the maximum extent practicable. The SWQMP will incorporate the following quantifiable and nonquantifiable sustainability features that will manage stormwater source and pollutant loads: ▪ Prevent illicit discharges into the Municipal Separate Storm Sewer System (MS4). ▪ Install storm drain stenciling or signage. ▪ Protect outdoor materials storage areas from rainfall, run-on, run-off, and wind dispersal. ▪ Protect materials stored in outdoor work areas from rainfall, run-on, run-off, and wind dispersal. ▪ Protect trash storage areas from rainfall, run-on, run-off, and wind dispersal. In addition, as identified in the project-specific Priority Development Project SWQMP, the proposed project will implement site design BMPs, where applicable and feasible. Site-design BMPs include the following: ▪ Maintain natural drainage pathways and hydrologic features. ▪ Conserve natural areas, soils, and vegetation. ▪ Minimize impervious areas. ▪ Minimize soil compaction. ▪ Incorporate impervious area dispersion.

Table ES-1. Summary of Project Design Features

Project Design Feature	Summary Description of Feature
	▪ Install landscaping with native and/or drought-tolerant species. Low-impact development and stormwater pollutant control BMPs designed to retain, biofilter, and treat stormwater runoff generated on the project site will be implemented. Applicable BMPs are identified in the City of Santee's 2021 Jurisdictional Urban Runoff Management Program (JRMP), following the City of Santee's 2016 BMP Design Manual. A Green Street SWQMP will be prepared for the project components that fall within the City of San Diego's jurisdiction. The applicable source control and site design BMPs will be implemented, in addition to the Green Street elements specified in the project's Green Street SWQMP. Applicable BMPs are identified in the City of San Diego's 2025 JRMP and follow the City of San Diego's 2024 BMP Design Manual.
PDF-15	**Scour and Erosion Prevention Measures.** The project will incorporate the following features to eliminate potential scour and erosion of the proposed slopes adjacent to the floodway and floodplain: ▪ Geotextile turf reinforcement mat that binds to the soil for slope surface stabilization and slope reinforcement. ▪ Geotechnical soil reinforcement to ensure that high-flow velocities will not erode or damage the embankment. ▪ Rock riprap and/or concrete energy dissipators for all storm drain outlets to reduce the rate of storm runoff velocity to a nonerosive level and to prevent erosion and siltation.
Scenic View Features	
PDF-16	**Security Fence Coloring.** Security fences will be powder-coated and colored dark evergreen, dark brown, or black to make the safety fencing appear more see-through than untreated, light-grey fencing that can act as a visual barrier.

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
3.1 Aesthetics and Visual Resources			
Implementation of the proposed project would not result in any potentially significant impacts related to aesthetics and visual resources.			
3.2 Air Quality and Health Risks			
Impact AQ-1: Expose Sensitive Receptors to Substantial Pollutant Concentrations.	PS	**MM-AQ-1. Tier 4 Final Construction Equipment.** The project will require heavy-duty, diesel-powered construction equipment used during construction to meet at least Tier 4 Final engine emission standards.	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
3.3 Biological Resources			
Impact BIO-1: ~~Diegan Coastal Sage Scrub (City of San Diego).~~Potential Impacts to Special-Status Species. Direct and indirect impacts on special-status species	PS	MM-BIO-1.~~ Mitigate Temporary and~~ Permanent Impacts ~~Within~~within City of San Diego on Sensitive Upland Vegetation Communities. ~~Direct~~ Within the City of San Diego, direct permanent impacts ~~on 0.08 acres of disturbed Diegan coastal sage scrub (outside of MHPA) and direct temporary off-site impacts on 0.11 acres of~~to disturbed Diegan coastal sage scrub (outside of Multi-Habitat Planning Area~~), 0.19 acres total [MHPA])~~ within the City of San Diego, shall be mitigated at a 1:1 ratio in accordance with the Upland Mitigation Ratios ~~provided~~ in the City of San Diego Biological Guidelines (as specified in Table 3 of ~~the Biological Guidelines).~~ City of San Diego 2018) as summarized in Table 3.3-7, Proposed Mitigation for Permanent Impacts on Sensitive Upland Vegetation Communities. Prior to ~~beginning~~ the issuance of any ~~ground disturbing activities or being issued~~ grading ~~permits by the City of San Diego~~permit or ground disturbance activity impacting sensitive upland vegetation communities, the applicant shall ensure that: A qualified biologist shall perform relevant preconstruction surveys as required by MM-BIO-13 through MM-BIO-18. Sensitive upland vegetation communities shall be mitigated through either Option 1 or Option 2 as described below. Option 1: The applicant shall provide a contribution into the City of San Diego Habitat Acquisition Fund (HAF). The HAF fee calculated shall be based on the current market rate amount per acre set by Real Estate Assets Department (READ) each year at the trigger time. Per the City of San Diego Municipal Code, an additional 10% administration fee is required to ~~be~~ paid for HAF City ~~of San Diego HAF~~ staff administration and maintenance costs. The 10% fee is calculated and applied after the mitigation HAF amount is determined based upon the	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		required mitigation acreage/ratio. Documentation of this contribution shall be provided to the City of San Diego by the applicant prior to the issuance of any ~~construction permit.~~grading permit or ground disturbance activity impacting sensitive upland vegetation communities. Option 2: If habitat credit cannot be purchased at the HAF, then the applicant shall provide for the on-site creation, preservation, or restoration of Diegan coastal sage scrub at a 1:1 ratio that complies with the mitigation strategy outlined in Appendix K, Proposed On-Site Mitigation Overview, of Appendix E, Revised Biological Survey Report. Prior to issuance of the permit for any ground disturbance activities impacting sensitive upland vegetation communities the following shall occur: a. Conservation easement. A conservation easement shall be recorded on site at a location approved by the City of San Diego for the on-site creation, preservation, or restoration of Diegan coastal sage scrub at a 1:1 ratio. The Conservation Easement shall be owned by a conservancy or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary. b. Upland Restoration Plan. An Upland Restoration Plan shall be approved by the City of San Diego. The Upland Restoration Plan shall include the following: 1. Monitoring of the restoration areas shall occur for a minimum of 5 years, or until the 5th year performance/success criteria are met, to determine the successful completion of the	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		5-year mitigation and monitoring program. 2. The performance standards and success criteria to determine the successful completion of the 5-year mitigation and monitoring program. The criteria must be approved by the City of San Diego, and shall include requirements for 100% survival of native shrub container stock plantings at the first annual monitoring (or sufficient number of shrubs emerging from seed to replace the container stock), as well as Year 5 standards of native vegetation cover of at least 90% of that of a nearby Diegan coastal sage scrub reference site. Methods used to measure these performance standards shall be described, and if the restored areas fail to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed and implemented, and the monitoring and maintenance period shall be extended until all Year 5 standards are met or as	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		otherwise provided in this document. The Upland Restoration Plan must be approved City of Santee prior to implementation. 3. The City of San Diego's General Outline for Conceptual Revegetation/Restoration Plans shall be used for guidance. 4. The Upland Restoration Plan shall detail the installation, maintenance, and monitoring that would occur as part of the restoration effort. 5. The Upland Restoration Plan shall include an evaluation of restoration suitability specific to proposed vegetation types, soil preparation, plant palettes, irrigation, erosion control, maintenance and monitoring program, and success criteria. c. Resource Management Plan (RMP). An RMP shall be prepared as described in MM-BIO-~~2. Mitigate~~ 6 and approved by the City of San Diego and CDFW. The RMP shall establish long-term monitoring, maintenance, management, and reporting directives and provide for long-term management funding through a non-wasting endowment (or equivalent acceptable funding mechanism) in an amount determined through the preparation of a	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Property Assessment Record or similar method. The RMP cannot be approved by the City of San Diego or CDFW until the following items have been completed: a qualified Resource Manager has been selected and approved by the City of San Diego and CDFW, and the RMP funding mechanism has been established. ~~a.~~d. Bonding. The applicant shall secure performance bonds (if Option 2 is selected) for the restoration work under the plan, to secure the issuance of grading permits by the City of San Diego that would be released after the City of San Diego approves the final success of the restoration site. **MM-BIO-2. Permanent Impacts within City of Santee on Sensitive Upland Vegetation Communities.** Within the City of Santee, direct permanent impacts to disturbed Diegan coastal sage scrub shall be mitigated at a 1:1 ratio as summarized in Table 3.3-7, Proposed Mitigation for Permanent Impacts on Sensitive Upland Vegetation Communities. Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities (i.e., disturbed Diegan coastal sage scrub) within the City of Santee, the applicant shall ensure that: 1) A qualified biologist shall perform relevant preconstruction surveys as required by MM-BIO-13 through MM-BIO-18. 2) Sensitive upland vegetation communities shall be mitigated through either Option 1, Option 2, or Option 3, as described below. **Option 1.** On-Site Restoration. If on-site restoration is proposed, the applicant shall provide for the on-site restoration of land that meets the criteria for sensitive upland vegetation	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		based on a 1:1 ratio and as outlined in mitigation strategy in Appendix K, Proposed On-Site Mitigation Overview. Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities (disturbed Diegan coastal sage scrub) within the City of Santee the applicant shall provide the following: a. **Recordation of conservation easement.** A conservation easement shall be recorded over the site to be restored. The conservation easement shall be owned by a conservancy or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary. b. **Upland Restoration Plan approved**. An Upland Restoration Plan shall be approved by the City of Santee. The Upland Restoration Plan shall include the following: - Monitoring of the restoration areas shall be required for a minimum of 5 years, or until the 5th year performance/success criteria are met, to determine the successful completion of the 5-year mitigation and monitoring program. ~~i.~~ The performance standards and success criteria to determine the successful completion of the 5-year mitigation and monitoring program. The criteria shall include requirements for 100% survival of native shrub	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		container stock plantings at the first annual monitoring (or sufficient number of shrubs emerging from seed to replace the container stock), as well as Year 5 standards of native vegetation cover of at least 90% of a nearby Diegan coastal sage scrub reference site. Methods used to measure these performance standards shall be described, and if the restored area fails to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed and implemented, and the monitoring and maintenance period shall be extended until all final performance standards are met or as otherwise provided in this document. In the absence of any restoration plan guidance from the City of Santee, the City of San Diego's General Outline for Conceptual Revegetation/Restoration Plans shall be used for guidance. - The Upland Restoration Plan shall detail the installation, maintenance, and monitoring that would occur as part of the restoration effort. - The Upland Restoration Plan shall include an evaluation of restoration suitability specific to proposed vegetation types, soil preparation, plant palettes, irrigation, erosion control, maintenance and monitoring program, and performance standards.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		c. **Resource Management Plan approved**. An RMP shall also be prepared as described in MM-BIO-6 and approved by the City of Santee or CDFW. The specifics regarding long-term management and management funding shall be included in the RMP that establishes long-term monitoring, management, and reporting directives. The RMP cannot be approved by the City of Santee or CDFW until the following items have been completed: a qualified Resource Manager has been selected and approved by the City of Santee and CDFW, and the RMP funding mechanism has been established. d. **Bonding**. The applicant shall secure performance bonds (if Option 1 is selected) for the restoration work under the plan, prior to issuance of grading permits by the City of Santee that would be released after the City of Santee approves the final success of the restoration site. ***Option 2***. Off-Site Preservation. Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities (disturbed Diegan coastal sage scrub) within the City of Santee the applicant shall provide for the off-site preservation of land that meets the criteria for sensitive upland vegetation based on the ratios described in Table 3.3-7 by providing the following: a. **Recordation of Conservation Easement**. The recordation of a	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		conservation easement for the off-site preservation of land, at a location approved by the City of Santee and the Wildlife Agencies and must be within one of the following areas: (1) preserve areas in the City of Santee, (2) City of San Diego Multi-Habitat Planning Area, or (3) County of San Diego Pre-Approved Mitigation Areas. The Conservation Easement shall be owned by a conservancy, or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary. b. **Approval of a Resource Management Plan (RMP).** An RMP shall also be prepared as described in MM-BIO-6. The RMP shall establish long-term monitoring, maintenance, management, and reporting directives and provide for long-term management funding through a non-wasting endowment in an amount determined through the preparation of a Property Assessment Record or similar method. The RMP cannot be approved by the City of Santee or CDFW until the following items have been completed: a qualified Resource Manager has been selected and approved by the City of Santee and CDFW, and the RMP funding mechanism has been established.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~1.~~ Option 3. The purchase of mitigation credits shall occur at a mitigation bank approved by the ~~California Department of Fish and Wildlife (CDFW)~~CDFW in the local area or other location deemed acceptable by CDFW. The applicant shall provide evidence of purchase of credits to the City of Santee prior to ~~being issued grading permits by the City of Santee.~~issuance of any grading permit or ground disturbance activity impacting disturbed Diegan coastal sage scrub. Evidence of purchase shall consist of the following items: a. A copy of the purchase contract referencing the project name and numbers for which the habitat credits were purchased. b. If not stated explicitly in the purchase contract, a separate letter must be provided identifying the entity responsible for the long-term management and monitoring of the preserved land. c. To ensure ~~that~~ the land ~~shall~~will be protected in perpetuity, evidence must be provided that a dedicated conservation easement or similar land constraint has been placed over the mitigation land. d. An accounting of the status of the mitigation bank. This shall ~~be provided and~~ include the total amount of credits available at the bank, the amount required by this project, and the amount remaining after use by this project.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~**Option 2:** If habitat credit cannot be purchased in a mitigation bank, then the applicant shall provide for the off site preservation or on-site creation and preservation of Diegan coastal sage scrub habitat at a 1:1 ratio, as described below, prior being issued grading permits by the City of Santee.~~ ~~Off-Site Preservation: The applicant shall provide for the off-site preservation of land that meets criteria for sensitive upland vegetation community mitigation through the recordation of a conservation easement at a location approved by the City of Santee and the Wildlife Agencies (U.S. Fish and Wildlife Service and CDFW) that will be managed in perpetuity under a Resource Management Plan (RMP) that establishes long term monitoring, maintenance, management, and reporting directives. The RMP will be prepared as described in MM-BIO-6. Off-site mitigation shall occur within one of the following areas: (1) preserve areas in the City of Santee; (2) City of San Diego Multi Habitat Planning Area; or (3) County of San Diego Pre-Approved Mitigation Areas. The off-site land being preserved must be at a location approved by the City of Santee and the Wildlife Agencies. Long term management shall be funded through a non-wasting endowment in an amount determined through preparation of a Property Assessment Record or similar method for determining funding amount. The Conservation Easement shall be owned by a conservancy, or other similar, experienced entity, subject to approval by CDFW, and CDFW shall be listed as a third-party beneficiary.~~ ~~e. On-Site Restoration and Preservation. Diegan coastal sage scrub shall be restored and preserved on site at a 1:1 ratio through the recordation of a conservation easement at a location approved by the City of Santee, granted to an entity approved by the City of Santee, and restored pursuant to an Upland Restoration Plan described below. The Conservation Easement shall be owned by a conservancy, or other similar, experienced entity subject to approval by CDFW, and CDFW~~	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~shall be listed as a third party beneficiary.~~ The Upland Restoration Plan shall include the following: ~~Monitoring of the restoration areas will occur for a minimum of 5 years or until the fifth year performance/success criteria are met to determine the successful completion of the 5 year mitigation and monitoring program. The performance standards and success criteria must be approved by the City of Santee and CDFW and shall include requirements for 100% survival of native shrub container stock plantings at the first annual monitoring (or sufficient number of shrubs emerging from seed to replace the container stock), as well as Year 5 standards of native vegetation cover of at least 90% of that of a nearby Diegan coastal sage scrub reference site. Methods used to measure these performance standards shall be described, and, if the restored areas fail to meet the Year 5 standards after the full monitoring term, then a specific set of remedial measures will be developed and implemented, and the monitoring and maintenance period would be extended until all Year 5 standards are met, or as otherwise provided in this document. The Upland Restoration Plan must be approved City of Santee and CDFW prior to implementation.~~ ~~i.~~ In the absence of any restoration plan guidance from the City of Santee, the City of San Diego's ~~General Outline for Conceptual Revegetation/Restoration Plans~~ shall be used for guidance. ~~The Upland Restoration Plan shall detail the installation, maintenance, and monitoring which would occur as part of the restoration effort.~~ ~~ii.~~ The Upland Restoration Plan shall include an evaluation of restoration suitability specific to proposed vegetation types, soil preparation, plant palettes, irrigation, erosion control, maintenance and monitoring program, and success criteria.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~iii. The applicant shall also secure performance bonds prior to being issued grading permits by the City of Santee. These bonds would be released after the City of Santee approves the final success of the restoration site. The specifics regarding long-term management and management funding will be included in a Resource Management Plan (RMP) that establishes long-term monitoring, maintenance, management, and reporting directives. The final RMP shall be prepared as described in MM-BIO-6. The RMP cannot be approved by the City of Santee or CDFW until the following has been completed: easements shall be dedicated, a qualified Resource Manager approved by the City shall be selected, and the RMP funding mechanism shall be in place.~~ MM-BIO-3. ~~Mitigate~~ Permanent Impacts and ~~Certain~~ Temporary Impacts ~~Within~~within City of Santee on Sensitive Riparian and Wetland Vegetation Communities. ~~Impacts on~~Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive riparian and wetland vegetation communities ~~shall be mitigated~~within the City of Santee, mitigation shall occur in accordance with the following: (1) The applicant shall obtain a permit or authorizations as directed by MM-BIO-11 from the applicable regulatory agencies (e.g., U.S. Army Corps of Engineers [USACE], California Department of Fish and Wildlife [CDFW], and Regional Water Quality Control Board [RWQCB]) pursuant to the regulatory agencies' requirements and regulations together with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e., USFWS and CDFW) through the consultation process; and (2) provide evidence of these permits or authorizations, including all required conditions therein, or confirm that no such permits or authorizations are required, to the City of Santee; and (3) mitigate for permanent and temporary impacts in accordance	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		with the mitigation ratios presented in Tables 3.3-8, 3.3-9, and 3.3-11. a) For permanent impacts on sensitive riparian and wetland vegetation communities and other aquatic resources, mitigation will be accomplished through on-site restoration~~,~~ (i.e., creation), enhancement, and/or preservation of habitat~~. The impacts to sensitive riparian and wetland vegetation shall be mitigated at~~ at the mitigation ratios described ~~below:~~in Table 3.3-8 and Table 3.3-9 and as outlined in mitigation strategy in Appendix K, Proposed On-Site Mitigation Overview. If the mitigation for permanent impacts cannot be fully achieved on-site then the creation of the remaining acreage shall be met at an off-site location preferably within the Draft Santee MSCP Subarea Plan Area to be preserved in perpetuity through a dedicated conservation easement. If there are no off-site locations available within the Draft Santee MSCP Subarea Plan Area, then the site can be located outside of the Draft Santee MSCP Subarea Plan but preferably within the San Diego River to ensure mitigation occurs within the same watershed as the impact area. ~~**Direct permanent impacts on disturbed wetland** shall be mitigated at a 2:1 ratio through preservation of enhanced or restored native wetland habitat.~~ ~~**Direct permanent impacts on mule fat – disturbed** shall be mitigated at a 3:1 ratio through preservation of enhanced or restored riparian scrub habitat (mule fat and/or willow scrub).~~ ~~**Direct permanent impacts on southern cottonwood–willow riparian forest and southern cottonwood–willow riparian forest – disturbed** shall be mitigated at a 3:1 ratio through preservation of enhanced or restored riparian forest habitat.~~	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~**Direct temporary impacts on nonnative riparian communities** shall be mitigated at a 1:1 ratio through preservation of enhanced or restored riparian or wetland habitat.~~ ~~**Direct temporary impacts on southern cottonwood–willow riparian forest (including disturbed)** shall be mitigated at a 3:1 ratio through in-situ re-establishment of riparian forest and preservation of enhanced or restored riparian forest.~~ ~~**Direct temporary impacts on mule fat scrub** shall be mitigated at a 2:1 ratio through in-situ re-establishment of mule fat scrub and enhancement of riparian scrub habitat.~~ ~~The~~All temporary impacts related to the placement of the Temporary Railcar Crossing and spillway repair area shall be restored in-place to pre-project conditions. The temporary impacts to sensitive riparian and wetland vegetation shall be mitigated at mitigation ratios described in Table 3.3-11. b) For both permanent and temporary impacts, a Habitat Mitigation and Monitoring Plan (refer to MM-BIO-5) and Resource Management Plan (MM-BIO-6) that include monitoring and restoration requirements for these sensitive riparian and wetland vegetation communities and aquatic resources shall also be ~~identified in a~~ prepared. The Habitat Mitigation and Monitoring Plan ~~(HMMP) (refer to **MM-BIO-5**) and~~and the Resource Management Plan ~~(RMP) (**MM-BIO-6**). The HMMP must~~shall be approved by the appropriate resource agencies (U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife ~~[CDFW]), and the RMP must be approved by the Wildlife Agencies (U.S. Fish and Wildlife Service and CDFW) prior to issuance of grading permits by the City of Santee.~~).	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		MM-BIO-4. Restoration of Temporary Dewatering Impacts within City of Santee and City of San Diego on Sensitive Riparian and Wetland Vegetation Communities. Prior to the issuance of any grading permit or ground disturbance activity the applicant shall obtain a permit or authorizations as directed by MM-BIO-11 from the applicable regulatory agencies (i.e., U.S. Army Corps of Engineers [USACE], Regional Water Quality Control Board, and California Department of Fish and Wildlife [CDFW]) pursuant to the regulatory agencies' requirements and regulations together with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e., USFWS and CDFW) through the consultation process; and provide evidence of these permits or authorizations, including all required conditions therein, or confirm that no such permits or authorizations are required, to the City of Santee. Riparian and wetland vegetation communities within the San Diego River (North Channel) impoundment would be temporarily impacted during dewatering activities during construction. Direct temporary impacts to coastal valley freshwater marsh, fresh water, southern cottonwood-willow riparian forest, and non-native riparian vegetation shall be replaced in accordance with the mitigation ratios provided in Table 3.3-10 through passive in-situ replacement of habitat to pre-dewatering conditions upon completion of the dewatering activities. The impacted areas shall be restored in place and monitored in accordance with the Habitat Mitigation and Monitoring Plan (refer to MM-BIO-5) until success criteria are achieved to ensure these areas fully recover to pre-dewatering conditions. MM-BIO-5. Habitat Mitigation and Monitoring Plan (HMMP). ~~To implement the restoration and enhancement of~~Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive riparian and wetland vegetation	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		communities as ~~mitigation for loss of, or temporary impact on, those communities within the project site, as~~ described in MM-BIO-3 and MM-BIO-4, a final HMMP must be approved by the resource agencies as relevant (U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife), City of San Diego, and the City of Santee ~~prior to being issued grading permits by the City of Santee~~. The HMMP shall ~~do~~comply with the following criteria and standards: ▪ The draft HMMP ~~(Appendix K of the Biological Survey Report) shall be used as a basis for the final HMMP. The HMMP~~ shall include details for the installation, maintenance, and monitoring ~~of sensitive riparian and wetland vegetation that would occur after approval of the HHMP.~~. Annual performance standards for native and non-native vegetation cover designed to assess progress toward final mitigation goals (e.g., by the end of Year 5, the establishment area is expected to achieve at least 75% absolute native vegetation cover, non-native plant cover should not exceed 10%, with perennial invasive species maintained at 0%) and long-term site protection and management. ▪ Monitoring shall include monitoring of the restoration/ enhancement areas for a minimum of 5 years or until ~~fifth~~ 5th year performance ~~/success criteria~~ standards are met. The ~~HHMP~~HMMP shall include performance standards to determine the successful completion of the 5-year mitigation and monitoring program. Attainment of these standards shall indicate the restoration area is progressing toward the habitat functions and services specified in the ~~HHMP~~HMMP. Methods used to measure these performance standards shall be described, and if the ~~restored~~mitigation area fails to meet the Year 5	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		standards after the full monitoring term, a specific set of remedial measures shall be developed~~,~~ and implemented, and the monitoring and maintenance period ~~would~~shall be extended until all ~~Year 5~~final performance standards are met or as otherwise provided in the HMMP. ▪ The HMMP shall include performance bonds that would be released after the City of Santee approves the final success of the restoration site. **MM-BIO-6. Resource Management Plan (RMP).** ~~To~~Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive riparian and wetland vegetation communities, an RMP to provide for the long-term management of the mitigation sites (~~i.e., on-site wetland mitigation sites and potential Diegan coastal sage preservation~~scrub sites~~), an RMP~~) shall be prepared by a qualified biologist to address long-term monitoring, maintenance, management, and reporting directives, in perpetuity. The qualified biologist shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of field experience. The RMP shall be approved by the City of Santee and/or the City of San Diego, and Wildlife Agencies (U.S. Fish and Wildlife Service [USFWS] and California Department of Fish and Wildlife [CDFW~~]) and implemented prior to any ground disturbance activities or issuance of grading permits by the City of Santee.~~]). The RMP shall include the following: ▪ ~~Delineation~~The delineation of the limits of where the conservation easement will be recorded. ▪ Selection of a qualified ~~Preserve~~Resource Manager approved by the City of Santee ~~and Wildlife Agencies,~~ and/or City of San Diego, and CDFW, as applicable.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ ~~Requirements of~~ Establishment of requirements for long-term monitoring~~, maintenance,~~ and management~~, and~~ actions, including reporting directives, in~~-~~perpetuity, approved by the City of Santee and~~ Wildlife Agencies~~/or City of San Diego, and Resource Agencies (i.e., USFWS, U.S. Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB[, and California Department of Fish and Wildlife [CDFW]), as applicable, that will be managed by the ~~Preserve~~Resource Manager. ~~Monitoring requirements for the mitigation area for a minimum of 5 years or until fifth year performance/success criteria are met.~~ ~~Draft performance standards to determine the successful completion of the 5 year mitigation and monitoring program. Attainment of these standards shall indicate that the restoration area is progressing toward the habitat functions and services specified in the RMP. Methods used to measure these performance standards will be described, and, if the restored area fail to meet the Year 5 standards after the full monitoring term, then a specific set of remedial measures will be developed and implemented, and the monitoring and maintenance period will be extended until all Year 5 standards are met, or as otherwise provided in the RMP.~~ ~~▪~~ Preparation of a Property Analysis Record (prepared for endowment funding) or similar cost estimation~~,~~ to determine the size of a non-wasting endowment necessary to fund the annual costs for basic stewardship of the ~~preserve~~mitigation sites. ▪ Establishment of an endowment (or equivalent acceptable funding mechanism) for purposes of long-term monitoring and management actions including reporting directives, in perpetuity based on a Property Analysis Record or similar cost estimation. The funding	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		mechanism shall approved by the applicable city agencies (City of Santee and/or City of San Diego) and Resource Agencies (i.e., USACE, RWQCB, CDFW, and USFWS). ▪ Identification of ~~what~~the entity that would hold the endowment (or be responsible for the equivalent acceptable funding mechanism). ~~The final RMP document must include the additional following items:~~ ~~▪~~ Evidence of purchase of the mitigation land to be managed, if applicable. ▪ Evidence that a conservation easement has been dedicated to ~~CDFW, or other~~ an entity approved by CDFW, to ensure that the land is protected in perpetuity. ▪ Acknowledgment that the ~~resource manager~~Resource Manager accepts ~~the~~ responsibility for the management of the site. ~~Establishment of an endowment or equivalent acceptable funding mechanism.~~ Acknowledgment that the ~~City of Santee~~ applicable city agency has approved the entity that will be responsible for holding the endowment. **MM-BIO-7. Qualified Biologist to Provide Construction Monitoring.** ~~A qualified biologist shall be responsible for overseeing compliance with all laws, regulations, permit conditions, mitigation measures, and any other biological resources requirements during project construction.~~ Prior to the start of ~~construction~~grading or other ground disturbing activity, a qualified biologist shall conduct environmental awareness training for all construction personnel. Topics to be included in the training include, but are not limited to, the	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		construction limits~~,~~; sensitive habitats, features, plants, and animal species to avoid~~,~~; mitigation measure and/or permit condition requirements~~,~~; seasonal or other time-related restrictions on construction~~,~~; and measures related to erosion control and spill prevention. Environmental awareness training shall be repeated for any new construction personnel working on the site. The qualified biologist shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of field experience. ▪ During project vegetation removal or ground disturbing activities (e.g., grubbing, tree removals, grading, discing, soil deposition, etc.), a qualified biologist shall be on-site to oversee compliance with all laws, regulations, permit conditions, mitigation measures, and any other biological resources requirements. The qualified biologist shall review the entire site at least once weekly during other construction activities to ensure that full compliance occurs. **MM-BIO-8. Delineate Environmentally Sensitive Areas.** ~~Sensitive vegetation communities, jurisdictional waters and wetlands,~~Prior to the issuance of any grading permit or ground disturbance activity impacting environmentally sensitive areas within the City of Santee and ~~other~~City of San Diego, "environmentally sensitive ~~biological resources located outside of permanent and temporary impact~~ areas" shall be identified on the final construction plans ~~as *environmentally sensitive areas*~~ and protected with temporary fencing (e.g., orange snow fencing). A qualified biologist shall monitor the installation of the temporary fencing and ensure ~~that~~ it is installed prior to the start of clearing, brushing, grading, or other ground-disturbing construction activities. A qualified biologist shall inspect the temporary fencing at least twice weekly during	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		grading. and monthly after grading is complete, ensuring thatto ensure it remains in place throughout construction. **MM-BIO-9. Stormwater Pollution Prevention Plan.** To control erosion and sedimentation and to preserve water quality, the applicant will obtain coverage for the project under the Construction General Permit (Order No. 2022-0057-DWQ). Prior to the issuance of grading permits, the applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) to support coverage under the Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ) to reduce the potential for water pollution and sedimentation from construction. Best management practices (BMPs) to be included in the SWPPP that must be submitted to the State Water Resources Quality Control Board shall include, but are not limited to, the following: 1 The applicant shall not stockpile brush, loose soils, excavation spoils, or other similar debris material within sensitive habitats. 2 If visible dust is present during construction activities, then standard dust- suppression techniques (e.g., water spraying) shall be used in all ground-disturbance areas. 3 During construction activities, measures shall be in place to ensure that contaminants are not discharged from construction sites. The SWPPP willshall define areas where hazardous materials and trash wouldshall be stored,; where vehicles wouldshall be parked, fueled, and serviced,; and where construction materials wouldshall be stored. 4 Runoff, sedimentation, and erosion shall be minimized through the use of BMPs, such as water bars, silt fences, staked straw bales, wattles, and mulching and seeding of all disturbed areas. These measures shall be designed to	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water, and to preserve roadways and adjacent properties. 5 Equipment storage, fueling, and staging areas shall be located in upland sites, away from riparian areas and other sensitive habitats. These designated areas would shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Where vehicle maintenance (excluding fueling) cannot be avoided in areas outside of those previously specified, these maintenance activities will shall be performed at least 150 feet from all aquatic resources, or as specified by agency permits, on an impermeable bladder or tarp specified for such maintenance activities. Project-related spills of hazardous materials shall be cleaned up immediately, and contaminated soils removed to approved disposal areas. 6 Measures such as sandbags, silt screens, cleanup of spills of hazardous materials, and cleanup of sediment shall be implemented to prevent polluted (with sediment or hazardous materials) runoff from work areas in paved streets from entering the storm drain system. 7 Measures such as silt screens, cleanup of spills of hazardous materials, cleanup of sediment, secondary containment for hazardous materials, and avoidance of activities that disturb sediment or have a high potential for hazardous materials spills shall be implemented immediately before or during rain to prevent polluted (with sediment or hazardous materials) runoff from staging areas from draining into water ways such as washes, drainages, and ditches, and from entering municipal storm drain systems. ▪ The applicant shall comply with the City of Santee's Stormwater Pollution Prevention Program, the specifics of which can be found on the City of Santee's website. Verification of Construction General Permit coverage approval and the approved SWPPP(s) will shall be	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		provided to the City of Santee at least 30 days prior to start of construction. Updated SWPPPs ~~will~~shall be provided to the City of Santee on request during construction. **MM-BIO-10. Speed Limits During Construction.** ~~The City of Santee shall require that vehicle~~Vehicle speed limits within the project site ~~will~~shall not exceed 25 miles per hour during project construction. **MM-BIO-12. Indirect Noise Impacts on Non-Listed Riparian Birds and Raptors.** The operation of construction equipment (e.g., backhoes, loaders, bulldozers, excavators, skid steers, graders) and construction activities (building construction) shall not occur within any suitable breeding habitat that overlap the "noise impact area" (defined as up to 300 feet from the noise source) during the breeding seasons for yellow warbler, yellow-breasted chat, and vermilion flycatcher (February 15 through August 31), nesting raptors (January 15 through July 15), or cormorant (April 1 through July 31). If it is not feasible to avoid operation of construction equipment during any of these breeding seasons, then a pre-construction nesting survey shall be conducted within potential habitat of any of these species within 150, 300, or 500 feet respectively of proposed construction equipment activity. Pre-construction surveys shall be conducted by a qualified biologist no more than 72 hours prior to the start of construction to determine if active nests of these species are present within the areas potentially impacted by noise. The qualified biologist conducting the survey(s) shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of experience conducting biological field surveys, including surveys for nesting birds.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		The "noise impact area" is defined as up to 300 feet from the noise source to the nest for raptors, 500 feet from the noise source to the cormorant rookery, and up to 150 feet from the noise source to the nest for other sensitive riparian species, including yellow warbler, yellow-breasted chat, and vermilion flycatcher. If it is determined at the completion of pre-construction surveys that active nests belonging to yellow warbler, yellow-breasted chat, vermilion flycatcher, or raptors are absent from the noise impact area, construction shall be allowed to proceed. If pre-construction surveys determine the presence of active nests belonging to any of these sensitive species, then construction shall: (1) be postponed within the noise impact area until a qualified biologist determines any nests are no longer active or until after the respective breeding season; (2) be conditionally allowed within portions of the noise impact area if intensive monitoring by the qualified biologist determines that nesting activities are not being substantially (i.e., adults appearing agitated, scolding more, attracting the attention of brown-headed cowbirds, or leaving the nest site more than average) disrupted by adjacent construction activity; or (3) not occur until a temporary noise barrier or berm is constructed at the edge of the construction limits and/or around the piece of equipment to ensure that noise levels within the noise impact area are reduced to below 1-hour average of 60 A-weighted decibels (dBA) L_{eq} or ambient noise levels, whichever is greater, at the nest location. Decibel output shall be confirmed by a qualified noise specialist, and intermittent monitoring by a qualified biologist shall be required to ensure that conditions have not changed. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that construction of the noise attenuation feature does not itself result in disruption of nesting behavior. Factors used to determine and guide the	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		appropriate buffer distance shall include individual pair behavior responses, amount of buffering topography or structures, proximity to existing disturbance, and ambient noise levels. While the rookery is active, the qualified biologist shall monitor the rookery for any signs of disruption to breeding activities by ongoing construction activities (e.g., adults appearing agitated, leaving the nest more than average, etc.). If the qualified biologist determines breeding activities are disrupted, the avoidance buffer shall be expanded until the disruption is no longer observed. **MM-BIO-13. Disturbance of Vegetation During Bird Nesting Season.** Construction activities occurring within all potential nesting resource areas within the Project site and areas within 500 feet of the Project site containing suitable nesting resources should be avoided during the migratory bird nesting season (typically January 15 through September 15). If construction activities (i.e., grading, tree removal, external construction involving heavy equipment generating noise in excess of 60 dBA [energy equivalent level] or ambient noise levels, whichever is greater, at the nest location) must occur during the bird nesting season, an avian nesting survey of all potential nesting resource areas within the Project site and areas containing suitable nesting resources within 500 feet of all impact areas must be conducted to determine the presence/absence of special-status species, protected migratory birds, and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours of initiation of construction activities in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If construction activities are on hold for more than 30 days, then pre-construction surveys would need to be reinitiated. If an active bird nest is found, the nest shall be flagged (flagging shall be	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		attached to a nearby tree or shrub with distance and direction identified so as not to disturb nest) and mapped on the construction plans, along with an appropriate buffer established around the nest. The buffer will be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species), existing nearby conditions (e.g., natural habitat versus roads or existing noisy activities), existing buffering features (e.g., topography, tall and dense trees, buildings), legal status of species (i.e., listed versus non-listed), general sensitivities of the species (e.g., disturbance tolerant or urban versus not disturbance tolerant), and other variables. The nest buffer area shall be avoided until the nest is vacated and/or the juveniles have fledged. The nest buffer area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when an active nest buffer is in place. No project activities shall encroach into established buffers without the consent of a monitoring biologist. Construction shall be conditionally allowed within portions of the noise impact area (i.e., buffer surrounding the nest) if a temporary noise barrier or berm is constructed at the edge of the construction limits and/or around the piece of equipment to ensure that noise levels within the noise impact area are reduced to below 1-hour average of 60 A-weighted decibels (dBA) equivalent sound level hourly average (leq) or ambient noise levels, whichever is greater, at the nest location. Decibel output shall be confirmed by a qualified noise specialist, and intermittent monitoring by a qualified biologist shall be required to ensure that conditions have not changed. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that construction of the noise attenuation feature does not itself result disruption of	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		nesting behavior. Factors used to determine and guide the appropriate buffer distance shall include individual pair behavior responses, amount of buffering topography or structures, proximity to existing disturbance, and ambient noise levels. The qualified biologist shall determine the appropriate nest avoidance distance based on species type, habitat location and condition, and behavior of the nesting pair. The qualified biologist conducting the survey(s) shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of experience conducting biological field surveys, including surveys for nesting birds. **MM-BIO-14. Mitigation, Monitoring, and Reporting Conditions for Potential Impacts to Occupied Least Bell's Vireo Habitat.** No clearing, grubbing, grading, or other construction activities shall occur during the least Bell's vireo breeding season (March 15 through September 15) until the following requirements have been met, to the satisfaction of the applicable jurisdiction issuing the grading permit: A. A qualified biologist shall perform a clearance survey in those wetland areas suitable for the presence of least Bell's vireo, as shown on Figure 12 of the Revised Biological Survey Report. Surveys for the species shall be conducted within the current breeding season (i.e., when the impact is to occur – if it cannot wait until after the breeding season), and include at least 3 weekly surveys with the last survey occurring 24 hours before any clearing, grubbing, grading, or other construction activities commences. If least Bell's vireo is present, then the following conditions must be met:	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ Occupied habitat shall be staked or fenced under the supervision of a qualified biologist; and ▪ From March 15 through September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 A-weighted decibels (dBA) equivalent sound level hourly average (leq) hourly average (or to the ambient noise level if greater) at the edge of occupied least Bell's vireo habitat. An analysis showing that noise generated by construction activities would not exceed 60 dBA hourly average (or to the ambient noise level if greater) at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City of San Diego City Manager or the City of Santee City Planner (depending on applicable jurisdiction) at least 2 weeks prior to the commencement of construction activities in the affected area. Prior to the commencement of any construction activities during the breeding season, areas restricted from such activities (avoidance buffers) shall be staked or fenced under the supervision of a qualified biologist. This noise analysis may include noise attenuation requirements, including altering grading operations, phasing grading, cessation of vehicle idling, and using quieter machinery	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		near sensitive resources, to obtain the necessary noise levels; or ▪ At least 2 weeks prior to the commencement of construction activities in the affected area, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dBA leq hourly average (or the ambient noise level if greater) at the edge of habitat occupied by least Bell's vireo. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that the construction of the noise attenuation feature does not itself result in disruption of nesting behavior. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring (as described below) shall be conducted at the edge of the occupied habitat to ensure that noise levels do not exceed 60 dBA leq hourly average (or ambient noise levels if greater). If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, or the nesting activities are being substantially disrupted by adjacent construction activity, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16). ▪ Construction noise monitoring shall continue to be monitored at least twice weekly on	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dBA leq hourly average or to the ambient noise level if greater. If not, other measures shall be implemented in consultation with the biologist, the City of San Diego City Manager, or the City of Santee City Planner (depending on the applicable jurisdiction), as necessary, to reduce noise levels to below 60 dBA leq hourly average or to the ambient noise level if greater. Such measures may include limitations on the placement of construction equipment and the simultaneous use of equipment. **MM-BIO-15. Crotch's Bumble Bee Pre-Construction Surveys.** Prior to any ground disturbance activity within non-developed areas (golf course areas are considered to be developed) during the Colony Active Period (April 1 through August 31), pre-construction surveys for active Crotch's bumble bee nest colonies shall be required no more than 5 days prior to any ground disturbance or vegetation removal. The following method for nest surveys shall be used unless the Wildlife Agencies provide an updated method based on current understanding of bumble bee nests in the future: ▪ The biologist shall look for nest resources (e.g., burrows) suitable for bumble bee use. If an area of bumble bee activity is detected, the biologist shall watch potential nest resources for a period of time (up to 30 minutes if early in the Colony Active Period, and up to 10 minutes during the peak of the Colony Active Period) looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		nest site with frequency, although the rate can vary depending on whether it is early/late or at the peak of the Colony Active Period. If a bumble bee worker is detected, then a representative bee shall be identified to species. This should be possible without capture in San Diego County. Biologists shall ensure that 100% visual coverage of all potential burrow resources are surveyed. Therefore, the biologist shall select a view that balances viewing multiple burrows while ensuring detection if bees are present. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point, but this limit shall not exceed 50 feet. The biologist shall reduce the 50-foot limit as necessary to ensure 100% visual coverage of potential burrow resources depending on topography, vegetation height and cover, and other factors. This approach shall allow the biologist to assess multiple burrows at one time to sufficiently determine if bees are entering/exiting them. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). A photo voucher of the bee species shall be collected, and the location mapped using GPS. If identification is not feasible without capture, then the project proponent shall consult with the California Department of Fish and Wildlife prior to allowing the biologist to capture and identify to species (using the protocol for the California Bumble Bee Atlas project managed by the Xerces Society) to determine if a California Endangered Species Act Memorandum of Understanding and/or Scientific Collecting Permit would be required.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ A written survey report shall be submitted to the City of Santee and City of San Diego within 30 days of the pre-construction nest surveys. The report shall include survey methods, weather conditions, and survey results, including botanical results, a list of insect species observed, and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed (as appropriate for the level of survey required). The survey report shall include the qualifications of the surveyor(s) and approved biologist(s) for identification of photo vouchers and a detailed habitat assessment. If Crotch's bumble bee nests are observed, location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report. If Crotch's bumble bee is not detected during the surveys, no further action or mitigation would be required. ▪ If a Crotch's bumble bee nest is detected, the project biologist shall establish, monitor, and maintain a no-work buffer around the nest. The size and configuration of the no-work buffer shall be based on best professional judgement of the project biologist in consultation with the Wildlife Agencies. The buffer shall provide at least 50 feet of clearance around nest entrance(s). Construction activities shall not occur within the no-work buffer until the colony is no longer active. To determine that a nest is no longer active, the nest shall be observed for a minimum of 60 minutes each day across a minimum of 3 days during suitable flight weather (i.e., ambient air temperature between 60°F and 90°F, winds under 10 miles per hour, and no precipitation higher than a drizzling rain). If no bees are seen flying in or out of the nest by the end of the	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		observation period, it shall be determined that the nest is no longer active. If project activities occur outside of the Colony Active Period, then pre-construction surveys for active bee nest colonies and avoidance measures are not required. ▪ If required, based on positive identification during the preconstruction survey, mitigation for direct impacts to Crotch's bumble bee nesting habitat shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project to be provided through implementation of the project's mitigation measures MM-BIO-1 and MM-BIO-2. If required by the California Department of Fish and Wildlife (CDFW) 2081 incidental take permitting process, additional mitigation measures may be required through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, a cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of a conservation easement area(s) in perpetuity for the Crotch's bumble bee, in coordination with CDFW. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall account for all management activities required to fulfill the requirements of the conservation easement(s), which are currently under review and development by CDFW.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		MM-BIO-16. Western Spadefoot Pre-Construction Survey. During the rainy season (typically begins with the first rains in October) prior to any ground-disturbance activities which impact potentially suitable western spadefoot ponded habitat in the project's biological study area (BSA), south of the San Diego River North Channel, the project must either perform an egg mass/larval survey for western spadefoot or perform nocturnal eyeshine surveys for adults. If performed, egg mass/larval surveys must be performed in March and/or April. If performed, nocturnal adult surveys must be performed during or the night after the first three large (0.25-inch or greater) rain events of the winter. If the standing water or nocturnal survey is negative, then no additional measures are required. If the surveys find western spadefoot, then a 1,500-foot buffer shall be applied, originating from the breeding resource. The buffer area between the BSA open space limit and farthest project impact limit shall be enclosed by exclusion fencing. That interior area shall be surveyed during the first three rain events, and western spadefoot shall be relocated outside of the buffer area within the BSA. If detected, a relocation plan shall be prepared prior to grading or relocation that identifies the specific methods and relocation areas, and shall be approved by the lead agency and any relevant wildlife agencies (Note that if the species becomes listed, then that wildlife agency would also need to review and approve the relocation plan). Any relevant incidental take permits required (e.g., Section 7 or 10 under the Federal Endangered Species Act or scientific collecting permits or 2081 under California Department of Fish and Wildlife (CDFW) to perform this task shall be acquired. If 100% avoidance of occupied habitat is not feasible AND the species is listed, consultation and possible incidental take permitting with U.S. Fish and Wildlife Service (USFWS) and/or CDFW shall be completed prior to	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		implementation of any activities that may impact occupied habitat or animals, directly or indirectly. **MM-BIO-17. Western Burrowing Owl Pre-Construction Survey.** Prior to ground disturbance activities impacting suitable habitat for burrowing owl, the project shall determine if suitable burrowing owl nesting and overwintering habitat occurs within the project site based on a current habitat assessment. Suitable habitat generally consists of open habitats that are situated on flat to rolling slopes and include minimum 11-centimeter diameter burrows or other openings like rock crevices. The most important characteristic is the burrow. If suitable burrows are identified (e.g., greater than 11 centimeters in diameter and greater than 150 centimeters in depth), then the following shall be implemented: ▪ If suitable burrowing owl habitat with burrows are present, pre-construction burrowing owl surveys shall be conducted consistent with the 2012 California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation. No more than 14 days prior to the initiation of project activities, a qualified biologist shall conduct at least two surveys at least 7 days apart, with the final survey conducted no more than 48 hours prior to the initiation of project activities. A report of the survey results, including mapping of any occupied burrows (including natural or constructed), burrowing owls, or burrowing owl sign observed, shall be submitted to the Cities of Santee and San Diego for their review and approval prior to initiation of project activities. Pre-construction surveys are not seasonally dependent and shall be required whenever ground disturbance is planned to address potential impacts during both overwintering and nesting seasons. If the survey is negative, then nothing	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		more is required. If a burrow with burrowing owl sign (e.g., feathers, white-wash, pellets, insect remains) or burrowing owl is found, then the following measures shall be implemented: - Project activities shall be restricted within occupied burrowing owl habitat (inclusive of the appropriate buffer) during the breeding season (February 1 through August 31) until nesting is complete (i.e., the young have dispersed and are fledged, independently foraging, and no longer using the burrows or burrow complex, and/or adults are no longer nesting). - During the breeding season, buffers shall be established by a qualified biologist consistent with guidance provided in the 2012 CDFW Staff Report on Burrowing Owl Mitigation. Appropriate buffer size shall depend on the time of year, level of disturbance, and project-specific site conditions. Buffers around active nesting sites shall be a minimum of 200 meters (656 feet) regardless of the time of year. The monitoring biologist shall have the authority to order stop work if burrowing owls exhibit distress or abnormal behavior and shall consult with the appropriate entities to determine next steps (e.g., stop work or increase buffers. ▪ Where impacts to burrowing owl are unavoidable, the following measures shall be required: - If suitable but un-occupied burrows cannot be avoided, burrow exclusion may be appropriate. Burrow exclusion shall only be allowed after the burrow has been determined by a qualified biologist to be inactive. No exclusions shall be permitted during the nesting season when there is evidence of burrowing owl activity. Prior to the initiation of	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		any burrow exclusions, a Burrow Exclusion Plan shall be submitted to the Cities of Santee and San Diego and CDFW for review and approval. Implementation of the plan may require a CDFW 2081 incidental take permit or an MOU/Scientific Collecting Permit. - Mitigation for impacts to occupied habitat shall occur through the conservation of occupied burrowing owl habitat at a ratio coordinated in consultation with CDFW but no less than 1:1 for the territory of the burrowing owl. If occupied burrowing owl habitat is not available for mitigation within the Santee Subarea Plan Area, lands with potential to be occupied through appropriate restoration, management, and enhancement of burrowing owl nesting and foraging requirements may be considered. The land to be conserved shall be approved by the Cities of Santee and San Diego and CDFW. The land to be conserved shall be secured by a legal instrument (e.g., conservation easement) to the satisfaction of CDFW. - Respectively, the applicant shall secure a CDFW 2081 Incidental Take Permit or obtain issuance of required permit(s) based on the City of San Diego Multiple Species Conservation Program requirements for implementation of any activities that may impact occupied habitat, directly or indirectly. **MM-BIO-18. Avoidance of California Gnatcatcher Take.** Prior to the grading or removal of coastal sage scrub, a California gnatcatcher pre-construction survey will be performed. A permitted biologist (i.e., possessing a valid Endangered Species Act Section 10(a)(1)(a) Recovery Permit) shall conduct	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		a focused pre-construction survey for coastal California gnatcatcher (*Polioptila californica californica*) within all coastal sage scrub areas of the project site. If presence of coastal California gnatcatcher is determined to occur on the project site, the following measures shall be required to be implemented by the applicant: ▪ If habitat is occupied by coastal California gnatcatcher, no vegetation removal shall occur within occupied habitat during the coastal California gnatcatcher breeding season (March 15 to August 15). ▪ A 500-foot buffer will be required around the nest site until it is shown to be vacated. ▪ If 100% avoidance of occupied habitat and buffer is not feasible, consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife and possible receipt of an incidental take permit through Section 7 or 10 (FESA) shall be required prior to implementation of any activities that may impact occupied habitat, directly or indirectly. **MM-BIO-19. Homeowner Education Program and Signage.** Prior to the first occupancy of the residential homes on the project site, a homeowner education program shall be prepared by a qualified biologist for approval by City of Santee and distributed by the applicant to inform homeowners of the need to keep pets outside of the adjacent open space areas. The homeowners' association shall incorporate signage, where appropriate, to inform residents of the importance of preservation of native flora and fauna and to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in proposed open space areas and/or suitable habitat for special-status wildlife.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		MM-BIO-20. Adjacency Guidelines. Prior to the commencement of any construction activities, the construction contractor shall prepare construction plans for submission to and approval by the City of Santee that shall include the following to address potential indirect impacts to special-status species occurring within all suitable habitat associated with the San Diego River (i.e., within 500 feet of the project site): a) **Invasive Weeds.** To reduce the spread of invasive plant species, landscape plants shall not be on the most recent version of the California Invasive Plant Council's Invasive Plant Inventory (https://www.cal-ipc.org/plants/inventory/). Landscape plans shall incorporate native species that occur in the region to the extent feasible and all stream courses within the redeveloped golf course shall include a 10-foot-wide strip of planted native vegetation. This strip shall have an emphasis on saltgrass (Distichlis spicata), a native, wetland tolerant grass species. b) **Night Work.** All construction activities shall be conducted during the daytime, and lights shall not be kept on overnight in the construction area, as practicable. If night lighting is required during construction activities, all exterior lighting along undeveloped land shall be fully shielded and directed downward in a manner that shall prevent light spillage or glare into the adjacent open space. c) **Lighting**. Project lighting shall be designed consistent with the requirements of Section 13.30.030(B) of the Santee Municipal Code. Night lighting shall be directed away from open space and/or suitable habitat for special-status species to protect species from direct night lighting. Shielding shall be incorporated in project designs to ensure that ambient lighting is not increased.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		MM-BIO-21. Wildlife-Friendly Fencing. Prior to the issuance of a grading permit, the Applicant/Developer shall prepare a fencing plan to prevent the exclusion of wildlife usage of the secondary movement corridor (golf course area) for the approval of the City of Santee. The chain-link fencing shall include a 42-inch gap at the bottom that includes a bottom twisted wire strand at 20 inches above the ground within the gap. Up to three additional strands may be placed between the bottom wire and the protective fence. The resulting wire strands at 20 inches, 23 inches, 26 inches, and 38 inches. The fencing design shall allow wildlife through the fence and through the secondary wildlife corridor, including deer with antlers that could crawl under the fence. The fencing plan shall be approved by the City of Santee as part of design review and approval. The fencing shall be maintained in perpetuity through contractual obligation with the Homeowners' Association or other equivalent mechanism(s).	
Impact BIO-2: ~~Permanent Impacts on Sensitive Communities (City of Santee).~~**Potential Impacts to Natural Vegetation Communities and Riparian Habitat.** Direct and indirect impacts on sensitive natural communities or riparian habitat	PS	~~Implement MM-BIO-3 and MM-BIO-5 through MM-BIO-10, as described above.~~**MM-BIO-1**, Permanent Impacts within City of San Diego on Sensitive Upland Vegetation Communities; **MM-BIO-2**, Permanent Impacts within City of Santee on Sensitive Upland Vegetation Communities; **MM-BIO-3**, Permanent Impacts and Temporary Impacts within City of Santee on Sensitive Riparian and Wetland Vegetation Communities; **MM-BIO-4**, Temporary Dewatering Impacts within City of Santee and City of San Diego on Sensitive Riparian and Wetland Vegetation Communities; **MM-BIO-5**, Habitat Mitigation and Monitoring Plan (HMMP); **MM-BIO-6**, Resource Management Plan (RMP); **MM-BIO-7**, Qualified Biologist to Provide Construction Monitoring; **MM-BIO-8**, Delineate Environmentally Sensitive Areas; **MM-BIO-9**, Stormwater Pollution Prevention Plan; **MM-BIO-10**, Speed Limits During Construction; **MM-BIO-19**, Homeowner Education Program and Signage; and **MM-BIO-**	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		20. Adjacency GuidelinesImplement **MM-BIO-7 through MM-BIO-10**, as described above. **MM-BIO-2. Mitigate Permanent Impacts Within City of Santee on Sensitive Upland Vegetation Communities.** Direct permanent impacts on disturbed Diegan coastal sage scrub and nonnative grassland within the City of Santee shall be mitigated at a 1:1 ratio either through the purchase of mitigation bank credits of Diegan coastal sage scrub(Option 1) or through off site preservation or on site creation and preservation of Diegan coastal sage scrub (Option 2). **Option 1**: The purchase of mitigation credits shall occur at a mitigation bank approved by the California Department of Fish and Wildlife (CDFW) in the local area or other location deemed acceptable by CDFW. The applicant shall provide evidence of purchase of credits to the City of Santee prior to being issued grading permits by the City of Santee. *Evidence of purchase* shall consist of the following items: A copy of the purchase contract referencing the project name and numbers for which the habitat credits were purchased. If not stated explicitly in the purchase contract, a separate letter must be provided identifying the entity responsible for the long-term management and monitoring of the preserved land. To ensure that the land shall be protected in perpetuity, evidence must be provided that a dedicated conservation easement or similar land constraint has been placed over the mitigation land. An accounting of the status of the mitigation bank shall be provided and include the total amount of credits available at the bank, the amount required by this project, and the amount remaining after use by this project. **Option 2**: If habitat credit cannot be purchased in a mitigation bank, then the applicant shall provide for the off site	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~preservation or on-site creation and preservation of Diegan coastal sage scrub habitat at a 1:1 ratio, as described below, prior being issued grading permits by the City of Santee.~~ ~~Off-Site Preservation: The applicant shall provide for the off-site preservation of land that meets criteria for sensitive upland vegetation community mitigation through the recordation of a conservation easement at a location approved by the City of Santee and the Wildlife Agencies (U.S. Fish and Wildlife Service and CDFW) that will be managed in perpetuity under a Resource Management Plan (RMP) that establishes long-term monitoring, maintenance, management, and reporting directives. The RMP will be prepared as described in MM BIO-6. Off-site mitigation shall occur within one of the following areas: (1) preserve areas in the City of Santee; (2) City of San Diego Multi-Habitat Planning Area; or (3) County of San Diego Pre-Approved Mitigation Areas. The off-site land being preserved must be at a location approved by the City of Santee and the Wildlife Agencies. Long-term management shall be funded through a non-wasting endowment in an amount determined through preparation of a Property Assessment Record or similar method for determining funding amount. The Conservation Easement shall be owned by a conservancy, or other similar, experienced entity, subject to approval by CDFW, and CDFW shall be listed as a third-party beneficiary.~~ ~~On-Site Restoration and Preservation. Diegan coastal sage scrub shall be restored and preserved on-site at a 1:1 ratio through the recordation of a conservation easement at a location approved by the City of Santee, granted to an entity approved by the City of Santee, and restored pursuant to an Upland Restoration Plan described below. The Conservation Easement shall be owned by a conservancy, or other similar, experienced entity subject to approval by CDFW, and CDFW shall be listed as a third-party beneficiary. The Upland Restoration Plan shall include the following:~~	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~Monitoring of the restoration areas will occur for a minimum of 5 years or until the fifth year performance/success criteria are met to determine the successful completion of the 5-year mitigation and monitoring program. The performance standards and success criteria must be approved by the City of Santee and CDFW and shall include requirements for 100% survival of native shrub container stock plantings at the first annual monitoring (or sufficient number of shrubs emerging from seed to replace the container stock), as well as Year 5 standards of native vegetation cover of at least 90% of that of a nearby Diegan coastal sage scrub reference site. Methods used to measure these performance standards shall be described, and, if the restored areas fail to meet the Year 5 standards after the full monitoring term, then a specific set of remedial measures will be developed and implemented, and the monitoring and maintenance period would be extended until all Year 5 standards are met, or as otherwise provided in this document. The Upland Restoration Plan must be approved City of Santee and CDFW prior to implementation.~~ ~~In the absence of any restoration plan guidance from the City of Santee, the City of San Diego's *General Outline for Conceptual Revegetation/Restoration Plans* shall be used for guidance.~~ ~~The Upland Restoration Plan shall detail the installation, maintenance, and monitoring which would occur as part of the restoration effort.~~ ~~The Upland Restoration Plan shall include an evaluation of restoration suitability specific to proposed vegetation types, soil preparation, plant palettes, irrigation, erosion control, maintenance and monitoring program, and success criteria.~~ ~~The applicant shall also secure performance bonds prior to being issued grading permits by the City of Santee. These bonds would be released after the City of Santee approves the final success of the restoration site. The specifics regarding~~	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~long term management and management funding will be included in a Resource Management Plan (RMP) that establishes long-term monitoring, maintenance, management, and reporting directives. The final RMP shall be prepared as described in **MM-BIO-6**. The RMP cannot be approved by the City of Santee or CDFW until the following has been completed: easements shall be dedicated, a qualified Resource Manager approved by the City shall be selected, and the RMP funding mechanism shall be in place.~~ ~~**MM-BIO-3. Mitigate Permanent and Certain Temporary Impacts Within City of Santee on Sensitive Riparian and Wetland Vegetation Communities.** Impacts on sensitive riparian and wetland vegetation communities shall be mitigated through on-site restoration, enhancement, and preservation of habitat. The impacts to sensitive riparian and wetland vegetation shall be mitigated at the mitigation ratios described below:~~ ~~**Direct permanent impacts on disturbed wetland** shall be mitigated at a 2:1 ratio through preservation of enhanced or restored native wetland habitat.~~ ~~**Direct permanent impacts on mule fat – disturbed** shall be mitigated at a 3:1 ratio through preservation of enhanced or restored riparian scrub habitat (mule fat and/or willow scrub).~~ ~~**Direct permanent impacts on southern cottonwood–willow riparian forest and southern cottonwood–willow riparian forest – disturbed** shall be mitigated at a 3:1 ratio through preservation of enhanced or restored riparian forest habitat.~~ ~~**Direct temporary impacts on nonnative riparian communities** shall be mitigated at a 1:1 ratio through preservation of enhanced or restored riparian or wetland habitat.~~ ~~**Direct temporary impacts on southern cottonwood–willow riparian forest (including disturbed)** shall be mitigated at a 3:1 ratio through in situ re-establishment of riparian forest and preservation of enhanced or restored riparian forest.~~	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Direct temporary impacts on mule fat scrub shall be mitigated at a 2:1 ratio through in situ re-establishment of mule fat scrub and enhancement of riparian scrub habitat. The monitoring and restoration requirements for these sensitive riparian and wetland vegetation communities shall be identified in a Habitat Mitigation and Monitoring Plan (HMMP) (refer to **MM-BIO-5**) and Resource Management Plan (RMP) (**MM-BIO-6**). The HMMP must be approved by the resource agencies (U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife [CDFW]), and the RMP must be approved by the Wildlife Agencies (U.S. Fish and Wildlife Service and CDFW) prior to issuance of grading permits by the City of Santee. **MM-BIO-5. Habitat Mitigation and Monitoring Plan (HMMP).** To implement the restoration and enhancement of sensitive riparian and wetland vegetation communities as mitigation for loss of, or temporary impact on, those communities within the project site, as described in **MM-BIO-3** and **MM-BIO-4**, a final HMMP must be approved by the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and the City of Santee prior to being issued grading permits by the City of Santee. The HMMP shall do the following: The draft HMMP (Appendix K of the Biological Survey Report) shall be used as a basis for the final HMMP. The HMMP shall include details for the installation, maintenance, and monitoring of sensitive riparian and wetland vegetation that would occur after approval of the HHMP. Monitoring shall include monitoring of the restoration/ enhancement areas for a minimum of 5 years or until fifth year performance/success criteria are met. The HHMP shall include performance standards to determine the successful completion of the 5-year mitigation and monitoring program. Attainment of these standards shall indicate the restoration area is progressing toward the habitat functions and services		

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		specified in the HHMP. Methods used to measure these performance standards shall be described and if the restored area fails to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed, implemented, and the monitoring and maintenance period would be extended until all Year 5 standards are met or as otherwise provided in the HMMP. The HMMP shall include performance bonds that would be released after the City of Santee approves the final success of the restoration site. **MM BIO-6. Resource Management Plan (RMP).** To provide for the long-term management of the mitigation sites (i.e., on-site wetland mitigation sites and potential Diegan coastal sage preservation sites), an RMP shall be prepared by a qualified biologist to address long-term monitoring, maintenance, management, and reporting directives, in perpetuity. The RMP shall be approved by the City of Santee and the Wildlife Agencies (U.S. Fish and Wildlife Service and California Department of Fish and Wildlife [CDFW]) and implemented prior to any ground disturbance activities or issuance of grading permits by the City of Santee. The RMP shall include the following: Delineation of the limits of where the conservation easement will be recorded. Selection of a qualified Preserve Manager approved by the City of Santee and Wildlife Agencies. Requirements of long-term monitoring, maintenance, management, and reporting directives, in perpetuity, approved by the City of Santee and Wildlife Agencies, that will be managed by the Preserve Manager. Monitoring requirements for the mitigation area for a minimum of 5 years or until fifth-year performance/success criteria are met.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~Draft performance standards to determine the successful completion of the 5 year mitigation and monitoring program. Attainment of these standards shall indicate that the restoration area is progressing toward the habitat functions and services specified in the RMP. Methods used to measure these performance standards will be described, and, if the restored area fail to meet the Year 5 standards after the full monitoring term, then a specific set of remedial measures will be developed and implemented, and the monitoring and maintenance period will be extended until all Year 5 standards are met, or as otherwise provided in the RMP.~~ ~~Preparation of a Property Analysis Record prepared for endowment funding or similar cost estimation, to determine the size of a non-wasting endowment necessary to fund the annual costs for basic stewardship of the preserve.~~ ~~Identification of what entity would hold the endowment (or equivalent acceptable funding mechanism).~~ ~~The final RMP document must include the additional following items:~~ ~~Evidence of purchase of the mitigation land to be managed.~~ ~~Evidence that a conservation easement has been dedicated to CDFW, or other entity approved by CDFW to ensure that the land is protected in perpetuity.~~ ~~Acknowledgment that the resource manager accepts the responsibility for the management of the site.~~ ~~Establishment of an endowment or equivalent acceptable funding mechanism.~~ ~~Acknowledgment that the City of Santee has approved the entity that will be responsible for holding the endowment.~~	
Impact BIO-3: ~~Temporary Impacts on Sensitive Communities (City of Santee).~~Potential Impacts to	PS	MM-BIO-3, Permanent Impacts and Temporary Impacts within City of Santee on Sensitive Riparian and Wetland Vegetation Communities; MM-BIO-4, Temporary Dewatering Impacts within City of Santee and City of San Diego on Sensitive Riparian and	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Wetlands. Direct and indirect impacts on wetlands.		Wetland Vegetation Communities; **MM-BIO-5**, Habitat Mitigation and Monitoring Plan (HMMP); **MM-BIO-6**, Resource Management Plan (RMP); **MM-BIO-7**, Qualified Biologist to Provide Construction Monitoring; **MM-BIO-8**, Delineate Environmentally Sensitive Areas; **MM-BIO-9**, Stormwater Pollution Prevention Plan; **MM-BIO-10**, Speed Limits During Construction; **MM-BIO-19**, Homeowner Education Program and Signage; and **MM-BIO-20**, Adjacency Guidelines ~~Implement MM BIO 3 and MM BIO 5 through MM BIO 10, as described above.~~ **MM-BIO-11. Wetland Permits.** ~~Implement **MM-BIO-3** through **MM-BIO-10**, as described above.~~Prior to the issuance of any grading permit or ground disturbance activity impacting aquatic resources, the applicant shall: (1) obtain a permit or authorization from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and/or California Department of Fish and Wildlife jurisdiction as applicable pursuant to the regulatory agencies' requirements and regulations, together with any permit/agreement conditions and mitigation measures imposed through the consultation process; (2) provide evidence to the City of Santee of the permit or authorization, or confirmation that no such permits or authorizations are required; and 3) mitigate for permanent impacts to aquatic resources and restoration of temporary impact areas within aquatic resources for each sensitive wetland vegetation type in accordance with measures MM-BIO-3 and MM-BIO-4, in addition to the permit requirements of the applicable resource agencies (i.e., USACE, CDFW, and RWQCB) imposed during the permitting process. Temporary impacts shall occur in-place and shall be restored to pre-project conditions. The monitoring and restoration requirements shall be identified in a Habitat Mitigation and Monitoring Plan (refer	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		to MM-BIO-5) that complies with the mitigation strategy outlined in Appendix K, Proposed On-Site Mitigation Overview, of Appendix E, Revised Biological Survey Report and Resource Management Plan as directed by MM-BIO-6. ~~**MM-BIO-4. Mitigate Temporary Dewatering Impacts on Sensitive Riparian and Wetland Vegetation Communities Within the City of Santee.** Riparian and wetland vegetation communities within the City of Santee are considered sensitive by California Department of Fish and Wildlife. Direct temporary impacts on coastal valley freshwater marsh, fresh water, and nonnative riparian vegetation shall be mitigated through passive, in situ restoration of habitat to pre-dewatering conditions. The impacts shall be mitigated through implementation of the Habitat Mitigation and Monitoring Plan (refer to **MM-BIO-5**).~~	
Impact BIO-4: **Potential Impacts to Wildlife Movement and Nursery Sites**. Direct and indirect impacts to wildlife movement and nursery sites~~Wetland Impacts.~~	PS	**MM-BIO-7**, Qualified Biologist to Provide Construction Monitoring; **MM-BIO-8**, Delineate Environmentally Sensitive Areas; **MM-BIO-12**, Indirect Noise Impacts on Non-Listed Riparian Birds and Raptors; and **MM-BIO-21**, Wildlife-Friendly Fencing ~~Implement **MM-BIO-3** through **MM-BIO-10**, as described above.~~ ~~**MM-BIO-11. Wetland Permits.** Impacts on jurisdictional wetland and waterway resources and occupied least Bell's vireo critical habitat would require permits and authorizations by the USACE, RWQCB, and CDFW prior to impacts. Prior to the approval of the grading plans, the applicant will provide the City of Santee with permits and authorizations from each resource agency, for project impacts related to aquatic resources and impacts on occupied least Bell's vireo riparian habitat, or provide evidence that no such permits are required. Impacts on sensitive wetland communities will be mitigated, at a minimum, as described in **MM-BIO-3** and **MM-BIO-4**. These resource agencies could require mitigation ratios higher than~~	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		those described in **MM-BIO-3** and **MM-BIO-4**, but ratios will not be less than those described in **MM-BIO-3**.	
Impact BIO-5: **Potential Conflicts to Adopted Plans or Local Policies.** Conflicts with adopted plans or local policies~~Least Bell's Vireo Breeding Habitat (City of Santee).~~	PS	**MM-BIO-3**, Qualified Biologist to Provide Construction Monitoring; **MM-BIO-6**, Resource Management Plan (RMP); **MM-BIO-9**, Stormwater Pollution Prevention Plan; **MM-BIO-12**, Indirect Noise Impacts on Non-Listed Riparian Birds and Raptors; and **MM-BIO-20**, Adjacency Guidelines~~Implement **MM-BIO-3** through **MM-BIO-10**, as described above.~~ ~~**MM-BIO-14. Mitigation, Monitoring, and Reporting Conditions for Potential Impacts on Occupied Least Bell's Vireo Habitat.**~~ ~~Prior to the issuance of grading permits, the Cities of Santee and San Diego shall verify that the following project requirements regarding least Bell's vireo are shown on the construction plans. No clearing, grubbing, grading, or other construction activities shall occur during the least Bell's vireo breeding season (March 15 through September 15) until the following requirements have been met to the satisfaction of the applicable jurisdiction issuing the grading permit:~~ ~~A qualified biologist shall perform a clearance survey in those wetland areas suitable for the presence of least Bell's vireo. Surveys for the species shall be conducted within the current breeding season, if applicable, and include at least 3 weekly surveys and monthly follow-up surveys. If least Bell's vireo is present, then the following conditions must be met:~~ ~~Occupied habitat shall be staked or fenced under the supervision of a qualified biologist; and~~ ~~From March 15 through September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 A-weighted decibels (dBA) equivalent sound level (L_{eq}) hourly average (or to the ambient noise level if greater) at the edge of occupied least Bell's vireo habitat. An analysis showing that noise generated by construction activities would not~~	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~exceed 60 dBA L_{eq} hourly average (or to the ambient noise level if greater) at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City of San Diego City Manager or the City of Santee City Planner (depending on applicable jurisdiction) at least 2 weeks prior to the commencement of construction activities in the affected area. Prior to the commencement of any of construction activities during the breeding season, areas restricted from such activities (avoidance buffers) shall be staked or fenced under the supervision of a qualified biologist. This noise analysis may include noise attenuation requirements, including altering grading operations, phasing grading, cessation of vehicle idling, and using quieter machinery near sensitive resources, to obtain the necessary noise levels; or~~ ~~At least 2 weeks prior to the commencement of construction activities in the affected area, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dBA L_{eq} hourly average (or the ambient noise level if greater) at the edge of habitat occupied by least Bell's vireo. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that the construction of the noise attenuation feature does not itself result in disruption of nesting behavior. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring (as described below) shall be conducted at the edge of the occupied habitat to ensure that noise levels do not exceed 60 dBA L_{eq} hourly average (or ambient noise levels if greater). If the noise attenuation techniques implemented are determined to be~~	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		inadequate by the qualified acoustician or biologist, or the nesting activities are being substantially disrupted by adjacent construction activity, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16). Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dBA L_{eq} hourly average or to the ambient noise level if greater. If not, other measures shall be implemented in consultation with the biologist, the City of San Diego City Manager, or the City of Santee City Planner (depending on the applicable jurisdiction), as necessary, to reduce noise levels to below 60 dBA L_{eq} hourly average or to the ambient noise level if greater. Such measures may include limitations on the placement of construction equipment and the simultaneous use of equipment.	
Impact BIO-6: Potential Impacts to Biological Resources from Edge Effects. Direct and indirect impacts to biological resources within or adjacent to the MHPANon-listed Special-Status Species Habitat.	PS	MM-BIO-20, Adjacency GuidelinesImplement MM-BIO-1 through MM-BIO-10, as described above.	LTS
Impact BIO-7: Potential Impacts to Natural Open Space Areas from Invasive Plant Species Introduction. Direct and indirect impacts to natural open space areas	PS	MM-BIO-20, Adjacency GuidelinesMM-BIO-12. Minimize Indirect Noise Impacts on Non-listed Riparian Birds and Raptors. The operation of construction equipment (e.g., backhoes, loaders, bulldozers, excavators, skid steers, graders) and construction activities (building construction) shall not occur within a "noise impact area" (as defined below)	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
from introduction of invasive species~~Nesting Birds.~~		~~during the breeding seasons for yellow warbler, yellow-breasted chat, and vermilion flycatcher (February 15 through August 31), or nesting raptors (January 15 through July 15). If it is not feasible to avoid operation of construction equipment during any of these breeding seasons, then a pre-construction nesting survey shall be conducted within potential habitat of any of these species within 150 or 300 feet of proposed construction equipment activity. Pre-construction surveys shall be conducted by a qualified biologist no more than 72 hours prior to the start of construction to determine if active nests of these species are present within the areas potentially impacted by noise. The qualified biologist conducting the survey(s) shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of experience conducting biological field surveys, including surveys for nesting birds.~~ ~~The "noise impact area" is defined as up to 300 feet from the noise source to the nest for raptors and up to 150 feet from the noise source to the nest for the cormorant rookery and for other sensitive riparian species, including yellow warbler, yellow breasted chat, and vermilion flycatcher. If it is determined at the completion of pre-construction surveys that active nests belonging to yellow warbler, yellow-breasted chat, vermilion flycatcher, or raptors are absent from the noise impact area, construction shall be allowed to proceed. If pre-construction surveys determine the presence of active nests belonging to any of these sensitive species, then construction shall (1) be postponed within the noise impact area until a qualified biologist determines any nests are no longer active or until after the respective breeding season; (2) be conditionally allowed within portions of the noise impact area if intensive monitoring by the qualified biologist determines that nesting activities are not being substantially (i.e., adults appearing~~	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~agitated, scolding more, attracting the attention of brown-headed cowbirds, or leaving the nest site more than average) disrupted by adjacent construction activity; or (3) not occur until a temporary noise barrier or berm is constructed at the edge of the construction limits and/or around the piece of equipment to ensure that noise levels within the noise impact area are reduced to below 1-hour average of 60 dBA L_{eq} or ambient noise levels, whichever is greater, at the nest location. Decibel output shall be confirmed by a qualified noise specialist, and intermittent monitoring by a qualified biologist shall be required to ensure that conditions have not changed. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that construction of the noise attenuation feature does not itself result disruption of nesting behavior. Factors used to determine and guide the appropriate buffer distance shall include individual pair behavior responses, amount of buffering topography or structures, proximity to existing disturbance, and ambient noise levels.~~ **~~MM-BIO-13. Avoid Disturbance of Vegetation During Bird-Nesting Season.~~** ~~To comply with state and federal protections on nesting birds, clearing, trimming, and grubbing of vegetation shall occur September 1 through February 14 (i.e., outside of the general bird breeding season), and tree removal shall occur July 16 through January 14 (outside of the raptor breeding season). If tree or vegetation trimming, clearing, or grubbing cannot feasibly occur outside of these breeding seasons, then pre-construction nesting surveys, as described below, shall be conducted by a qualified biologist prior to initiating vegetation trimming, clearing, or grubbing activities.~~ ~~The nesting survey for native birds protected under the Migratory Bird Treaty Act and California Fish and Game Code shall consist of one pre-construction nesting survey conducted~~	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		~~no more than 72 hours prior to the commencement of vegetation trimming, clearing, or grubbing to determine if active nests of these species are present in the affected areas. If pre-construction surveys determine the presence of active nests, then construction shall (1) be postponed within the noise impact area until a qualified biologist determines any nests are no longer active or until after the respective breeding season; (2) be conditionally allowed within portions of the noise impact area if intensive monitoring by the qualified biologist determines that nesting activities are not being substantially (i.e., adults appearing agitated, scolding more, attracting the attention of brown-headed cowbirds, or leaving the nest site more than average) disrupted by adjacent construction activity; or (3) not occur until a temporary noise barrier or berm is constructed at the edge of the construction limits and/or around the piece of equipment to ensure that noise levels within the noise impact area are reduced to below 1 hour average of 60 dBA L_{eq} or ambient noise levels, whichever is greater, at the nest location. Decibel output shall be confirmed by a qualified noise specialist, and intermittent monitoring by a qualified biologist shall be required to ensure that conditions have not changed. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that construction of the noise attenuation feature does not itself result disruption of nesting behavior. Factors used to determine and guide the appropriate buffer distance shall include individual pair behavior responses, amount of buffering topography or structures, proximity to existing disturbance, and ambient noise levels.~~ ~~The qualified biologist shall determine the appropriate nest avoidance distance based on species type, habitat location and condition, and behavior of the nesting pair. The qualified biologist conducting the survey(s) shall have, at a minimum, a~~	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of experience conducting biological field surveys, including surveys for nesting birds. **MM-BIO-18. Homeowner Education Program.** Prior to the issuance of a building permit for the residential homes on the project site, a homeowner education program shall be prepared by a qualified biologist for approval by City of Santee and distributed by the applicant to inform homeowners of the need to keep pets outside of the adjacent open space areas.	
Impact BIO-8: Crotch's Bumble Bee.	PS	**MM-BIO-15. Conduct Crotch's Bumble Bee Pre-construction Surveys.** Prior to the initiation of ground-disturbing activity during the Colony Active Period (April 1 through August 31), then pre-construction surveys for active bee nest colonies shall be required no more than 5 days prior to any ground disturbance or vegetation removal. The following method for nest surveys shall be used unless the Wildlife Agencies provide an updated method based on current understanding of bumble bee nests in the future: • Within non-developed habitats (golf course areas are considered to be developed), the biologist shall look for nest resources (e.g., burrows) suitable for bumble bee use. If an area of bumble bee activity is detected, the biologist shall watch potential nest resources for a period of time (up to 30 minutes if early in the Colony Active Period, and up to 10 minutes during the peak of the Colony Active Period) looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, although the rate can vary depending on whether it is early/late or at the peak of the Colony Active Period. If a bumble bee worker is detected, then a representative bee shall be identified to species. This should be possible without capture in San Diego County. Biologists shall ensure that 100% visual coverage of all	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		potential burrow resources are surveyed. Therefore, the biologist shall select a view that balances viewing multiple burrows while ensuring detection if bees are present. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point, but this limit shall not exceed 50 feet. The biologist shall reduce the 50-foot limit as necessary to ensure 100% visual coverage of potential burrow resources depending on topography, vegetation height and cover, and other factors. This approach shall allow the biologist to assess multiple burrows at one time to sufficiently determine if bees are entering/exiting them. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). A photo voucher of the bee species shall be collected, and the location mapped using GPS. If identification is not feasible without capture, then the project proponent shall consult with the California Department of Fish and Wildlife prior to allowing the biologist to capture and identify to species (using the protocol for the California Bumble Bee Atlas project managed by the Xerces Society) to determine if a California Endangered Species Act Memorandum of Understanding and/or Scientific Collecting Permit would be required. • A written survey report shall be submitted to the City of Santee and City of San Diego within 30 days of the pre-construction nest surveys. The report shall include survey methods, weather conditions, and survey results, including botanical results, a list of insect species observed, and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed (as appropriate for the level of survey required). The survey report shall include the qualifications of the surveyor(s) and approved biologist(s) for identification of photo vouchers and a	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		detailed habitat assessment. If Crotch's bumble bee nests are observed, location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report. • If a Crotch's bumble bee nest is detected, the project biologist shall establish, monitor, and maintain a no-work buffer around the nest. The size and configuration of the no-work buffer shall be based on best professional judgement of the project biologist in consultation with the Wildlife Agencies. The buffer shall provide at least 50 feet of clearance around nest entrance(s). Construction activities shall not occur within the no-work buffer until the colony is no longer active. To determine that a nest is no longer active, the nest shall be observed for a minimum of 60 minutes each day across a minimum of 3 days during suitable flight weather (i.e., ambient air temperature between 60°F and 90°F, winds under 10 miles per hour, and no precipitation higher than a drizzling rain). If no bees are seen flying in or out of the nest by the end of the observation period, it shall be determined that the nest is no longer active. If project activities occur outside of the Colony Active Period, then pre-construction surveys for active bee nest colonies and avoidance measures are not required.	
Impact BIO-9: Western Spadefoot.	PS	**MM-BIO-16. Western Spadefoot Pre-construction Survey.** During the rainy season (typically begins with the first rains in October) prior to the issuance of the grading permit, the project must either perform an egg mass/larval survey for western spadefoot within standing water in the biological study area (BSA) or perform nocturnal eyeshine surveys for adults across the BSA. If performed, egg mass/larval surveys must be performed in March and/or April. If performed, nocturnal adult surveys must be performed during or the night after the first three large (0.25-inch or greater) rain events of the winter. If	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		the standing water or nocturnal survey is negative, then no additional measures are required. If the surveys find western spadefoot, then a 1,500-foot buffer shall be applied, originating from the breeding resource. The buffer area between the BSA open space limit and farthest project impact limit shall be enclosed by exclusion fencing. That interior area shall be surveyed during the first three rain events, and western spadefoot shall be relocated outside of the buffer area within the BSA. A relocation plan shall be prepared that identifies the specific methods and relocation areas, shall be prepared prior to implementation, and shall be approved by the lead agency. Any permits required to perform this task shall be acquired. This measure is not required north of the San Diego River (north) because that section of the San Diego River does not provide suitable habitat for western spadefoot and would provide a suitable buffer if spadefoot were found south of there.	
Impact BIO-10: Western Burrowing Owl.	PS	**MM-BIO-17. Western Burrowing Owl Pre-construction Survey.** Prior to grading activities, the project shall determine if suitable burrowing owl nesting and overwintering habitat occurs within the project site based on a current habitat assessment. If suitable burrows are identified (e.g., greater than 11 centimeters in diameter and greater than 150 centimeters in depth), then the following shall be implemented: • Pre-construction burrowing owl surveys shall be conducted consistent with the 2012 California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation. No more than 14 days prior to the initiation of project activities, a qualified biologist shall conduct at least two surveys at least 7 days apart, with the final survey conducted no more than 48 hours prior to the initiation of project activities. A report of the survey results, including	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		mapping of any occupied burrows (including natural or constructed), burrowing owls, or burrowing owl sign observed, shall be submitted to the Cities of Santee and San Diego for their review and approval prior to initiation of project activities. Pre-construction surveys that are not seasonally dependent shall be required whenever ground disturbance is planned to address potential impacts during both overwintering and nesting seasons. If the survey is negative, then nothing more is required. If an occupied burrow or burrowing owl is found, then the following measures shall be implemented: - Depending on the jurisdiction (City of Santee/City of San Diego) and their respective Multiple Species Conservation Program requirements at the time, either those requirements shall be implemented, or a CDFW 2081 Incidental Take Permit shall be secured and the following shall be implemented unless superseded by the Multiple Species Conservation Program or Incidental Take Permit: - Project activities shall be restricted within occupied burrowing owl habitat (inclusive of the appropriate buffer) during the breeding season (February 1 through August 31) until nesting is complete (i.e., the young have dispersed and are fledged, independently foraging, and no longer using the burrows or burrow complex, and/or adults are no longer nesting). - During the breeding season, buffers shall be established by a qualified biologist consistent with guidance provided in the 2012 CDFW Staff Report on Burrowing Owl Mitigation. Appropriate buffer size shall depend on the time of year, level of disturbance, and project-specific site conditions. Buffers around active nesting sites shall be a minimum of 200 meters (656 feet) regardless of the time of year. The monitoring	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		biologist shall have the authority to order stop work if burrowing owls exhibit distress or abnormal behavior and shall consult with the appropriate entities to determine next steps (e.g., stop work or increase buffers). - Where impacts to burrowing owl are unavoidable, the following measures shall be required: - If suitable but unoccupied burrows cannot be avoided, burrow exclusion may be appropriate. Burrow exclusion shall only be allowed after the burrow has been determined by a qualified biologist to be inactive. No exclusions shall be permitted during the nesting season when there is evidence of burrowing owl activity. Prior to the initiation of any burrow exclusions, a Burrow Exclusion Plan shall be submitted to the Cities of Santee and San Diego and CDFW for review and approval. - Mitigation for impacts to occupied habitat shall occur through the conservation of occupied burrowing owl habitat at a ratio of no less than 1:1 for the territory of the burrowing owl. If occupied burrowing owl habitat is not available for mitigation within the Santee Subarea Plan Area, lands with potential to be occupied through appropriate restoration, management, and enhancement of burrowing owl nesting and foraging requirements may be considered. The land to be conserved shall be approved by the Cities of Santee and San Diego and CDFW. The land to be conserved shall be secured by a legal instrument (e.g., conservation easement) to the satisfaction of CDFW.	
Impact BIO-11: Cormorant Rookery.	PS	Implement **MM-BIO-7, MM-BIO-8,** and **MM-BIO-12**, as described above.	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
~~**Impact BIO-12:** Construction Noise.~~	~~PS~~	~~Implement **MM-BIO-12** and **MM-BIO-13**, as described above.~~	~~LTS~~
~~**Impact BIO-13:** Indirect Human Activity.~~	~~PS~~	~~Implement **MM-BIO-18**, as described above.~~	~~LTS~~
~~**Impact BIO-14:** Domestic Animals.~~	~~PS~~	~~Implement **MM-BIO-18**, as described above.~~	~~LTS~~
~~**Impact BIO-15:** Water Quality.~~	~~PS~~	~~Implement **MM-BIO-9**, as described above.~~	~~LTS~~
~~**Impact BIO-16:** Fugitive Dust.~~	~~PS~~	~~Implement **MM-BIO-9** and **MM-BIO-10**, as described above.~~	~~LTS~~
3.4 Cultural and Tribal Cultural Resources			
Impact CUL-1: Potential to Affect Archaeological Resources.	PS	**MM-CUL-1. Retention of Qualified Archaeologist.** Prior to the start of any ground-disturbing activity, provide evidence to the City of Santee that a Qualified Archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology has been contracted by the Applicant to implement the Archaeological Monitoring program and carry out all mitigation measures related to archaeological resources. Within 60 days after construction is complete, the qualified archaeologist will prepare and submit to the City of Santee for review a final monitoring report that will discuss the monitoring program, its results, and approval and provide interpretations about the recovered materials, noting, to the extent feasible, each item's class, material, function, and origin. Any new cultural sites or features encountered will be recorded with the SCIC at San Diego State University. **MM-CUL-2. Preconstruction Cultural Resources Sensitivity Training.** Prior to the approval of grading permits, a qualified archaeologist will prepare cultural resources sensitive training materials for use during project-wide Worker Environmental Awareness Training (or equivalent). The cultural resources sensitivity training will be conducted by a qualified environmental trainer working under the supervision of a	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		qualified archaeologist. The qualified archaeologist will determine and ensure the suitability of the qualified environmental trainer. The cultural resources sensitivity training will be conducted for all construction personnel. Construction personnel will be informed of the types of archaeological resources that may be encountered and the proper procedures to be implemented in the event of an inadvertent discovery of archaeological resources or human remains. The City of Santee will ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance. **MM-CUL-3. Installation of Exclusionary Signage.** Prior to the approval of grading permits, exclusionary temporary environmentally sensitive area signage will be installed to ensure that Site P-37-000204/CA-SDI-204 is not inadvertently affected during project construction. The exclusionary signage will encompass the mapped site boundary and be spaced no more than 20 feet apart; in order to discourage unauthorized disturbance, vandalism, or collection of artifacts, signage will not identify the protected areas as demarcating archaeological resources. Work within the delineated area will be limited to no new ground disturbance within the mapped boundaries of Site P-37-000204/CA-SDI-204 outside of approved areas where data recovery will be performed. **MM-CUL-4 Capping Site P-37-000204/CA-SDI-204.** Avoidance of impacts to archaeological site P-37-000204/CA-SDI-204 will be conducted through a combination of site-capping and avoidance, where feasible within the site boundaries. Prior to approval of grading permits, a site-capping plan will be prepared by a qualified archaeologist who meets or exceeds the Secretary of Interior's Professional Qualifications Standards for archaeology. The plan will be reviewed and approved by the Project Director for the City of Santee with	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		input from Native American tribal groups who have consulted on the project. The plan will include the following steps: ▪ To ensure that potential archaeological deposits remain intact, proposed work within the site boundary will require capping of the site that includes placing a geotextile fabric across the existing ground surface and covering that ground surface with a layer of clean fill where project components are proposed and/or placing ground-protecting mats in areas of ingress and egress within the site. ▪ The exception to this will be the new storm drains, which, by the nature of their design, cannot be installed aboveground; data recovery will be conducted within the ground disturbance footprint. ▪ Any proposed grading will only occur within new fill. ▪ This mitigation measure will not apply to non-project-related routine maintenance and operations activities that are regularly conducted for the golf course. **MM-CUL-5. Development and Implementation of Cultural Resources Monitoring Plan.** Prior to the start of any project-related ground-disturbing activities or issuance of grading permits, a qualified archaeologist will prepare a Cultural Resources Monitoring Plan (CRMP) that will stipulate the location and timing of archaeological and Native American monitoring, including, but not limited to, the monitoring of all ground-disturbing activities within 250 feet of P-37-000204/ CA-SDI-204. The CRMP will include monitoring protocols to be carried out during project construction and stipulate that a Native American monitor associated with one or more of the Native American groups that have expressed interest in the project be retained to monitor all project-related ground disturbance stipulated in the CRMP. In preparing the CRMP, the Native	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		American groups that have expressed interest in monitoring will be consulted regarding monitor scheduling, and a Native American–monitoring schedule will be incorporated into the CRMP. The CRMP will contain an allowance that a qualified archaeologist, based on observations of subsurface soil stratigraphy or other factors during initial grading, and in coordination with the Native American monitor(s) and the City of Santee, may reduce or discontinue monitoring as warranted if it is determined that the possibility of encountering archaeological deposits is low. The plan will outline the appropriate measures to be followed in the event of an unanticipated discovery of cultural resources during project implementation, including that all ground disturbance within 100 feet of an unanticipated discovery will cease until a treatment plan is developed by a qualified archaeologist in coordination with the City of Santee and the Native American monitor(s) that will consider the resources archaeological and tribal value. The CRMP will identify avoidance as the preferred manner of mitigating impacts to cultural resources. The plan will establish the criteria utilized to evaluate the significance (per CEQA) of the discoveries, methods of avoidance consistent with CEQA Guidelines Section 15126.4(b)(3), as well as identify the appropriate treatment to mitigate the effect of the project if avoidance of a significant resources is determined to be infeasible. The CRMP will also include provisions for the treatment of archaeological sites that qualify as unique archaeological resources pursuant to PRC Section 21083.2, which places limits on the costs of mitigation for unique archaeological resources. The plan will also include reporting of monitoring results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories. The CRMP will be submitted to the City of Santee for review and approval prior to	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		approval of grading permits, as well as to the Native American groups that have expressed interest in the proposed project for review and comment. **MM-CUL-6. Development and Implementation of a Data Recovery Plan.** Where avoidance and or site-capping is infeasible, or if any part of the intact portion of Site P-37-000204/CA-SDI-204 is affected by ground disturbance, or if the City of Santee, in coordination with the qualified archaeologist, determines that an unanticipated discovery is a historical resource, and data recovery is the only feasible mitigation, then an archaeological Data Recovery Plan (DRP) will be designed and implemented to record and remove scientifically important data that would otherwise be destroyed through construction-related ground disturbance, per CEQA Guidelines 15126.4(b)(3)(C). The DRP will include historic context, research design, expected feature types, data recovery thresholds, data recovery field and laboratory methods, the artifact-disposition policy, and reporting requirements. The DRP and data recovery fieldwork will be completed prior to the start of or resumption of project construction. After the archaeological data recovery fieldwork is complete, the qualified archaeologist will prepare an archaeological Data Recovery Report that conforms with the California Office of Historic Preservation's recommended contents and format for cultural resources reports. The report will be submitted to the City of Santee for review; on the City of Santee's determination that the report is satisfactory, it will be reposited at the SCIC. Any artifacts collected during data recovery will be curated at the San Diego Archaeological Center, at the project proponent's expense. This report will be deemed acceptable by the City of Santee prior to any project-related ground-disturbing activities or issuance of grading permits. In cases of unanticipated cultural resource discoveries requiring data	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		recovery, data recovery work and the report will be deemed acceptable by the City of Santee prior to the resumption of construction activities within the potentially impacted portion of the resource.	
Impact CUL-2: Potential to Affect Unknown Human Remains.	PS	Implement **MM-CUL-5 and MM-CUL-6**, as described above. **MM-CUL-7. Contact Authorities if Human Remains Are Encountered.** Human remains are known to be located in the proposed project area. Should additional human remains be found within the project beyond those already identified in this report, their location will be incorporated into P-37-000204/CA-SDI-204. California Health and Safety Code Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains and that no further disturbance occur until the County Coroner has made a determination of origin and disposition, pursuant to PRC Section 5097.98. If the remains are determined to be Native American, then the County Coroner must contact the NAHC, which will assign a Most Likely Descendant. Per PRC Section 5097.98(b), the landowner will confer with the Most Likely Descendant about all reasonable options regarding the disposition of the remains. In addition, according to California Health and Safety Code, six or more human burials at one location constitutes a cemetery (California Health and Safety Code § 8100), and disturbance of Native American cemeteries is a felony (California Health and Safety Code § 7052). Although there are known human remains in the project area, with the implementation of mitigation measures, the project will avoid potentially significant impacts on human remains. Public Resources Code Section 5097.98, CEQA Section 15064.5, and Health & Safety Code Section 7050.5 will be followed in the event that human remains are discovered.	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact TCR-1: Potential to Impact Tribal Cultural Resources.	PS	Implement **MM-CUL-1** through **MM-CUL-7**, as described above.	LTS
3.5 Energy			
Implementation of the proposed project would not result in any potentially significant impacts related to energy.			
3.6 Geology and Soils			
Impact GEO-1: Potential to Exacerbate Conditions That Would Result in Liquefaction (City of Santee).	PS	**MM-GEO-1. Geotechnical Recommendations.** Prior to the issuance of a grading permit, the applicant will demonstrate that the recommendations and specifications contained in the geotechnical investigations conducted for the project site and off-site areas have been incorporated into the final project design and construction documents as minimum project requirements to the satisfaction of the City of Santee Director of Engineering. The recommendations are discussed in detail in the reports prepared by Geocon and updated in 2024 (Appendices G1 and G2). The geotechnical recommendations include, but are not limited to, general geotechnical recommendations, soil and excavation characteristics, soluble sulfate exposure, grading, seismic design criteria, slope stability, corrosive potential, foundation and concrete slab on-grade, post-tensioned foundation system parameters, pavement recommendations, retaining walls and lateral loads, slope maintenance, grading and foundation review, site drainage and moisture protection, grading plan review, and recommended grading specifications. Recommendations also include remedial grading for the areas containing artificial fill or young alluvium saturated by groundwater, as well as recommendations for the bridge pier foundations for the bridge proposed from Residential North to the Resort site. Lastly, the human-made lakes present at both Residential North and Residential West would need to be dewatered and evaluated by an engineer with respect to remedial grading.	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact GEO-2: Potential to Exacerbate Conditions That Would Result in Lateral Spreading or Soil Collapse (City of Santee).	PS	Implement **MM-GEO-1**, as described above.	LTS
Impact GEO-3: Potential to Disturb Buried Paleontological Resources.	PS	**MM-GEO-2. Paleontological Monitoring in Areas of Sensitivity.** To address potentially significant impacts to paleontological resources, a monitoring program will be implemented. To reduce potential impacts on paleontological resources, all proposed grading and excavating to depths greater than 10 feet will be monitored by a qualified paleontologist(s) and approved by the City of Santee, notification would be provided to the City of San Diego, and monitoring would be paid for by the project proponents. Specifically, the project proponent and/or its construction supervisor will ensure that the following measures are implemented: ▪ **Preconstruction Personnel and Repository:** Prior to approval of grading permits, a qualified project paleontologist will be retained to oversee the mitigation program. A qualified project paleontologist is a person with a doctorate or master's degree in paleontology, or a related field, and who has knowledge of the County of San Diego paleontology and documented experience in professional paleontological procedures and techniques. In addition, a regional fossil repository, such as the San Diego Natural History Museum, will be designated by the City of Santee or the City of San Diego depending upon where the resource is found, to receive any discovered fossils. ▪ **Preconstruction Meeting:** The project paleontologist will attend the preconstruction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues.	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ **Preconstruction Training:** The project paleontologist will conduct a paleontological resource training workshop to be attended by earth-excavation personnel. ▪ **During-Construction Monitoring:** A project paleontologist or paleontological monitor will be present during all earthwork in formations with moderate to high paleontological sensitivity. A paleontological monitor (working under the direction of the project paleontologist) will be on site on a full-time basis during all original cutting of previously undisturbed deposits of Pleistocene terrace deposits (moderate paleontological potential), ancient landslide deposits (moderate paleontological potential), Stadium Conglomerate (high paleontological potential), and Friars Formation (high paleontological potential) to inspect exposures for unearthed fossils. Areas to be monitored will include, but would not be limited to, the majority of the proposed project. ▪ **During-Construction Fossil Recovery:** If fossils are discovered, then the project paleontologist (or paleontological monitor) will recover them. In most cases, fossil salvage can be completed in a short period of time. However, some fossil specimens (e.g., a bone bed or a complete large mammal skeleton) may require an extended salvage period. In these instances, the project paleontologist (or paleontological monitor) has the authority to temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. A regional fossil repository, such as the San Diego Natural History Museum, will be designated by the City of Santee or the City of San Diego depending upon where the resource is found, to receive any discovered fossils. ▪ **Post-Construction Treatment:** Fossil remains collected during monitoring and salvage will be cleaned, repaired, sorted, and cataloged.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ **Post-Construction Curation:** Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will be deposited in the designated fossil repository. ▪ **Post-Construction Final Report:** A final summary paleontological mitigation report that outlines the results of the mitigation program will be completed and submitted to the City of Santee within 2 weeks of the completion of each construction phase of the proposed project. This report will include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, inventory lists of cataloged fossils, and significance of recovered fossils.	
3.7 Greenhouse Gas Emissions			
Implementation of the proposed project would not result in any potentially significant impacts related to greenhouse gas emissions.			
3.8 Hazards and Hazardous Materials			
Implementation of the proposed project would not result in any potentially significant impacts related to hazards and hazardous materials.			
3.9 Hydrology and Water Quality			
Impact HYD-1: Potential to Place New Development Within the Regulatory Floodway and Floodplain Limits.	PS	**MM-HYD-1: Approval of a Conditional Letter of Map Revision and Letter of Map Revision.** Prior to issuance of any grading permit, the project applicant shall obtain approval of the CLOMR from FEMA. The CLOMR will include revised local base - flood elevations based on current modeling of the project site. The building pads for all on-site structures will be set a minimum of 1 foot above the maximum 100-year water-surface elevations on the project site associated with the river flow rates as provided in Table 11.36.070 of the City of Santee's Flood Damage Prevention Ordinance. Prior to building permit issuance, the applicant will obtain a LOMR that is approved by FEMA and demonstrate that no building pads would be placed below 1 foot above the calculated local base-flood elevations. The LOMR would officially revise the current	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		FIRM map to show changes to the floodplain, floodway, and flood elevations.	
3.10 Land Use and Planning			
Implementation of the proposed project would not result in any potentially significant impacts related to land use and planning.			
3.11 Mineral Resources			
Implementation of the proposed project would not result in any potentially significant impacts related to mineral resources.			
3.12 Noise and Vibration			
Impact NOI-1: Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels in Excess of Established Standards.	PS	**RCM-NOI-1. Restrict project construction activity to the days and hours permitted by the City of Santee Municipal Code.** Construction equipment at the project site will not be started, idled, moved, or operated on Mondays through Saturdays, except between the hours of 7:00 a.m. and 7:00 p.m., or at any time on Sundays or City of Santee-recognized holidays, unless expressly approved by the City of Santee's Director of Engineering. **RCM-NOI-2. Provide construction notices to all property owners and residents within 300 feet of the project site.** A City of Santee-approved construction notice will be prepared for the project that describes the project and its expected duration and provides a point of contact to resolve noise complaints. The project proponent will coordinate with the City of Santee to ensure that the notice is approved in advance of construction. The notice will be delivered to all property owners and residents within 300 feet of the project site at least 10 days before the start of construction. **RCM-NOI-3. Notify the Noise Control Officer of emergency generator use.** In the event of an emergency that requires the use of the sewer lift-station emergency generator to maintain the safe operation of the lift station, the Noise Control Officer must be notified as soon as practical after the emergency. If	LTS

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		possible, the Noise Control Officer should be notified in advance. **RCM-NOI-4. Provide construction notices to all property owners and residents within 300 feet of the project site.** The sewer lift-station emergency generator shall be designed, modified, or equipped to reduce sounds produced to the lowest possible level consistent with its effective operation. **MM-NOI-1. Implement the noise-control measures to meet the city's 65 dBA L_{dn} noise threshold at the private rear yards.** Prior to Certificate of Occupancy, a 6-foot noise barrier would be required along Carlton Oaks Drive to reduce noise levels at Residential North and along West Hills Parkway to reduce noise levels at Residential West to below the City's 65 dBA L_{dn} noise threshold. The location of the 6-foot barriers are shown on the landscape plans. The barriers must be constructed of a non-gapping material consisting of masonry, ½ inch thick glass, earthen berm or any combination of these materials. **MM-NOI-2. Conduct an acoustical study to reduce interior noise levels at noise-sensitive areas of proposed residential development.** Mitigation is required at the proposed Residential West and to the single-family homes adjacent to Carlton Oaks Drive within the proposed Residential North. Prior to the issuance of building permit(s) for the identified homes as shown on the landscape plans, the applicant will retain a qualified acoustical consultant to prepare an acoustical report to address interior noise levels at the homes. The specific noise limits to be achieved are described below. The analysis will be submitted to the City of Santee's Planning & Building Director for approval. The recommendations of the report will be incorporated into the project's site and architectural plans and be implemented during project construction. The acoustical report will satisfy the following requirements:	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ The acoustical report will evaluate the designs and provide recommendations, as necessary, to ensure that interior noise levels due to exterior noise sources will not exceed 45 dB L_{dn}. ▪ Techniques to achieve the required noise control may include, but are not limited to, the following: - Orient bedrooms away from noise sources. - Limit the size and number of openings (e.g., windows, doors) and penetrations (e.g., vents, pipes, conduits) on exterior facades, especially facades facing the street. - Use sound-rated doors and windows. - Upgrade construction of walls, roofs, and attics, including added insulation. - Add a mechanical ventilation/air-conditioning system so that a habitable environment can be maintained with doors and windows closed. **MM-NOI-3. Restrict the style, timing, and location of music permitted on site.** The following restrictions will be applied to the project and be included as conditions of approval in the project's conditional use permit (CUP). ▪ No exterior music or amplified sound (including speech) will occur at the project site after 10:00 p.m. ▪ Live or amplified music will be permitted only at the outdoor patio of the clubhouse/restaurant or inside the banquet hall. ▪ All windows and doors to the exterior of the building from the banquet hall will remain closed while music is being performed inside the banquet hall. ▪ The following restrictions will apply to music at the outdoor patio of the clubhouse/restaurant:	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		- Music may include amplified vocals and amplified instruments, such a guitar or piano/keyboard, but will not include live drums or percussion (either amplified or non-amplified). - Music will be restricted to acoustic-style performances with no more than two performers. - Music levels will be compatible with background entertainment of guests and diners at the clubhouse/restaurant patio. Additional amplification (e.g., amplification to extend music performance audio to other areas of the project) will not be permitted.	
Less than Significant Impact: Generate Excessive Groundborne Vibration or Groundborne Noise Levels.	LTS	**MM-NOI-4. Observe buffer distances during project construction.** During all construction activity at the project site, the project proponent will require its construction contractor(s) to observe the following buffer distances to reduce groundborne vibration at nearby off-site buildings per Federal Transit Administration thresholds: ▪ Avoid vibratory compaction within 100 feet of residential buildings. If the listed buffer distance cannot be maintained, alternative equipment can be used that avoids or reduces high vibrational levels at the source. Non-vibratory rollers may be used in place of vibratory rollers.	LTS
Impact C-NOI-1: Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels.	PS	Implement **MM-NOI-1**, as discussed above.	LTS
3.13 Population and Housing			
Implementation of the proposed project would not result in any potentially significant impacts related to population and housing.			
3.14 Public Services			
Implementation of the proposed project would not result in any potentially significant impacts related to public services.			

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
3.15 Recreation			
Impact REC-1: Construction of Recreational Facilities That Have the Potential to Result in Significant Impacts to the Environment.	PS	Applicable mitigation measures from other resource topics including air quality and health risk, biological resources, cultural and tribal cultural resources, hydrology and water quality, noise and vibration, and transportation and circulation in this EIR. No additional mitigation is required.	LTS
Impact C-REC-1: Construction of Recreational Facilities That Have the Potential to Result in Significant Cumulative Impacts to the Environment.	PS	Refer to **Impact REC-1**, above.	LTS
3.16 Transportation and Circulation			
Impact TRA-1: Generate Vehicle Miles Traveled in Exceedance of Thresholds for Residential Uses.	PS	**MM-TRA-1. Implement TDM Measures.** To reduce project-related vehicle miles traveled (VMT), the project applicant will implement the following Traffic Demand Management (TDM) measures included in the Mobility Management VMT Reduction Calculator Tool. ▪ **Voluntary Employer Commute Program**: The project applicant will prepare and implement a TDM plan for which their employees volunteer to participate. The TDM plan may include measures such as the following. - Enroll in the San Diego Association of Governments' (SANDAG) iCommute Program. - Provide ride-match assistance to employees for carpooling (Strategy 1C). - Implement a vanpool program and subsidies (Strategy 1E). - Inform employees about the different resources available to reduce their commute trips. - Subsidize transit passes for employees who elect to take transit to work (Strategy 1D).	SU

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		- Provide on-site bicycle racks and showers for employees who elect to ride their bicycle to work. ▪ **Employer Carpool Program**: The hotel and restaurant will implement an employer carpool-assistance program for their employees. Additionally, the HOA will also implement a similar program for residents. ▪ **Employer Transit Pass Subsidy:** The project applicant will provide transit-pass subsidies for employees who elect to take transit to work. However, due to the limited transit service accessing the proposed project site (Route 834), no reduction is assumed for this strategy. ▪ **Employer Vanpool Program:** The project applicant will coordinate with SANDAG's iCommute program to implement a vanpool program, if feasible for an identified group of employees. ▪ **Parking Pricing:** The hotel component of the project will charge a parking fee, which will be included in the resort fee. Hotel patrons will be provided with a rebate if they did not use a personal or rented vehicle to access the hotel. ▪ **Parking Cash Out:** The resort employees will be incentivized not to drive to work as a single driver and will be provided a TDM reward payment (amount to be determined later) for driving with a carpool group (i.e., three people or more). ▪ **Bicycle Share:** The proposed project will provide a bicycle-share service to hotel guests. Guests will be able to check out communal bicycles from the front desk or clubhouse of the hotel, which will allow guests to ride to different parts of the city, such as the Town Center or along the San Diego River Trail. However, this strategy will not be applicable toward VMT reduction because this measure is intended to be a citywide measure to be effective.	

Table ES-2. Project Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ **Community-Based Travel Planning:** It is assumed that the proposed project's HOA will provide information about alternative modes of transportation to residents and tenant as a part of their New Resident or New Tenant package. The HOA will also provide residents with transit schedules within the area and alert residents when new transit services are added or new services are charged. The HOA will also act as Travel Advisor, providing new residents and tenants with information regarding how members of households can travel in alternative ways that meet their needs.	
Impact TRA-2: Generate Vehicle Miles Traveled in Exceedance of Thresholds for Commercial Uses.	PS	Implement **MM-TRA-1**, as described above.	SU
Impact C-TRA-1: General Vehicle Miles Traveled in Exceedance of Thresholds for Residential and Commercial Uses.	PS	Implement **MM-TRA-1**, as described above.	SU
3.17 Utilities and Service Systems			
Impact UTIL-1: Construction of Utilities Has the Potential to Result in Significant Impacts to the Environment.	PS	Applicable mitigation measures from other resource topics including air quality and health risks, biological resources, cultural and tribal cultural resources, geology and soils, and noise. No additional mitigation is required.	LTS
3.18 Wildfire			
Implementation of the proposed project would not result in any potentially significant impacts related to wildfire.			

Note:
LTS = less than significant; PS = potentially significant; SU = significant and unavoidable.

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1 Introduction

1.1 Partial Recirculation

This document includes the partially recirculated sections of the Draft Environmental Impact Report (EIR) for the proposed Carlton Oaks Country Club and Resort Project (project). The Draft EIR for the project was circulated by the lead agency (City of Santee) for a 45-day public review and comment period from June 10, 2025 through July 24, 2025, in compliance with the California Environmental Quality Act (CEQA) Guidelines Section 15085. During this time, numerous comment letters were received from government agencies, interested parties, and private -individuals.

Section 15088.5(a) of the CEQA Guidelines states, "[a] lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification." Section 15088.5(a) further states that "new information added to an EIR is not 'significant' unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect [...]." The entire document need not be circulated if revisions are limited to specific portions of the -document.

To facilitate review of the Partially Recirculated Draft EIR, two versions of the Partially Recirculated Draft EIR and associated appendices have been recirculated: a clean version and a comparison version. The clean version of the Partially Recirculated Draft EIR presents a version without strikeout/underline revisions (i.e., track changes) that incorporates all revisions without visible markup. The comparison version of the Partially Recirculated Draft EIR presents a version that shows deletions marked with blue ~~strikeout~~ and with additions or moved text shown with double underline.

This Draft EIR is being partially recirculated to document unmapped sensitive vegetation communities and updated mapping for jurisdictional aquatic resources occurring on the project site. The Partially Recirculated Draft EIR now includes updated biological impact calculations, as well as revisions to the impact analysis and mitigation measures to reflect this new information. New impacts to jurisdictional aquatic resources within the City of Santee are included in the Partially Recirculated Draft EIR. For areas within the City of San Diego, the project applicant has redesigned the golf course to avoid all permanent impacts to wetlands, and these changes are reflected on the site plan changes for the golf course. Appendix T, Comparison of Biological Impacts, has been appended to this Partially Recirculated Draft EIR to graphically depict a comparison of biological impacts between the project, as presented in the public review Draft EIR in June 2025, and the revisions to the project as proposed herein within the Partially Recirculated Draft EIR. In addition to minor editorial and clerical revisions, the Project Description of the Partially Recirculated DEIR has been revised to clarify details related to the following project elements: off-site improvements, trail segments, bridge descriptions, floodway improvements, roadway vacations, and required easements/permits. Figures have also been updated and added to the Project Description to reflect these revisions. Because additional analyses of impacts related to biological resources have been completed, select portions of the Draft EIR are being recirculated to provide the public with a meaningful opportunity to comment on this environmental topic including the following:

- Chapter ES, Executive Summary
- Chapter 1.0, Introduction

- Chapter 2.0, Project Description
- Section 3.3, Biological Resources
- The following appendices are included:
  - Appendix E, Revised Biological Survey Report, which includes revised subappendix I, Updated Jurisdictional Delineation Report, replacement of subappendix K, Conceptual Habitat Mitigation and Monitoring Plan, with subappendix K, Proposed On-Site Mitigation Overview, and addition of subappendix O, Hydrology Memorandum. All other subappendices of Appendix E, Revised Biological Survey Report, have not been revised, and can be found at the following link: https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club
  - Appendix S, Revised Planned Development District Standards
  - New Appendix T, Comparison of Biological Impacts

Based on review of the new information included in this Partially Recirculated Draft EIR, it was determined that Chapter 5, Alternatives, of the Draft EIR, does not require recirculation. The range of alternatives analyzed and the associated impact conclusions presented within the previously circulated Draft EIR remain applicable and valid, notwithstanding revisions made elsewhere in the Partially Recirculated Draft EIR, and project objectives remain unchanged from those identified in the previously circulated Draft EIR. The revisions presented in the Partially Recirculated Draft EIR do not introduce new significant and unavoidable impacts, and do not change CEQA significance determinations in a manner that would affect the feasibility or comparative merits of the alternatives analyzed in the previously circulated Draft EIR. Therefore, pursuant to Section 15088.5(a)(3) of the CEQA Guidelines, recirculation of Chapter 5, Alternatives, is not required, and the alternatives analysis continues to satisfy CEQA's requirement to evaluate a reasonable range of feasible alternatives capable of substantially lessening significant environmental impacts.

In accordance with Section 15087 of the CEQA Guidelines, these revised and recirculated sections of the Partially Recirculated Draft EIR will be available for review and comment by the public and other interested parties, agencies, and organizations for 45 days between July 27, 2026 and September 9, 2026. As part of the Final EIR, the City of Santee will respond to comments specifically and solely focused on the recirculated sections of the Partially Recirculated Draft EIR. Additionally, the City of Santee will provide responses to comments received during the earlier circulation period regarding the environmental topics, EIR sections, or appendices. All comments or questions about the recirculated sections of the Partially Recirculated Draft EIR should be addressed to the following and provided by September 9, 2026 at 5:00 PM:

Sandi Sawa, Director of Planning & Building
City of Santee, Planning and Building Department
10601 Magnolia Avenue
Santee, California 92071
Phone: 619-258-4100, ext. 167
Email: ssawa@cityofsanteeca.gov

1.1.1 Summary of Revisions

Section 15088.5(g) of the CEQA Guidelines requires that, "when recirculating a revised EIR, either in whole or in part, the lead agency shall, in the revised EIR or by an attachment to the revised EIR, summarize the revisions made to the previously circulated Draft EIR." This section provides the information required by Section 15088.5(g) of the CEQA Guidelines. As stated above under Section 1.1, to facilitate review, two versions of the Partially Recirculated Draft EIR

have been recirculated: a clean version without strikeout/underline revisions that incorporates all revisions without visible markup and a comparison version with blue strikeout/underline revisions, showing deletions marked with ~~strikeout~~ and additions and moved text marked with double underline.

Chapter ES, Executive Summary

This chapter of the Partially Recirculated Draft EIR is being revised to include the following:

- Explanation of partial recirculation
- Clarification of Project Description details
- Revised mitigation measures from Section 3.3, Biological Resources, of the Partially Recirculated Draft EIR
- Clerical and editorial revisions

Chapter 1, Introduction

This chapter of the Partially Recirculated Draft EIR is being revised to include the following:

- Explanation of partial recirculation (new Section 1.1)
- Summary of revisions to the Draft EIR (new Section 1.1.1)
- Revision to discretionary actions required for the project (revised Table 1.1)

Chapter 2, Project Description

This chapter of the Partially Recirculated Draft EIR is being revised to include the following:

- Clarification of proposed off-site improvement characteristics on West Hills Parkway (revised Sections 2.2, 2.4.3.1, 2.4.4.3 and 2.4.11)
- Revised Figures 2-3, 2-4, 2-5, 2-9, 2-13, 2-15, 2-16, 2-18, and 2-19
- New Figures 2-14 and 2-17
- Clarification of location of Very High Fire Hazard Severity Zone on the project site (revised Section 2.2.2)
- Clarification of bridge descriptions (revised Sections 2.4.4.3 and 2.5)
- Clarification regarding an easement required from the City of San Diego (Section 2.4.4.3 and addition of Figure 2-14) and an encroachment permit from the California Department of Transportation (Section 2.7.3)
- Clarification of Project Trail Segments by the following: adding information on widths and designations, revision of Project Trail Segment numbering, incorporating potential "Supplemental Trail" as now proposed Project Trail Segment 4, and changing designations of portions of previously designated on-site trails to enhanced decomposed granite sidewalks (revised Section 2.4.6 and revised Figures 2-3 and 2-15)
- Addition of detail regarding 100-year floodway improvements from Appendix L, Flood Study (revised Section 2.4.7) and revision of existing drainage information
- Addition of more information regarding the Offer of Dedication Vacation and associated figure (new Section 2.4.13 and Figure 2-17)
- Addition of information regarding Inwood Drive street vacation (new Section 2.4.13 and revised Figure 2-3)
- Clerical and editorial revisions

- Revision of Appendix S, Revised Planned Development District Standards to modify PDD Standards to clarify the driveway widths and/or length standards for proposed dwelling units in Residential North.

Section 3.3, Biological Resources

This section of the Partially Recirculated Draft EIR has been revised to include the following:

- Incorporation of updated survey results from vegetation mapping conducted in 2025 and updates to the aquatic resource delineation, including the conversion of non-jurisdictional features to jurisdictional and the expansion of California Department of Fish and Wildlife (CDFW) riparian habitat (revised Section 3.3.2.3 and Section 3.3.2.4).
- Incorporation of revised impact analysis from the Revised Biological Survey Report for the Carlton Oaks Country Club and Resort Project (Appendix E), including the redesign of the golf course to avoid all permanent impacts to City of San Diego Wetlands (revised Section 3.3.5).
- Additional hydrology analysis that evaluates the potential changes in water surface elevation and flow velocity associated with the proposed project to determine the overall functions and values of Sycamore Canyon Creek and the San Diego River after project implementation. Additionally, it evaluates potential re-establishment mitigation areas within the project site for changes to base flood elevations and surface water elevations
- Additional analysis related to wildlife nurseries (i.e. double-crested cormorant rookery) in response to a comment letter from CDFW on the public review draft of the EIR (revised Section 3.3.2.6 and Section 3.3.5).
- Additional analysis related to biological cumulative impacts (Section 3.3.6)
- Updated mitigation tables based on revised vegetation mapping and a revised aquatic resource delineation. Mitigation ratios were updated based on the standard aquatic resource regulatory agency (i.e. U.S. Army Corps of Engineers, Regional Water Quality Control Board, and CDFW) ratios (revised Section 3.3.5)
- Revisions to mitigation measures (mitigation measure [MM]-BIO-1 through MM-BIO-17) to clarify specifics of mitigation measure implementation, including more information on location and timing (revised Section 3.3.5)
- Addition of mitigation measures MM-BIO-18, Avoidance of California Gnatcatcher Take, MM-BIO-12, Adjacency Guidelines, and MM-BIO-21, Wildlife-Friendly Fencing
- Revisions to the mitigation measure for Crotch's bumblebee (MM-BIO-15) to include clarifications on the location of the preconstruction survey and details on compensatory mitigation if presence is determined during the preconstruction survey in response to a comment letter from CDFW on the public review draft of the EIR (revised Section 3.3.5)
- Revision to impact finding numbering (revised Sections 3.3.4 and 3.3.7)
- Addition of Appendix T, Comparison of Biological Impacts, to graphically depict a comparison of biological impacts between the project, as presented in the public review Draft EIR in June 2025, and the revisions to the project as proposed herein within the Partially Recirculated Draft EIR
- Clerical and editorial revisions
- Revisions to Appendix E, Revised Biological Survey Report, which are summarized above. In addition, the following revisions have been made to this Appendix E, Revised Biological Survey Report:
  - Revisions to Figures 1 through 13, and addition of Figure 3B, Floodway Improvements
  - Revisions to subappendix I, Updated Jurisdictional Delineation Report, to the Revised Biological Survey -Report

- Replacement of subappendix K, Conceptual Habitat Mitigation and Monitoring Plan with subappendix K, Proposed On-Site Mitigation Overview, to the Revised Biological Survey Report
- Addition of subappendix O, Hydrology Memorandum, to the Revised Biological Survey Report

1.2 Overview

Carlton Oaks Golf Course ownership and Lennar Homes, as joint project proponents, are proposing to redevelop the existing 1950s-era Carlton Oaks Country Club facility into a modern, self-sustaining destination resort with residential accessory uses. The Carlton Oaks Country Club and Resort Project (project) site that would be developed is located on approximately 165 acres and would include the following components: (1) demolition of the existing Carlton Oaks Golf Course; (2) redesign of the golf course; (3) reconstruction of the clubhouse with a new pro shop, practice area, and learning center structure; (4) a hotel and associated cottages; (5) single-family residences and residential accessory uses consisting of two residential neighborhoods with open-space areas; and (6) related on-site infrastructure. Approximately 3.5 acres consist of areas outside of the project site that would be developed with improvements associated with the project and are located either in the City of San Diego or City of Santee (off-site improvement areas). The off-site improvement areas and the project site make up the ~~California Environmental Quality Act (CEQA)~~CEQA Study Area.

The residential components of the proposed project are planned as an accessory use to the golf course and the Carlton Oaks Country Club and would be constructed in the western and northern portions of the project site (Residential West and Residential North). Additionally, as part of the proposed project, trail segments would be constructed on the project site to provide a connection to the future San Diego River Trail.

In addition to the project overview provided above, this introductory chapter briefly discusses the purpose of CEQA and this Draft ~~Environmental Impact Report (EIR),~~EIR, the intended uses for this Draft EIR, the scope and content of this Draft EIR, and the organization of this Draft EIR.

1.~~2~~3 Purpose of the California Environmental Quality Act and the Environmental Impact Report

~~This~~The Draft EIR evaluates the environmental effects of the proposed project and has been prepared in compliance with CEQA (California Public Resources Code [PRC] Section 21000 et seq.) and the procedures for implementation of CEQA set forth in the State CEQA Guidelines (California Code of Regulations [CCR] Title 14 Section 15000 et seq.).

CEQA was enacted by the California legislature in 1970. As noted under State CEQA Guidelines Section 15002, CEQA has four basic purposes:

1. Inform governmental decision-makers and the public about the potential significant environmental effects of proposed activities.
2. Identify the ways in which environmental damage can be avoided or significantly reduced.
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
4. If significant environmental effects are involved, disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose.

An EIR is an informational document, the purpose of which is to inform members of the public and agency decision-makers of the significant environmental effects of a proposed project, identify feasible ways to reduce the significant effects of the proposed project, and describe a reasonable range of feasible alternatives to the project that would reduce one or more significant effects and still meet the proposed project's objectives. In instances where significant impacts cannot be avoided or mitigated, the proposed project may nonetheless be carried out or approved if the approving agency finds that economic, legal, social, technological, or other benefits outweigh the unavoidable significant environmental impacts. Under CEQA, an EIR is not required to include an analysis of how the existing environmental conditions will affect a project's residents or users unless the project would exacerbate those existing conditions.

1.~~3~~4 Intended Uses of the Environmental Impact Report

This section discusses the intended uses for ~~this~~the Draft EIR and includes a list of agencies that would be expected to use ~~this~~the Draft EIR for decision making, a list of required permits and other approvals that would be required to implement the proposed project, and an explanation of the project-level analyses contained within ~~this~~the EIR. Environmental review and consultation requirements under federal, state, or local laws, regulations, or policies that are in addition to CEQA are discussed in the applicable individual resource sections in Chapter 3, Environmental Analysis.

1.~~3~~4.1 Agencies Expected to Use ~~this~~the Draft Environmental Impact Report

The City of Santee is the CEQA lead agency, as defined under State CEQA Guidelines Section 15050, because it has principal responsibility for carrying out and approving the proposed project. As the lead agency, the City of Santee also has primary responsibility for complying with CEQA. As such, the City of Santee has analyzed the environmental effects of the proposed project, the results of which are presented in ~~this~~the Draft EIR. The City of San Diego is a responsible agency, as defined under State CEQA Guidelines Section 15381, because a portion of the project would be within the City of San Diego's jurisdiction, and the City of San Diego is responsible for approving the applicable discretionary permits.

The City of Santee is responsible for certifying the Final EIR and approving the Findings of Fact and Statement of Overriding Considerations pursuant to State CEQA Guidelines Sections 15090–15093 prior to project approval. Table 1-1~~Table 1-1~~ provides a summary list of the approvals and permits that would be required.

Table 1-1. List of Required Discretionary Actions

Discretionary Action	City of Santee	City of San Diego
Certification of Final Environmental Impact Report	X	—
Adoption of Mitigation Monitoring and Reporting Program	X	—
Adoption of Findings of Fact	X	—
Adoption of Statement of Overriding Considerations	X	—
Issuance of Ministerial Construction Permits	X	X
Approval of a Conditional Use Permit	X	—
Approval of Tentative Map	X	—

Table 1-1. List of Required Discretionary Actions

Discretionary Action	City of Santee	City of San Diego
Approval of Development Review Permit	X	—
Approval of Site Development Permit	—	X
Approval of Easements	—	X
~~Approval of MHPA Boundary Line Adjustment or Boundary Line Correction~~	~~—~~	~~X~~
Responsible Agency Findings	—	X
Termination of that certain Irrevocable Offer of Dedication for the right to extend and maintain drainage facilities, excavation, and embankment slopes beyond the limits of the extension of Fanita Parkway as offered and rejected on Parcel Map No. 16978.	X	—
Vacation of certain Offer of Dedication for public roadways, including Fanita Parkway, as offered for dedication and rejected on Map No. 11166, which will be vacated and terminated pursuant to State law.	X	—

~~Notes~~: X = applicable; -- = not applicable

1.~~4~~5 Scope and Content of the Draft Environmental Impact Report

As the CEQA lead agency, the City of Santee is responsible for determining the scope and content of ~~this~~the Draft EIR, a process referred to as *scoping*. As part of the scoping process, the City of Santee considered the environmental resources present on site and in the surrounding area, and identified the probable environmental effects of the proposed project. On June 7, 2024, the City of Santee posted a Notice of Preparation (NOP) in accordance with State CEQA Guidelines Section 15082. The NOP was mailed to public agencies, organizations, and other interested individuals to solicit their comments about the scope and content of the environmental analysis. The City of Santee held a public scoping meeting on June 25, 2024, to provide an opportunity for agency staff and interested members of the public to submit written comments on the scope of the environmental issues analyzed in the EIR. The NOP and all NOP comment letters are included as Appendix A of ~~this~~the EIR.

The scope of ~~this~~the Draft EIR is based on the City of Santee's preliminary evaluation of the probable effects of the proposed project. ~~This~~The Draft EIR analyzes effects associated with the following resources:

- Aesthetics and Visual Resources
- Air Quality and Health Risk
- Biological Resources
- Cultural and Tribal Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions

- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise and Vibration
- Population and Housing
- Public Services
- Recreation
- Transportation and Circulation
- Utilities and Service Systems
- Wildfire

No agricultural or forestry resources occur on site; therefore, the proposed project would not have an adverse effect on these resources. Additionally, it was determined that the proposed project would have no impact associated with mineral resources (Threshold 2). Chapter 4, Other CEQA Considerations, includes a brief analysis as to why impacts on agricultural and forestry resources and mineral resources (Threshold 2) would not be significant.

It should be noted that under CEQA, an EIR is not required to include an analysis of how the existing environmental conditions will affect a project's residents or users unless the project would exacerbate those existing conditions.

1.~~4~~5.1 Areas of Known Controversy/Issues Raised by Agencies and the Public

Pursuant to CEQA Guidelines Section 15123(b)(2), a lead agency is required to include in the EIR areas of controversy raised by agencies and the public during the public scoping process. Several specific environmental issues were raised in the comments on the NOP. A summary of these comments and the sections where they are addressed in ~~this~~the EIR are provided in Table 1-2~~Table 1-2~~. Only comments that pertain to the environmental scope of ~~this~~the EIR are summarized.

Comments received during the NOP scoping period were reviewed to assist in preparing the information and analysis contained in ~~this~~the EIR.

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
State		
California Department of Fish and Wildlife Jennifer Turner, Environmental Program Manager, July 8, 2024	The California Department of Fish and Wildlife (CDFW) may act as a responsible agency under CEQA and may need to exercise regulatory authority as provided by the Fish and Game Code. CDFW recommends that the Draft EIR include a thorough evaluation of the potential of the project to	Section 3.3, Biological Resources; Section 3.9, Hydrology and Water Quality; and Chapter 5, Alternatives to the Proposed Project

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
	result in changes to flood risks in the San Diego River and also in tributaries entering the project site. CDFW also recommends that the Draft EIR include a thorough and complete discussion of any topographic changes proposed within the flood plain and floodway of the San Diego River. CDFW recommends that the City of Santee analyze alternatives that do not involve grade changes within the floodplain or floodway, do not involve changes to the channels that run through the project site, do not require armoring or stabilization to protect raised elevations from stream flows, and do not reduce the width of the floodway. CDFW recommends that the City of Santee analyze alternatives that avoid impacts on stream, wetland, and riparian areas. CDFW recommends that the Draft EIR analyze whether the project would affect local wildlife movement that occurs throughout the entire project site. CDFW recommends the City of Santee analyze alternatives that do not reduce the width of the wildlife movement corridor. CDFW recommends that the Draft EIR analyze the potential of the project to indirectly affect adjacent habitats and that the City of Santee include requirements for effective buffers between development and sensitive habitats. CDFW recommends that the Draft EIR analyze the project's impact on floral resources, nesting habitat, and overwintering habitat for Crotch's bumble bee. Additionally, CDFW recommends that surveys within 1 year prior to vegetation removal and/or ground disturbance to determine the presence/absence of Crotch's bumble bee. CDFW recommends that the City of Santee require the project proponent to provide a native plant palette for the project. CDFW strongly recommends avoiding nonnative, invasive species for landscaping and restoration, particularly any species listed as *Moderate* or *High* by the California Invasive Plant Council. CDFW recommends that the Draft EIR include an analysis of the project's consistency with the conservation goals and objectives of the San Diego	

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
	Multiple Species Conservation Program (MSCP). CDFW recommends that the City of Santee consult with CDFW, the U.S. Fish and Wildlife Service (USFWS), and the City of San Diego prior to the issuance of the Draft EIR to resolve the project's potential impacts to the Multi-Habitat Planning Area and determine the need for a boundary line adjustment. CDFW recommends that the Draft EIR include a complete project description, a range of feasible alternatives, an adequate biological resources assessment, and a thorough discussion of direct and indirect impacts expected to affect biological resources, with specific measures to offset such impacts. CDFW also recommends compensatory mitigation measures for the project's significant direct and indirect impacts to sensitive and special status plants, animals, and habitats, and measures to protect the targeted habitat values in perpetuity. CDFW recommends that measures be taken to avoid impacts on nesting birds. CDFW recommends that the project proponent seek appropriate take authorization under California Endangered Species Act prior to implementing the project, if required. CDFW recommends prohibiting the use of translocation or transplantation as the primary mitigation strategy, or any development or conversion that would result in a reduction of wetland acreage or wetland habitat values. CDFW may require a scientific collecting permit and a Lake and Streambed Alteration Agreement.	

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
California Department of Transportation, District 11 Kimberly D. Dodson, Branch Chief, July 3, 2024	The California Department of Transportation (Caltrans) recommends preparation of a vehicle miles travelled–based traffic impact study, as well as a local mobility analysis. Caltrans also requests to be included in review of all submittals regarding floodplain administration. Caltrans recommends consideration of the 2021 *Regional Transportation Plan*, *State Route 52 Coast, Canyons, and Trails Comprehensive Multimodal Corridor Plan*, CAPTI: *Climate Action Plan for Transportation Infrastructure*, CTP 2050: *California Transportation Plan 2050*, and upcoming proposed projects and public transit in the area. Caltrans also recommends that compatibility concerns regarding airport obstructions and hazards to flight are considered.	Section 3.8, Hazards and Hazardous Materials, and Section 3.16, Transportation and Circulation
California Native American Heritage Commission Murphy Donahue, Cultural Resources Analyst, June 10, 2024	The Native American Heritage Commission (NAHC) recommends consultation with California Native American tribes under Assembly Bill 52 and Senate Bill 18. The NAHC provides standard recommendations for adequately assessing the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or, barring both, mitigation of project-related impacts on tribal cultural resources.	Section 3.4, Cultural and Tribal Cultural Resources
Regional		
Barona Band of Mission Indians Art Bunce, Tribal Attorney, June 24, 2024	Commenter recommends that the Draft EIR include a section on cultural resources that includes the results of a cultural resources assessment performed by a qualified archaeologist under applicable State CEQA Guidelines and other local law. The commenter also requests a copy of the full Draft EIR with any cultural resources appendices.	Section 3.4, Cultural and Tribal Cultural Resources
San Diego County Regional Airport Authority Ed Gowens, Senior Airport Planner, June 25, 2024	The commenter states that Airport Land Use Commission (ALUC) staff review of the project site indicates that it is entirely located outside the noise contours and safety zones of the *Gillespie Field Airport Land Use Compatibility Plan* (ALUCP), and, therefore, no determination of consistency with the ALUCP is required from the San Diego County Regional Airport Authority as the ALUC. The commenter also states that the project would be located within the Airport Influence Area of the ALUCP and potentially be subject to project sponsor notice to and review by the Federal Aviation Administration	Section 3.8, Hazards and Hazardous Materials

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
	(FAA) if their height and location attributes meet criteria for FAA notice. The commenter recommends that a form of notice of airport proximity and aircraft overflight be given to each new residential unit in compliance with California real estate disclosure law.	
San Diego County Archaeological Society, Environmental Review Committee James W. Royale, Jr., Chairperson, June 28, 2024	The commenter requests a copy of the Draft EIR and the archaeological technical report when they become available for public review.	Section 3.4, Cultural and Tribal Cultural Resources
Padre Dam Municipal Water District Lewis Clapp, Director of Engineering, July 8, 2024	The commenter requests that the Draft EIR identify the source of water for the project and consider the jurisdictional boundary between Padre Dam Municipal Water District and the City of San Diego. The commenter recommends that the Draft EIR consider the prior rights of Padre Dam as an easement holder and states that improvements should not interfere with Padre Dam's infrastructure. The commenter also states that improvements surrounding Padre Dam infrastructure should be avoided.	Section 3.9, Hydrology and Water Quality, and Section 3.17, Utilities and Service Systems
Organizations		
San Diego River Park Foundation Rob Hustel, President and CEO, July 7, 2024	The commenter recommends that the Draft EIR discuss how the proposed project will affect the terms of the City of San Diego lease with the current property owners. The commenter recommends that the Draft EIR consider the project's impacts on hydrology and water quality, recreation, land use, and biological resources, including analysis of the planned San Diego River Trail alignment and dam failure at the El Capitan Reservoir. The commenter recommends that the Draft EIR include an alternative where a road does not extend from West Hills Parkway to the proposed hotel and clubhouse.	Section 3.3, Biological Resources; Section 3.9, Hydrology and Water Quality; Section 3.10, Land Use and Planning; Section 3.15, Recreation; and Chapter 5, Alternatives to the Proposed Project

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
Preserve Wild Santee Van Collinsworth, Director, July 1, 2024	The commenter recommends that the Draft EIR include an alternative consistent with the City of Santee's *General Plan*, which eliminates housing in both Residential North and Residential West. The commenter recommends that the Draft EIR include an alternative that limits development to disturbed portions of the site. The commenter recommends that the Draft EIR include a discussion of the status of the City of Santee's *General Plan*, Protection Measure N, and the project's consistency with the *General Plan's Land Use Element* and Measure N.	Section 3.10, Land Use and Planning, and Chapter 5, Alternatives to the Proposed Project
Treviso Homeowners Association Board of Directors Lisa Meyer, July 8, 2024	The commenter recommends that the Draft EIR include detailed mapping of high-pressure gas lines to ensure that they are properly evaluated and that all necessary precautions are included in the Draft EIR to ensure that there is no impact on existing lines before, during, and after construction of the proposed project. The commenter also recommends that the Draft EIR consider the project's impacts on traffic, noise, air quality, hydrology and water quality, and public services, including mitigation for dust impacts, noise, and roadway improvements.	Section 3.2, Air Quality and Health Risks; Section 3.9, Hydrology and Water Quality; Section 3.12, Noise and Vibration; Section 3.16, Transportation and Circulation; and Section 3.17, Utilities and Service Systems
Individuals		
Katherine Pittman, June 8, 2024	The commenter recommends that the Draft EIR consider the project's impacts on traffic, parking, flooding, wildfire, and biological resources.	Section 3.3, Biological Resources; Section 3.9, Hydrology and Water Quality; Section 3.10, Land Use and Planning; Section 3.16, Transportation and Circulation; and Section 3.18, Wildfire
Joseph Mansour June 8, 2024	The commenter raised concerns regarding traffic and wildlife.	Section 3.3, Biological Resources, and Section 3.16, Transportation and Circulation
Mary Jo Clark, June 8, 2024	The commenter recommends that the Draft EIR consider floodplains, endangered species and wildlife, roadway infrastructure, fire evacuation routes, emergency access, and changes in property values and taxes.	Section 3.3, Biological Resources; Section 3.9, Hydrology and Water Quality; Section 3.14, Public Services; and Section 3.16, Transportation and Circulation

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
Jennifer C., June 10, 2024	The commenter recommends that the Draft EIR consider loss of freshwater marshlands and flooding.	Section 3.3, Biological Resources, and Section 3.9, Hydrology and Water Quality
Katherine Pittman, June 12, 2024	The commenter recommends that revisions are made to state that access to Residential North and the resort area would be at Carlton Oaks and Burning Tree Way, 200 feet west of Inwood Drive to Burning Tree Way.	Chapter 2, Project Description
Lori Hollis, June 12, 2024	The commenter recommends that the Draft EIR consider traffic and safety at the intersection of Carlton Oaks Drive and Leticia Drive, where the commenter describes traffic buildup in turn lanes. The commenter requests review of past accident reports.	Section 3.16, Transportation and Circulation
Scott Farrell, April Apperson-Farrell, and Loreen Mattis, June 15, 2024	The commenter recommends that the Draft EIR consider traffic, multi-use trails and separated bicycle lanes for safety and recreation, and more green space.	Section 3.15, Recreation, and Section 3.16, Transportation and Circulation
Karen Penn, June 19, 2024	The commenter recommends that the Draft EIR consider emergency vehicles authorized to use emergency access, frequency of emergency access use, resident safety during emergency access use, and the width/length of road adjustment. The commenter also recommends that the Draft EIR consider the loss of parking spaces, mitigation of vehicle and pedestrian noise, pedestrian safety on the walkway through Vista del Verde, and protection of least Bell's vireo bird habitat.	Chapter 2, Project Description; Section 3.3, Biological Resources; Section 3.12, Noise and Vibration; Section 3.14, Public Services; Section 3.15, Recreation; and Section 3.16, Transportation and Circulation
Ray and Vicki Bryan, June 20, 2024	The commenter recommends that the Draft EIR consider the project's impacts on traffic, public services, and aesthetics.	Section 3.1, Aesthetics and Visual Resources; Section 3.14, Public Services; and Section 3.16, Transportation and Circulation
Alexandria Lowry June 24, 204	The commenter expresses concern for emergency access road control, fencing along Carlton Oaks and West Hills Parkway, and asks if a retaining wall would be installed along West Hills Parkway.	Chapter 2, Project Description; Section 3.6, Geology and Soils; Section 3.9, Hydrology and Water Quality; and Section 3.16, Transportation and Circulation
Vanina Family, June 25, 2024	The commenter recommends that the City of Santee consider the project's impacts on traffic, biological resources, air quality, noise, and recreation.	Section 3.2, Air Quality and Health Risks; Section 3.3, Biological Resources; Section

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
		3.12, Noise and Vibration; Section 3.15, Recreation; and Section 3.16, Transportation and Circulation
Josh Rose, June 26, 2024	The commenter recommends that the Draft EIR consider the impacts of the proposed project on wetlands, cultural and historical resources, flood risk, and endangered or sensitive species, and include mitigation measures to reduce impacts on these resources. The commenter also requests that community input is considered during the EIR process.	Section 3.3, Biological Resources; Section 3.4, Cultural and Tribal Cultural Resources; and Section 3.9, Hydrology and Water Quality
Rachel Summers, June 27, 2024	The commenter recommends that the Draft EIR consider the project's impacts on traffic, hydrology and water quality, biological resources, and aesthetics.	Section 3.1, Aesthetics and Visual Resources; Section 3.3, Biological Resources; Section 3.9, Hydrology and Water Quality; and Section 3.16, Transportation and Circulation
Jeanette Salyer-Morris, June 28, 2024	The commenter recommends that the City of Santee consider the project's impacts on traffic, hydrology and water quality, and public services.	Section 3.9, Hydrology and Water Quality; Section 3.14, Public Services; and Section 3.16, Transportation and Circulation
Eid Fakhouri, June 28, 2024	The commenter states that Residential West is proposing to eliminate wetlands, riparian habitat, and the floodplain in order to build 86 multifamily detached residential units. The commenter recommends that the Draft EIR include a discussion of the project's consistency with the City of Santee's *General Plan* and federal and state laws and regulations, in addition to the City of San Diego and the San Diego Association of Governments (SANDAG). The commenter recommends that the Draft EIR include all agency responses to the potential destruction of wetlands and riparian habitat, biological-survey and wetlands-protection concerns regarding identifying and mapping species and habitat, floodplain impacts, impacts on the San Diego River and Sycamore Creek, impacts on Mission Trails	Chapter 2, Project Description; Section 3.1, Aesthetics and Visual Resources; Section 3.2, Air Quality and Health Risks; Section 3.3, Biological Resources; Section 3.9, Hydrology and Water Quality; Section 3.10, Land Use and Planning; Section 3.14, Recreation; and Section 3.16, Transportation and Circulation

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
	Park, and compliance with the City of Santee's *General Plan*. The commenter recommends that the Draft EIR include a discussion of SANDAG's *Regional Comprehensive Plan* and Environmental Mitigation Program, including avoidance measures, where feasible, and mitigation strategies consistent with SANDAG's guidelines and regulatory requirements. The commenter recommends that the Draft EIR include a discussion of the project's impacts on wetlands and compliance with the City of San Diego's Local Coastal Program, Executive Order W-59-93, and the California Coastal Act. The commenter recommends that field surveys be performed when the majority of critical resources can be best evaluated in compliance with USFWS and CDFW protocols. The commenter recommends that the Draft EIR include a discussion of the presence or absence of narrow endemic species, including information about species covered under the MSCP, and applicable federal and state laws. The commenter recommends that the Draft EIR include a discussion of floodplain impacts on the San Diego River basin and Sycamore Creek, as well as the project's compliance with the Porter-Cologne Water Quality Control Act and the federal Clean Water Act. The commenter recommends that the Draft EIR include a discussion of the project's compliance with the Rivers and Harbors Act of 1899, the federal Fish and Wildlife Coordination Act, the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and Executive Orders 11990 and 13186. The commenter recommends that the Draft EIR include a robust analysis of floodplain impacts and redirected flows and propose adequate mitigation measures to minimize these risks. The commenter recommends that the Draft EIR include a discussion of impacts on Mission Trails Park, including impacts on biological resources, traffic, noise, recreational amenities, and community access.	

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
	The commenter also recommends that mitigation measures are identified to protect the park's ecological integrity and recreational value. The commenter recommends that the Draft EIR include a discussion of the project's compliance with and implementation of Measure N, the City of Santee's *General Plan,* Protection Initiative. The commenter recommends that the Draft EIR include a discussion of the project's proposed landscaping and an analysis of current air flows. The commenter recommends that the Draft EIR include a discussion of the project's compliance with Chapter 13.08 of the City of Santee's Municipal Code. The commenter recommends that the Draft EIR include a discussion of the project's impacts related to visual resources, pedestrian facilities, and fugitive dust during construction and potential mitigation to reduce these impacts.	
James Dell, June 29, 2024	The commenter recommends that the Draft EIR consider the project's impacts on traffic, air quality, and noise.	Section 3.2, Air Quality and Health Risks; Section 3.12, Noise and Vibration; and Section 3.16, Transportation and Circulation
Eid Fakhouri, July 1, 2024	The commenter recommends that the Draft EIR consider a range of alternatives, including removal of Residential West from project development, creation of a municipal-owned golf course through preservation of Residential North area as open space by implementing a "golf maintenance district," preservation of Residential West as open space or to San Diego River Conservancy or City of San Diego to mitigate various projects in Mission Valley, or partial development of Residential West with open space, an alternative that mitigates view impacts on existing residences that border Residential West, an alternative that mitigates noise impacts from freeway noise by installing trees, additional setbacks along Residential West to allow for ocean freeze, aesthetic improvements to the homes in Residential West to mitigate loss of views, installation of high-quality street lights at Burning Tree Way, and fair compensation for residents adjacent to the project to account for changes in property value.	Chapter 5, Alternatives to the Proposed Project

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Environmental Topic	Location Where Addressed in ~~This~~the EIR
Jacquelyn G., July 1, 2024	The commenter recommends that the City of Santee consider the project's impacts on traffic, biological resources, and recreation.	Section 3.3, Biological Resources; Section 3.15, Recreation; and Section 3.16, Transportation and Circulation
Sandela Kuntz, July 7, 2024	The commenter recommends that the Draft EIR consider impacts on floodplains, the San Diego River Trail, Kumeyaay Lake and Campground, sensitive species and riparian habitat along the San Diego River, recreational use, noise, light, traffic, pollution, and air quality.	Section 3.1, Aesthetics and Visual Resources; Section 3.2, Air Quality and Health Risks; Section 3.3, Biological Resources; Section 3.9, Hydrology and Water Quality; -Section 3.12, Noise and Vibration; Section 3.15, Recreation; and Section 3.16, Transportation and Circulation
Christine A. Tolchin, July 8, 2024	The commenter recommends that the Draft EIR consider the project's impacts on hydrology and water quality and recreation.	Section 3.9, Hydrology and Water Quality, and Section 3.15, Recreation
Mitchell M. Tsai – Law Firm, July 25, 2024	The commenter opined on flooding, building in the floodplain, biological resources including protocol surveys. The commenter also recommended use of local workforce in order to reduce vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions.	Section 3.3, Biological Resources; Section 3.7, Greenhouse Gas Emissions; Section 3.9, Hydrology and Water Quality; and Section 3.16, Transportation and Circulation

1.56 Organization of the Draft EIR

The content and format of ~~this~~the Draft EIR are designed to meet the requirements of CEQA, specifically State CEQA Guidelines Article 9. Table 1-3~~Table 1-3~~ summarizes the organization and content of the Draft EIR.

Table 1-3. Document Organization and California Environmental Quality Act Requirements

Draft EIR Chapter	Contents
Executive Summary	Includes a brief summary of the proposed project; identifies each significant effect, including proposed mitigation measures and alternatives to reduce or avoid the effect; identifies the areas of controversy known to the lead agency, including issues raised by agencies and the public; and summarizes the issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects (State CEQA Guidelines Section 15123).
Chapter 1, Introduction	Discusses the purpose of CEQA and this Draft EIR, the scope and content of this Draft EIR, the organization of this Draft EIR, and the intended uses for this Draft EIR (State CEQA Guidelines Section 15124[d]).
Chapter 2, Project Description	Contains maps of the precise location and boundaries of the proposed project and its location relative to the region, lists the proposed project's central objectives and underlying purpose, and provides a detailed description of the proposed project's characteristics (State CEQA Guidelines Sections 15124[a], [b], and [c]).
Chapter 3, Environmental Analysis	Describes the existing physical conditions for each resource area, lists the applicable laws and regulations, describes the impact assessment methodology, lists the criteria for determining whether an impact is significant, identifies significant impacts that would result from implementation of the project, and lists feasible mitigation measures that would eliminate or reduce the identified significant impacts (State CEQA Guidelines Sections 15125–15126.4). This chapter also defines the cumulative study area for each resource; identifies past, present, and reasonably foreseeable future projects with related impacts within each study area; evaluates the contribution of the proposed project to a cumulatively significant impact; and lists feasible mitigation measures that would eliminate or reduce the identified significant cumulative impacts (State CEQA Guidelines Section 15130).
Chapter 4, Other CEQA Considerations	Discusses how the proposed project could foster economic or population growth, either directly or indirectly, in the surrounding environment; describes the significant irreversible changes associated with the proposed project's implementation; and provides a brief discussion of the environmental resource impacts that were found to be not significant during preparation of ~~this~~the Draft EIR (State CEQA Guidelines Sections 15126.2[c] and [d], 15127, and 15128).
Chapter 5, Alternatives to the Proposed Project	Describes a reasonable range of alternatives to the proposed project, including the No Project Alternative; compares and contrasts the significant environmental impacts of alternatives to the proposed project; and identifies the environmentally superior alternative (State CEQA Guidelines Section 15126.6).
Chapter 6, List of Preparers and Agencies Consulted	Lists the individuals and agencies involved in preparing ~~this~~the Draft EIR (State CEQA Guidelines Section 15129).
References	Provides a comprehensive listing at the end of each chapter or section of all references cited in ~~this~~the Draft EIR (State CEQA Guidelines Section 15148).

Table 1-3. Document Organization and California Environmental Quality Act Requirements

Draft EIR Chapter	Contents
Acronyms and Abbreviations	A list of acronyms and abbreviations is provided for the reader's reference immediately following the list of tables and figures in the Table of Contents.
Appendices	Presents additional background information and technical detail for several of the resource areas.

2 Project Description

2.1 Introduction

Carlton Oaks Golf Course ownership and Lennar Homes, as joint project proponents, are proposing to redevelop the existing 1950s-era Carlton Oaks Country Club facility into a modern destination resort with residential accessory uses (proposed project). The project site is located on approximately 165 acres and would include the following components: (1) demolition of the existing Carlton Oaks Golf Course; (2) redesign and redevelopment of the golf course; (3) reconstruction of the clubhouse with a new pro shop, practice area, and learning center structure; (4) construction of a hotel and associated cottages; (5) construction of residential accessory uses consisting of two residential neighborhoods with open space areas; and (6) construction of related on-site infrastructure. Approximately 3.5 acres outside of the project site will be developed with improvements associated with the project and are located either in the City of San Diego or City of Santee (off-site improvement areas). The off-site improvement areas and the proposed project site make up the CEQA Study Area of a total of approximately 169 acres.

The residential components would be constructed in the western and northern portions of the project site (Residential West and Residential North). Trail segments are proposed to be constructed on the project site to provide connections to planned and existing trails. ~~There is an alternative segment for a portion of the San Diego River Trail that is proposed for City of Santee's consideration (see Section 2.4.6, Project Trail Segments, for more details).~~

This chapter describes the location of the project, outlines the project's objectives, provides an overview of project construction and operations, and lists the approvals that would be required.

2.2 Project Location

The project site is approximately 165 acres spanning the City of Santee and City of San Diego. The precise location of the project site is shown in Figure 2-1, Project Location Map. The project site is north of State Route (SR-) 52, where it travels in an east–west direction, south of single-family and multifamily residential development lining Carlton Oaks Drive, east of West Hills Parkway and SR-52 (where it travels in a northwest–southeast direction), and east of open space associated with the San Diego River Trail and a residential development.

Approximately 100.6 acres of the project site occurs in the City of Santee, and approximately 64.2 acres occurs in the City of San Diego (East Elliot Community). Figure 2-2, Project Vicinity, depicts the jurisdictional boundaries of the site.

The CEQA Study Area consists of approximately 169 acres, including the off-site improvement areas and the project site. Project components, including the proposed clubhouse, hotel, residential development, and the majority of the golf course, would be within the City of Santee. ~~Project components within the City of San Diego would include a portion of the redesigned golf course (64.05 acres), driveway access to the proposed Residential West development from West Hills Parkway, widening and restriping of West Hills Parkway to provide access to the proposed residential neighborhood, a landscape easement (approximately 0.4 acres) along the widened portion of West Hills Parkway, and a portion of a graded bench (for future trail use) as well as a new Project Trail Segment in the southwestern~~

portion of the site (see Section 2.4.6, Project Trail Segments, for more details). The CEQA Study Area consists of approximately 169 acres, including the off-site improvement areas and the project site. A portion of the off-site improvements are located in the City of San Diego and would consist of widening and restriping of West Hills Parkway. The off-site improvements in Santee would consist of utility and access improvements (see Section 2.4.11, Off-Site Improvements, for more detail). Project components within the City of San Diego would include a portion of the redesigned and redeveloped golf course (64.05 acres), driveway access to the proposed Residential West development from West Hills Parkway (Parcel D, a private access easement, as shown on Figure 2-14), widening and restriping of medians, and installing a raised concrete median on West Hills Parkway to provide access to the proposed residential neighborhood, a landscape easement (approximately 0.4 acres), and trail segments within the Cities of Santee and San Diego (see Section 2.4.6, Project Trail Segments, for more details).

2.2.1 Existing General Plan Land Use and Zoning Designations

The portion of the project site within the City of Santee is designated in its General Plan as Park/Open Space (P/OS), Planned Development (PD), and Low-Medium Density Residential (R2) (City of Santee 19842017a). The City of San Diego's *General Plan* designates the southern part of the project site as Open Space with the zoning designation of RS-1-8 (City of San Diego 2008The2008). The golf course is currently operating consistent with this use.

The surrounding land uses are primarily residential, municipal, commercial, and recreational uses. Surrounding land use designations primarily consist of PD, P/OS, Public, Neighborhood Commercial (NC), R2, Medium-Density Residential (R7), Medium-High Density Residential (R14), High-Density Residential (R22), and General Commercial (GC) (City of Santee 2017a).

2.2.2 Existing Conditions

The project site occurs on relatively flat to gently sloping terrain and currently consists of a 145-acre, 18-hole golf course and country club structures, including a 52-room motel-type hotel. The existing buildings comprise several structures in the northeastern area of the site (PA 2) that are clustered around a surface parking lot. The two-story hotel occurs along the southern side of the parking lot. The single-story clubhouse is west of the hotel, with a pool and patio to the north; a small parking lot on the west side of the building; and a second patio to the south, facing the golf course. In addition, four two-unit casitas (i.e., cabins) and one one-unit casita occur on the northern edge of the project site (backing up to Carlton Oaks Drive). The casitas are all single-story wooden structures, resembling houses.

The area north and northwest of the project site is dominated by relatively dense suburban development comprising one- and two-story detached single-family homes on moderately sized lots. Two-story, townhouse-style multifamily housing becomes more prevalent to the northeast, and apartment complexes and neighborhood-serving commercial centers are farther east, near the intersection of Carlton Oaks Drive and Carlton Hills Boulevard. The Vista del Verde condominiums are directly northeast of the project site. Single-family housing and mobile home parks occur south of the project site; however, given that these uses exist on the opposite side of major transportation corridors, including SR-52 and Mission Gorge Road, these uses are not visually connected to the project site.

The project site is within athe wildland/urban interface. The majority of City of San Diego land within the project site is characterized as a Very High FHSZ as of August 30, 2025 (City of San Diego 2026). Within the City of Santee, the

site is statutorily designated as a Local Responsibility Area, with ~~portions~~a portion of the site classified as ~~a~~Moderate, High and Very High Fire Hazard Severity ~~Zone~~Zones (FHSZs) by the California Department of Forestry and Fire Protection (CAL FIRE~~).~~) (City of Santee 2026). However, ~~the areas classified as Very High Fire Hazard Severity Zones are within the landscaped golf course~~pursuant to the City of Santee, any parcel that is within one or more FHSZs or is partially included in a FHSZ is considered entirely within the most severe of the FHSZs identified (City of Santee 2026). Thus, as the City of Santee portion of the project site ranges from Moderate to Very High FHSZs, and is located within one parcel, the project site is considered, as a whole, to be located within a Very High FHSZ (City of Santee 2026).

The project's Fire Protection Plan (Appendix R1, Fire Protection Plan), analyzed the entire project site as being located within a VHFHSZ. Thus, the entire project would comply with the California Wildland-Urban Interface Code that is used for development within the Very High FHSZ. The proposed fire protection measures for the project will meet, or under certain circumstances, exceed all applicable fire and building codes requirements.

Several waterways travel through the project site. Sycamore Canyon Creek crosses under Carlton Oaks Drive and merges with the San Diego River (North Channel). The San Diego River (North Channel) flows through the golf course, traveling westward through the northern portion of the golf course until it merges with the San Diego River (South Channel) near the SR-52 overpass at the western end of the golf course. In addition, runoff from Forester Creek joins the San Diego River (South Channel) along the southeasterly limits of the property. The San Diego River (North Channel) corridor is mostly open, with lower-growing grasses, sedges, reeds, and intermittent patches of riparian trees and shrubs.

The San Diego River (South Channel) corridor travels along the southern boundary of the project site, separated from the golf course and project site by a constructed berm. The berm consists of loosely placed soil that was graded per 1995 Grading Plan G-378. The berm is approximately 10 to 12 feet tall, but in some areas has eroded to only 5 feet tall and is occasionally used as an informal recreational path. According to the ground lease between the City of San Diego and the Carlton Oaks Country Club, the southern boundary of the golf course is defined by the northern toe of the slope of the berm such that the entire structure of the berm is outside of the project site. The City of San Diego granted the Carlton Oaks Country Club a maintenance easement on the property that contains the berm so that both entities may maintain the berm, but neither has the obligation to do so. The berm ends near the western limits of the golf course, just upstream of the West Hills Parkway Bridge. No development would occur on the berm.

The project site receives runoff from the San Diego River, Sycamore Canyon Creek, and storm drain outfalls from the existing neighborhoods along the Carlton Oaks Drive and Mast Boulevard corridors. The San Diego River (North Channel) enters the site near the northeastern edge of the golf course under the existing Carlton Oaks Bridge and conveys flows westerly to the main channel of the San Diego River. ~~The project site contains two existing public storm drain extensions.~~ Existing drainage pipes discharge into the golf course in ~~four~~five locations along the northern subdivision boundary. The San Diego River (North Channel) provides drainage relief for overland flows from the majority of the golf course and the neighborhoods north of the property. Downstream of the Carlton Oaks Bridge, the presence of dense riparian vegetation overgrowth reduces and restricts the flow of water at the confluence of Sycamore Canyon Creek and San Diego River.

There are four existing irrigation wells within the golf course area. The depths of the wells are approximately 840 to 960 feet below land surface (ft. bls.) and yield approximately 200 to 250 gallons per minute (gpm). The water from these wells are currently used to fill the irrigation pond south of the country club building. Water is then pumped

back out of the pond as needed to irrigate the golf course. Under existing conditions, there are approximately 132 acres of golf course turf that is irrigated with water from these wells. These four wells are a necessary part of the golf course operations and maintenance, and all four would be retained during and after construction. None of the four wells are proposed to be abandoned or capped.

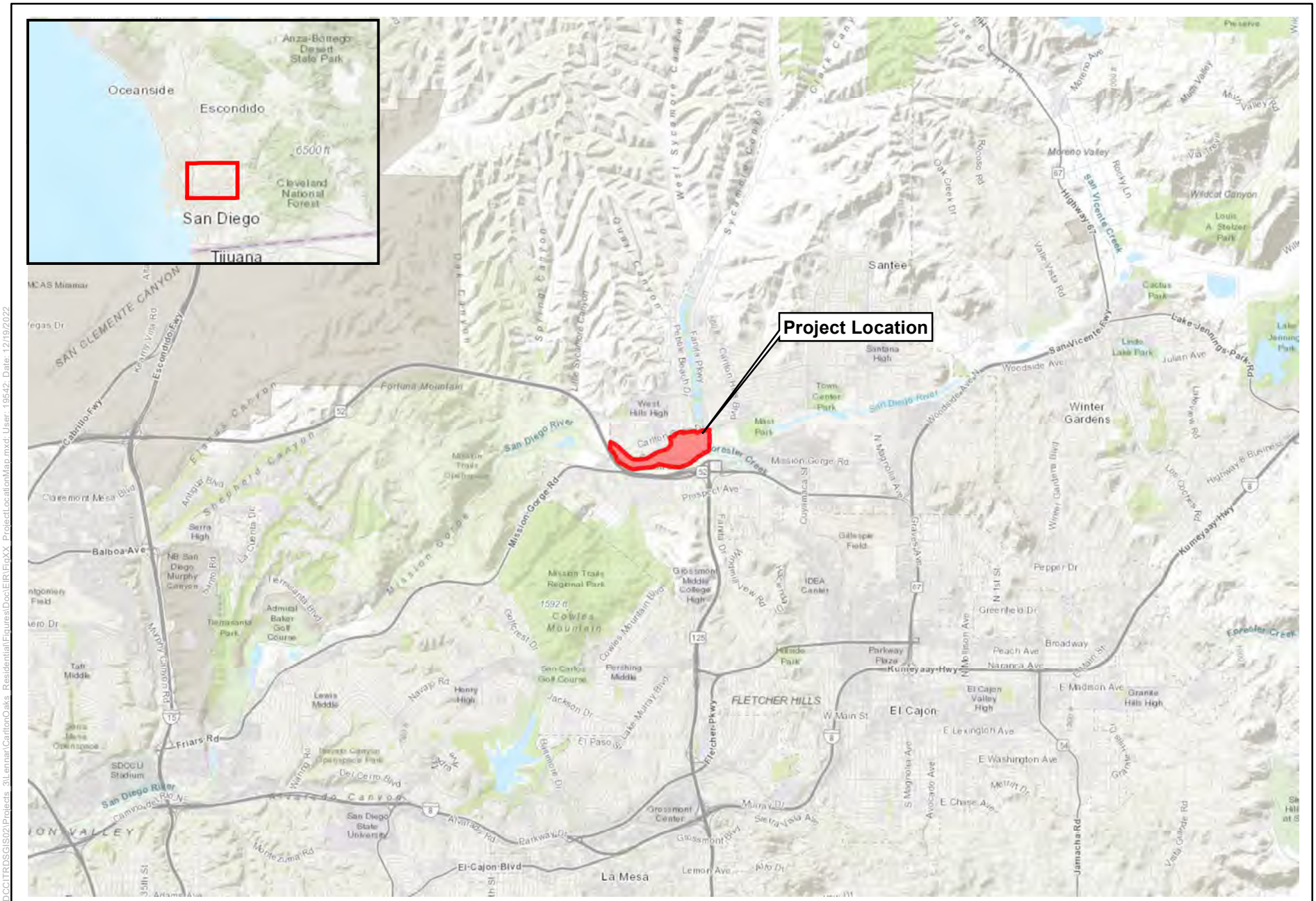

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Figure 2-1
Project Location Map

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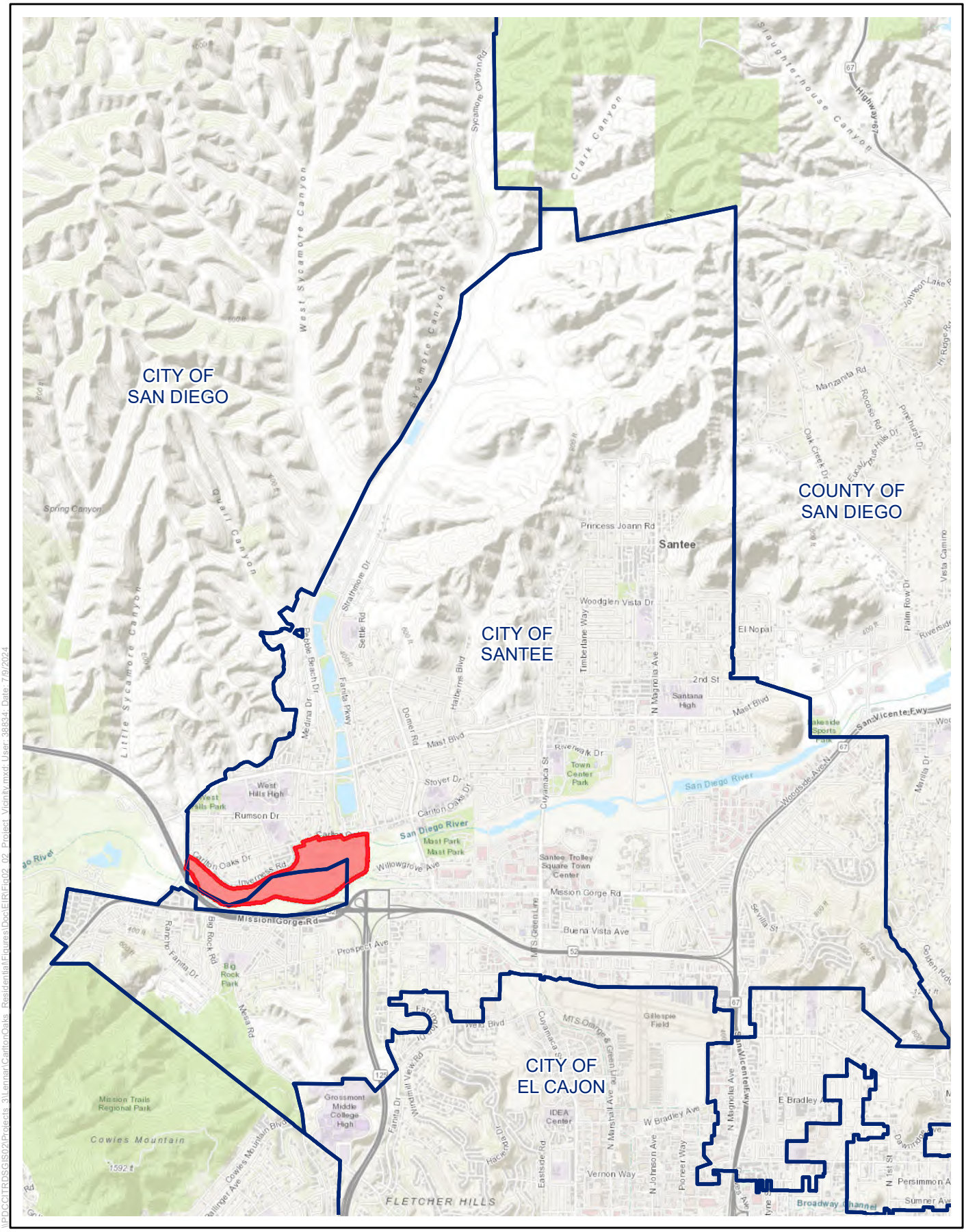

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0 0.5 1 Miles

1 in = 1 mile

Figure 2-2
Project Vicinity

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Beginning in 2023, soil extracted from a tunnel being bored under the golf course was transported to the existing driving range on the golf course using a small dump truck. The soil transported to the driving range was part of the continued upkeep and improvement of the existing golf course's operations. Approximately 1,000 cubic yards were moved during a year-long period. A small bulldozer was used to spread the soil and create a berm along the outer edge of the driving range, adjacent to Sycamore Canyon Creek, to aid in golf ball retention. No subsurface disturbance occurred as a result of the soil deposition.

On August 19, 2024, the City of Santee issued a Notice of Violation to the landowner of the project site. The Notice of Violation identified the transportation of the 1,000 cubic yards of dirt to the driving range without the required permit as a violation of the City of Santee's Municipal Code. The landowner was directed to remove the transported dirt from the driving range and restore the area to pre-construction conditions to the satisfaction of the City of Santee Engineer. The appropriate regulatory agencies were also informed of the violation, and they required that all restoration work be completed prior to the raptor nesting season of 2025.

Although the remedial measures are not components of the proposed project, for strictly informational purposes, the City of Santee requested that this environmental impact report (EIR) include information regarding the remedial measures that were undertaken to restore the property to its original condition. By the end of 2024, the soil and berm were removed, and the soil was transported off site. The site was returned to the contours that existed prior to the soil deposition, and site contours were verified through an engineering survey (Appendix J2, Driving Range Berm Drainage and Flood Assessment).

2.3 Project Objectives

State CEQA Guidelines Section 15124(b) requires project descriptions to contain a statement of objectives that includes the underlying purpose of the proposed project. The objectives of the proposed project are identified below:

- Provide a high-quality, mixed-use recreational resort that will enhance the experience of its users by integrating the country club and related amenities with the golf course and open space areas to provide a resort-like setting for the facilities and offer views of the golf course from the facilities.
- Develop a mixed-use, recreation-related country club resort consistently with the principles of the City of Santee *General Plan* (1984) that offers a high-quality resort setting and recreation-related amenities and uses that are consistent with other high-quality resorts in the region.
- Provide a golf course with a professionally designed layout that can be used by a broad range of players, enhance the golfers' experiences, and meet the needs of the broader tourism market.
- Provide a golf course that has improved drainage flows, reduced accumulation of surface water on the site, requires less water usage, and avoids environmentally sensitive areas, when feasible.
- Provide additional economic revenue for the City of Santee and County of San Diego through the generation of sales, transient occupancy, and property taxes by expanding the event facilities, adding residential units, and upgrading the hotel units.
- Invigorate the local economy by providing additional employment and business opportunities associated with operation of the proposed project.
- Provide high-quality housing opportunities that help satisfy regional housing needs.
- Locate the residential uses in a manner that will serve as a transition from the adjacent residential neighborhoods by providing comparable housing products.

- Foster future economic sustainability of the Carlton Oaks Country Club and Resort by providing residential accessory uses that will result in a diversification of its customers and enhance membership opportunities to activate the facilities and the site year-round.
- Design a development that is compatible with the San Diego River and includes links to existing and planned trails to the east and west of the project site.
- Provide a mixed-use recreational facility that will provide similar lifestyle experiences (i.e., residential units) as other high-quality resorts in the region.

2.4 Project Components and Features

The proposed project would consist of the following: (1) demolition of the existing, Carlton Oaks Country Club clubhouse, restaurant/bar, pro shop, hotel and hotel cottages, and surface parking lots; (2) redevelopment of the golf course; (3) construction of 242 dwelling units as new residential accessory uses, and resort facilities; and (4) construction of on-site and off-site infrastructure improvements associated with roads and utilities (Figure 2-3, Proposed Site Plan). The following describes the project components in more detail.

2.4.1 Golf Course Redesign

The proposed project would involve redesign and redevelopment of the existing 145-acre, 18-hole golf course that will accommodate the proposed residential neighborhoods, will provide an improved experience for the users of the Carlton Oaks Country Club and Resort (Figure 2-4, Golf Course Redesign). The redesigned 18-hole golf course would cover approximately 104 acres (approximately 64 acres within the City of San Diego and 40 acres within the City of Santee). To provide a more engaging golfing experience, the length of the golf course would be reduced from approximately 7,300 yards to 6,450 yards.

Under existing conditions, the golf course has approximately 132 acres of turf that is irrigated using an inefficient 30-year-old block-type irrigation system. The new course design would have approximately 66 acres of irrigated turf (i.e., a 50% reduction) that would use a modern, efficient irrigation system with individual head controls and native plantings, resulting in a decrease in water usage.

Existing manufactured ponds on the golf course would be reshaped to update existing drainage patterns to improve the drainage flow and reduce the accumulation of surface water on the site during rain events. Additionally, the stream course would be widened and enhanced in some areas to increase the functionality of the river, and surrounding vegetation would be restored. Out-of-play areas around the golf course would be planted with native grasses and smaller shrubs that require little or no maintenance. A number of riparian areas within the project site would provide an environment for native birds, small animals, and aquatic plant and animal species. These areas would be avoided and retained in their current condition. The existing maintenance facility in the eastern portion of the project site would also remain in its current location.

As amenities to the golf course, a 1,200-square-foot pro shop, 6,012-square-foot cart barn, 1,258-square-foot storage area, and a golf cart waiting area would be developed ~~on~~at the eastern end of the golf course, northeast of the golf resort. Golf carts would enter the golf course from an access ramp east of the cart barn/pro shop. In addition, a 1,258-square-foot golf learning center would be developed northeast of the pro shop. A shared surface parking lot would provide 293 parking spaces for users of the golf course, clubhouse, and hotel.

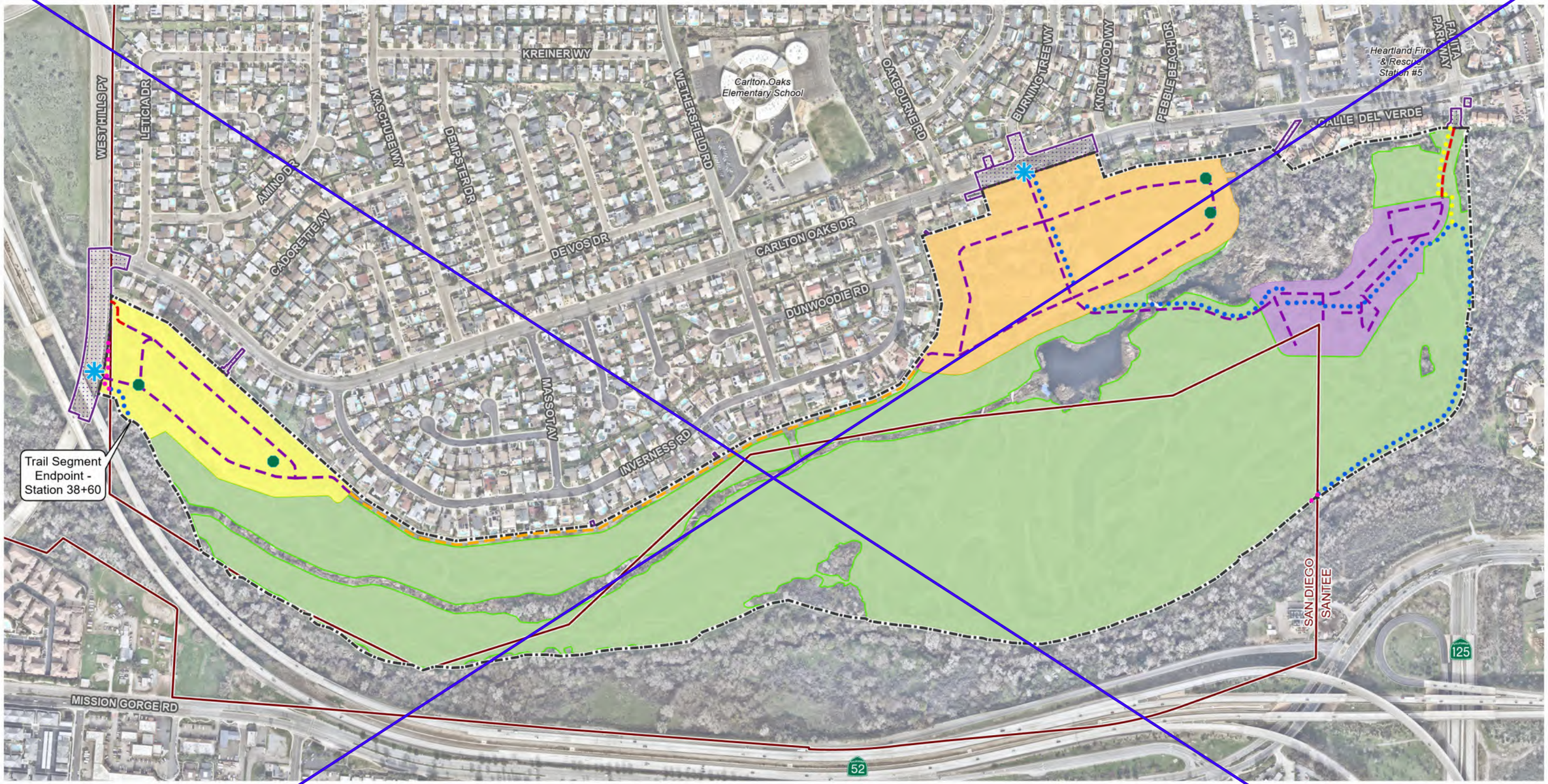

Figure 2-3
Proposed Site Plan

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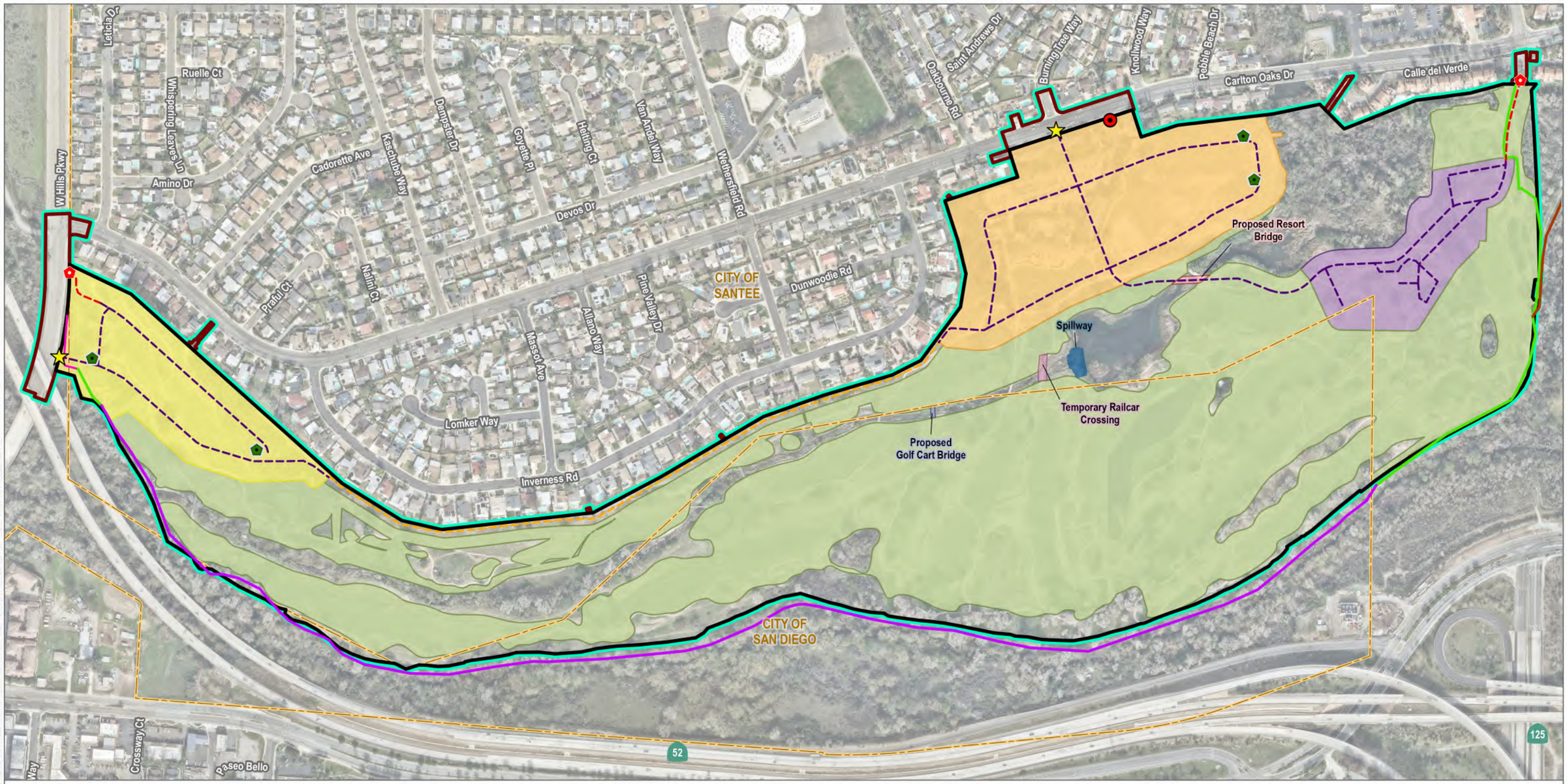

SOURCE: SANGIS 2025; Open Street Map 2023

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0 205 410 Feet

FIGURE 2-3

Proposed Site Plan

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Source: Cary Bickler, INC 1/2025

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Figure 2-4
Golf Course Redesign

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SOURCE: Cary Bickler, INC., 2026

FIGURE 2-4
Golf Course Redesign

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2.4.2 Carlton Oaks Country Club and Resort

The proposed project would transform the existing, outdated clubhouse and facilities into a country club and resort that would be competitive with other such establishments in the region. The resort would consist of 10 cottage-style hotel units, 42 hotel rooms, and a contemporary clubhouse. The single-story clubhouse would total approximately 16,000 square feet and contain a restaurant with a bar area, kitchen, banquet hall, administrative spaces, storage area, and restrooms. The 42-room hotel would be a separate, two-story, approximately 43-foot-tall structure. The outdoor space of the clubhouse and resort would consist of a pool and deck area, a patio, and a courtyard. The 10 cottages would be adjacent to the hotel and include individual patios. The shared surface parking lot would be northeast of the clubhouse and provide 293 parking spaces for users of the golf course, clubhouse, and hotel. Parking would meet City of Santee standard parking requirements. Figure 2-5 provides a conceptual site plan for the country club and resort area, and Figure 2-6 shows the proposed elevations of the new facilities.

Weddings, golfing events, and other social gatherings currently occur inside the clubhouse and outside on the patio and lawn area of the clubhouse. Current exterior music includes acoustic-style performances of multi-piece bands, DJ performances, and other small-event-type music. Future exterior music is proposed to remain similar to the existing acoustic-style performances, and the project does not propose any increase or expansion of noise occurrences. No exterior music or amplified sound would occur after 10:00 p.m.

The country club and resort would overlook the golf course, providing panoramic views of the course and surrounding open space areas along the San Diego River corridor and enhance the experience of its users by integrating it with the golf course and open-space areas. The proposed landscaping would include water-efficient plants that emphasize colors, textures, and varieties of plants. The landscaping concept would be suitable for the Southern California climate and would enhance the buildings and outdoor spaces around the hotel. Trees would be planted throughout the site to provide shade and reduce heat generated from the parking lots. In addition, three bio-filtration basins would be installed to treat water runoff; these would occur just north of the resort parking lot adjacent to the fire access road, south of the golf cart waiting area, and north of the cottages.

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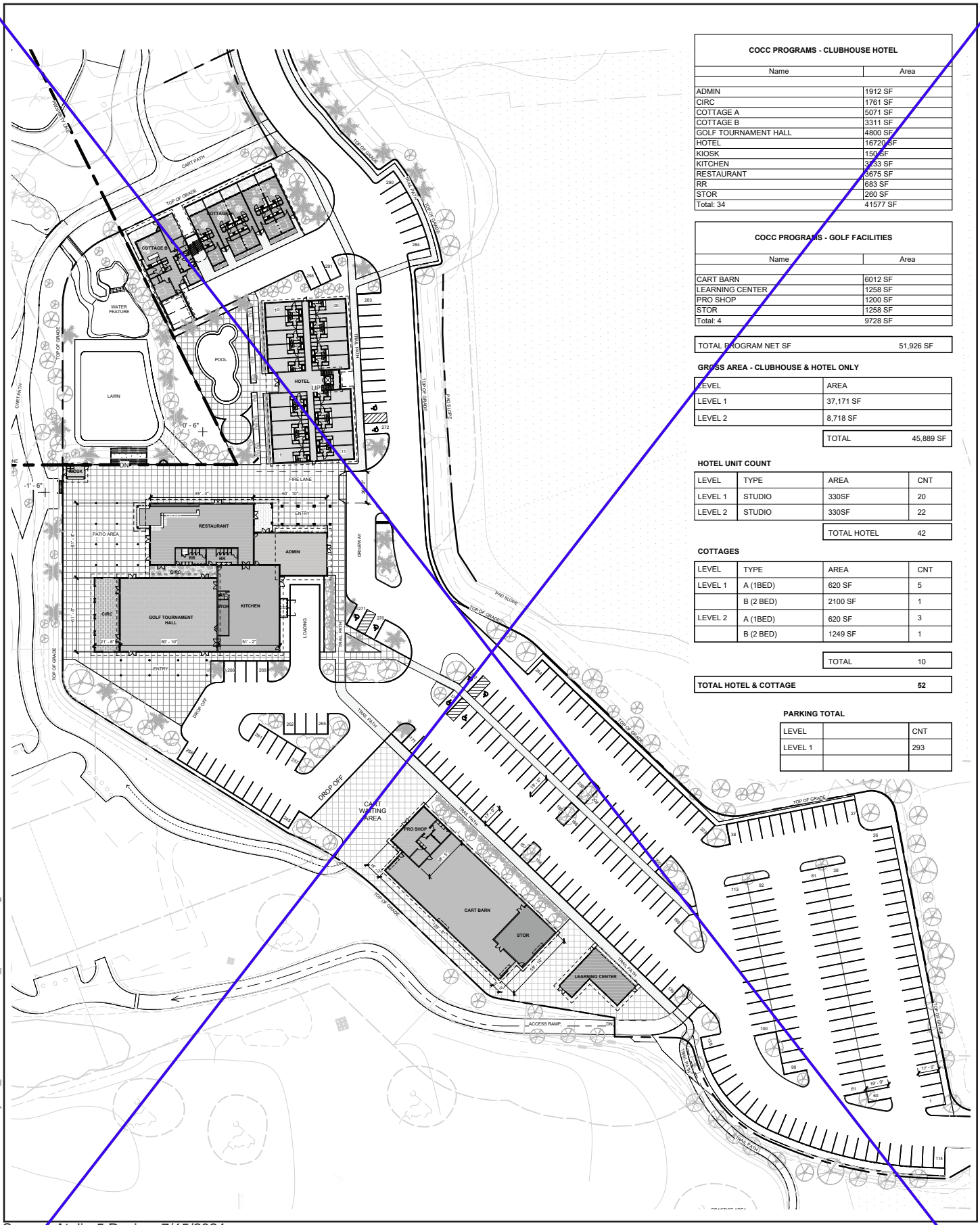

COCC PROGRAMS - CLUBHOUSE HOTEL

Name	Area
ADMIN	1912 SF
CIRC	1761 SF
COTTAGE A	5071 SF
COTTAGE B	3311 SF
GOLF TOURNAMENT HALL	4800 SF
HOTEL	16720 SF
KIOSK	150 SF
KITCHEN	3133 SF
RESTAURANT	3675 SF
RR	683 SF
STOR	260 SF
Total: 34	41577 SF

COCC PROGRAMS - GOLF FACILITIES

Name	Area
CART BARN	6012 SF
LEARNING CENTER	1258 SF
PRO SHOP	1200 SF
STOR	1258 SF
Total: 4	9728 SF

TOTAL PROGRAM NET SF	51,926 SF

GROSS AREA - CLUBHOUSE & HOTEL ONLY

LEVEL	AREA
LEVEL 1	37,171 SF
LEVEL 2	8,718 SF
TOTAL	45,889 SF

HOTEL UNIT COUNT

LEVEL	TYPE	AREA	CNT
LEVEL 1	STUDIO	330SF	20
LEVEL 2	STUDIO	330SF	22
		TOTAL HOTEL	42

COTTAGES

LEVEL	TYPE	AREA	CNT
LEVEL 1	A (1BED)	620 SF	5
	B (2 BED)	2100 SF	1
LEVEL 2	A (1BED)	620 SF	3
	B (2 BED)	1249 SF	1
		TOTAL	10

TOTAL HOTEL & COTTAGE	**52**

PARKING TOTAL

LEVEL		CNT
LEVEL 1		293

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Source: Atelier5 Design, 7/15/2024.

DUDEK N 1 in = 40 ft

Figure 2-5
Carlton Oaks Clubhouse and Resort Conceptual Site Plan

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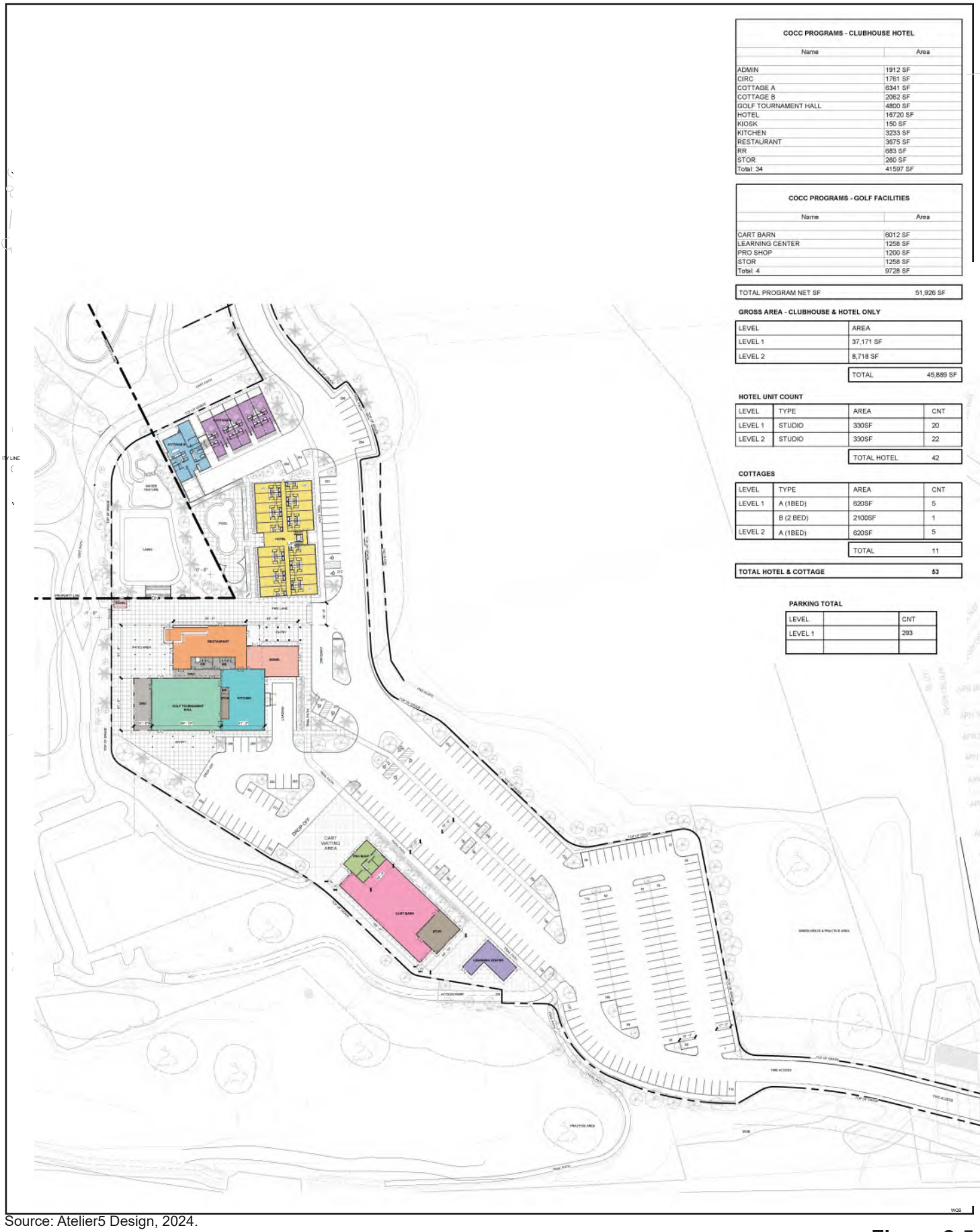

COCC PROGRAMS - CLUBHOUSE HOTEL

Name	Area
ADMIN	1912 SF
CIRC	1761 SF
COTTAGE A	6341 SF
COTTAGE B	2062 SF
GOLF TOURNAMENT HALL	4800 SF
HOTEL	16720 SF
KIOSK	150 SF
KITCHEN	3233 SF
RESTAURANT	3675 SF
RR	683 SF
STOR	260 SF
Total: 34	41597 SF

COCC PROGRAMS - GOLF FACILITIES

Name	Area
CART BARN	6012 SF
LEARNING CENTER	1258 SF
PRO SHOP	1200 SF
STOR	1258 SF
Total: 4	9728 SF

TOTAL PROGRAM NET SF	51,926 SF

GROSS AREA - CLUBHOUSE & HOTEL ONLY

LEVEL	AREA
LEVEL 1	37,171 SF
LEVEL 2	8,718 SF
TOTAL	45,889 SF

HOTEL UNIT COUNT

LEVEL	TYPE	AREA	CNT
LEVEL 1	STUDIO	330SF	20
LEVEL 2	STUDIO	330SF	22
		TOTAL HOTEL	42

COTTAGES

LEVEL	TYPE	AREA	CNT
LEVEL 1	A (1BED)	620SF	5
	B (2 BED)	2100SF	1
LEVEL 2	A (1BED)	620SF	5
		TOTAL	11
TOTAL HOTEL & COTTAGE			**53**

PARKING TOTAL

LEVEL		CNT
LEVEL 1		293

Source: Atelier5 Design, 2024.

DUDEK N 1 in = 40 ft

Figure 2-5
Carlton Oaks Clubhouse and Resort Conceptual Site Plan

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Source: Atelier5 Design, 5/12/2020.

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Figure 2-6
Carlton Oaks Clubhouse and Resort Elevations

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2.4.3 Residential Development

The proposed residential development would be clustered into two areas to optimize open space on the project site: Residential West (detached multifamily homes) and Residential North (detached multifamily homes and six single-family, single-story homes). Residential development would occur in the designated PD ~~and R2 zones~~zone identified in the City of Santee's *General Plan* (City of Santee ~~1984~~2003) and would be developed consistent with the underlying zoning requirements.

The project would ~~including~~include building a total of 242 new residential units, including 86 new units in the PD zone in Residential West and 156 new units in the PD zone in Residential North. Within the R2 zone, the project would ~~also~~ modify driveway access to an existing home at 9225 Inwood Drive (no changes to the existing structure are proposed~~).~~) but no new homes will be built in the R2 zone. In total, the project would include 243 homes in the project area, which includes the existing home with the driveway modification~~.~~ within the R2 zone and 242 new homes within the PD zone. The project would include a proposed density of 8.2 to 9 dwelling units per acre in the PD zone~~, and a density of 2.7 dwelling units per acre in the R2 zone.~~.

Single-family and multifamily dwellings are allowable uses within the PD zone with a development review permit (City of Santee Municipal Code Section 13.19.030 A). Consistent with the Planned Development Zone, development standards ~~would also~~are required to be established through the development review permit and are provided as Appendix S, Revised Planned Development District Standards~~.~~ (City of Santee Municipal Code Section 13.19.030A).

As required by the City of Santee's *General Plan*, the residential development areas were designed to be accessory to the primary recreational use (golf course). Residents would be able to access recreational and commercial uses at the country club and golf course via an interconnected system of golf cart paths, a multi-use path, and sidewalks that encourage pedestrian and bicycle access to these facilities. The residential uses are designed to activate the golf course and resort during the day and night and throughout the year. The new residential areas would be an integrated component of the country club and golf course and would provide a transition from the existing residential areas adjacent to the golf course to the updated resort area. The residential development would be an integrated component of the Carlton Oaks Country Club and Golf Course that would make the facilities readily accessible to the homeowners, promoting an economically sustainable, recreation-oriented lifestyle and allowing the residents to provide year-round patronage to the golf course and resort. All new residential areas would be accessible through privately maintained internal streets, and would provide optimal vehicular, pedestrian, and emergency access (see Section 2.4.4, Project Access).

The landscaping plan for the proposed project includes enhanced open space areas in the western and eastern portions of the project site. The proposed residential development would include approximately 40,000 square feet of community recreational space for residents.

2.4.3.1 Residential West

Residential West is located within the PD zone and would consist of 86 detached multifamily units on a minimum of 40- by 70-foot pads at a density of 9 dwelling units per gross acre, which is equivalent to the City's existing density ranges for the R7 zone (Figure 2-7, Residential West Site Plan). Each unit would be two stories and have a small, private yard. The detached residential units would be located within single parcels in which the underlying land would be held in common ownership (i.e., *detached multifamily*) and would be considered a condominium project, as defined in California Civil Code Section 4125. Residential designs would be a mixture of Modern Spanish,

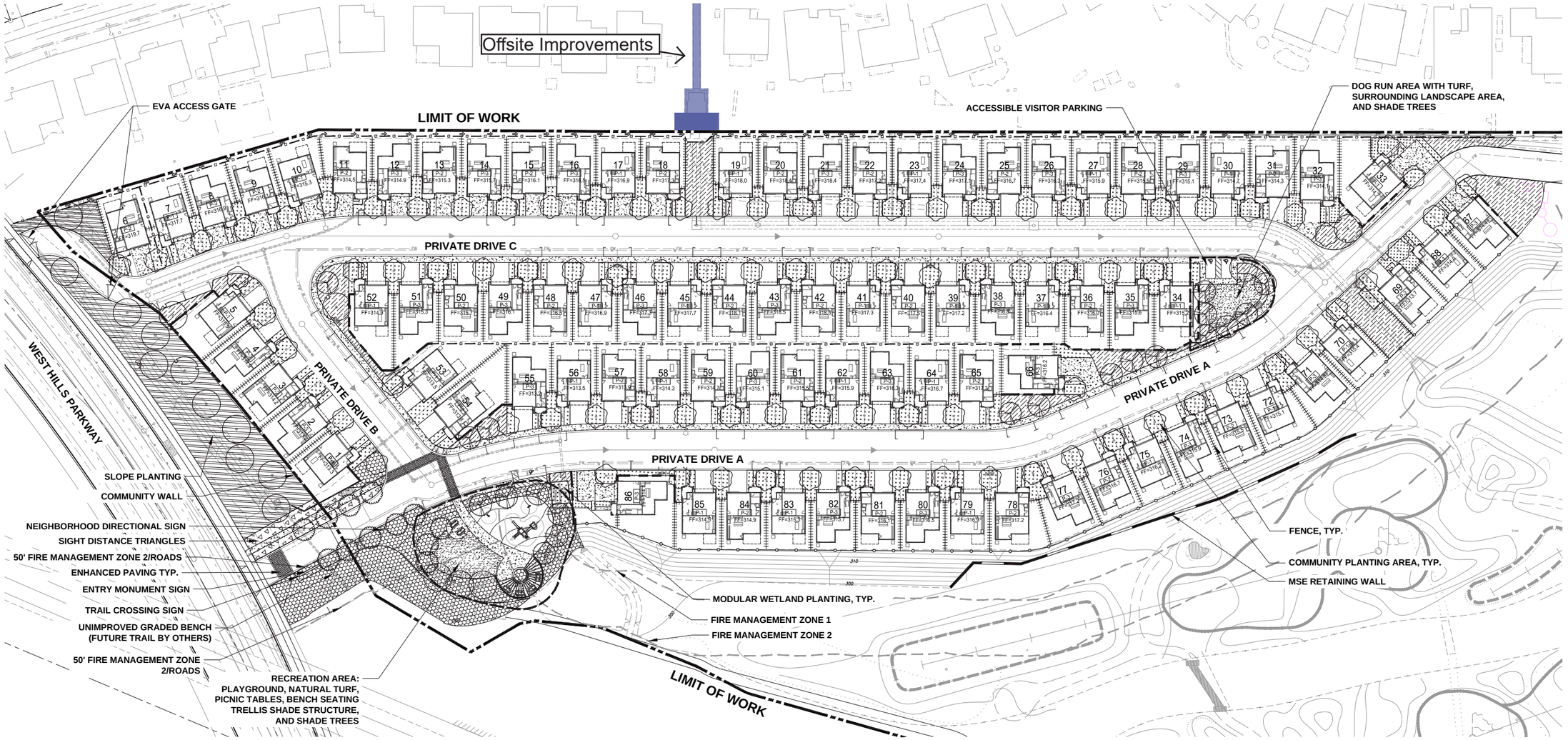
Transitional Monterey, and Transitional Farmhouse (Figure 2-8, Residential West Elevations). To improve the views from existing homes north of Residential West, architectural treatments would be added to the front and back of the homes. Additionally, landscape screening would be provided at existing homes adjacent to Residential West, if desired by the property owner.

The Residential West landscape design would include installation of flowering accent trees, community shade trees, shrubs, and groundcovers for private yards, and shrubs and groundcovers for public green spaces. Other design features would include entry monument signage, stylistic paving materials, and turf block pavers (i.e., pavers that allow turf to grow around them). Low-impact-development drainage features, such as bioswales and bioretention plantings, would also be installed. Figure 2-7 depicts the proposed water quality design features that would be provided.

The proposed Residential West development would also include construction of approximately 12,500 square feet of recreational space, split between two areas. A playground, picnic tables, shade structure, and overlook area with bench seating would be located along the southwestern boundary of Residential West, and a dog park with artificial turf and shade trees would be located in the eastern portion of Residential West.

The primary access to Residential West would be ~~accessed from~~ via a private driveway ~~that connects at~~ off of West Hills Parkway, ~~which~~located approximately 450 feet south of Carlton Oaks Drive. In addition, an emergency access driveway is proposed at the northwest corner of Residential West with an access road from West Hills Parkway. The driveway to the proposed emergency access road is located approximately 100 feet south of Carlton Oaks Drive. Existing medians would be ~~widened and~~ restriped ~~to allow for the private access.~~, and a raised concrete median would also be installed on West Hills Parkway across from the project's primary and emergency access driveways. Two private internal driveways would provide access to the homes. Further details of the proposed roadways are included under Section 2.4.4.3, Internal Roadways and Bridges.

Each house would include a two-car garage and driveway, providing a total of 172 off-street parking spaces. In addition, the development would include 55 on-street, parallel parking spaces and 3 parking spaces that are compliant with the Americans with Disabilities Act, for a total of 230 parking spaces. ~~There would also be emergency access (see Section 2.4.4.3, Internal Roadways).~~



State of CA Model Water Efficent Landscape Ordinance (MWELO) Update Impact Comparison

Project Name: CARLTON OAKS COLF COURSE - COMMUNITY LANDSCAPE

2015 Executive Order EO B-29-15 MWELO CALCS - MAWA & ETWU PROJECT WATER USE ANALYSIS

Description	MAWA	ETWU		Hydrozones				
			ETAF	High Water Use	Moderate Water Use	Low Water Use	Very Low Water Use	Total Usage
Total Landscape Area (Square Feet)	138,318.00	Hydrozone Area S.F. (HA)		8,717.00	4,665.00	124,936.00		138,318.00 SqFt
Special Landscape Area (SLA)	0.00	SLA Hydro Area		0.00	0.00	0.00	0.00	0.00 SqFt
Irrigation Efficienv (IE)	NA	Irrigation Efficiency (IE)		Irrig Type 0.75	Irrig Type 0.81	Irrig Type 0.75	Irrig Type 0.75	
Reference Evapotranspiration (Eto)	51.20	Ref ET (Eto)		51.20	51.20	51.20	51.20	
Plant Factor (PF) H=.8/.7, M=.6/.5, L=.4/.3, VL=.2/.1	NA	Plant Factor (PF)		0.8	0.5	0.2	0.1	
ET Adjustment Factor (ETAF) for non residential projects	0.45	ETAF (PF/IE)		1.07	0.62	0.27	0.13	
Conversation Factor (inches to Gallons)	0.62	Conversation Factor		0.62	0.62	0.62	0.62	
		(ETAF x Area)		8,248.63	16,220.60	33,316.27	0.00	49,536.87 SqFt
Eto x .62 x [(ETAF x Land Area) + ((1-ETAF) x SLA)]	1,975,845	Eto x .62 x (ETAF x Area)		261,845	514,907	1,057,592	0	1,834,343 Gal/Yr
		ETo x 0.62 x (SLA Area)			0.00	0.00	0.00	0.00 Gal/Yr
Total Gallons per year	1,975,845	1,834,343						1,834,342.77 Gal/Yr
		Project Average ETAF	0.36					

Anticipated evapotranspiration rates for the site are based on historical averages.
This data is collected from C.I.M.I.S.(California Irrigation Management Information System)

IE = All overhead spray = 0.75; Subsurface irrigation such as Bubblers and Drip = 0.81
Data from the C.I.M.I.S Station # 150 was used.

Note: Add project name, fill in highlighted areas with appropriate SF., and confirm/ update colored irrigation efficiency (IE) and plant factor (PF) areas. As a check, project average ETAF needs to be lower than MAWA ETAF (.45).

State of CA Model Water Efficent Landscape Ordinance (MWELO) Update Impact Comparison

Project Name: CARLTON OAKS COLF COURSE - PRIVATE LANDSCAPE

2015 Executive Order EO B-29-15 MWELO CALCS - MAWA & ETWU PROJECT WATER USE ANALYSIS

Description	MAWA	ETWU		Hydrozones				
			ETAF	High Water Use	Moderate Water Use	Low Water Use	Very Low Water Use	Total Usage
Total Landscape Area (Square Feet)	113,491.00	Hydrozone Area S.F. (HA)		0.00	0.00	113,491.00		113,491.00 SqFt
Special Landscape Area (SLA)	0.00	SLA Hydro Area		0.00	0.00	0.00	0.00	0.00 SqFt
Irrigation Efficiency (IE)	NA	Irrigation Efficiency (IE)		Irrig Type 0.75	Irrig Type 0.81	Irrig Type 0.75	Irrig Type 0.75	
Reference Evapotranspiration (Eto)	51.20	Ref ET (Eto)		51.20	51.20	51.20	51.20	
Plant Factor (PF) H=.8/.7, M=.6/.5, L=.4/.3, VL=.2/.1	NA	Plant Factor (PF)		0.8	0.5	0.1	0.1	
ET Adjustment Factor (ETAF) for non residential projects	0.45	ETAF (PF/IE)		1.07	0.62	0.13	0.13	
Conversation Factor (inches to Gallons)	0.62	Conversation Factor		0.62	0.62	0.62	0.62	
		(ETAF x Area)		8,248.63	16,220.60	15,132.13	0.00	31,352.73 SqFt
Eto x .62 x [(ETAF x Land Area) + ((1-ETAF) x SLA)]	1,621,196	Eto x .62 x (ETAF x Area)		261,845	514,907	480,354	0	1,257,106 Gal/Yr
		ETo x 0.62 x (SLA Area)			0.00	0.00	0.00	0.00 Gal/Yr
Total Gallons per year	1,621,196	1,257,106						1,257,105.64 Gal/Yr
		Project Average ETAF	0.28					

Anticipated evapotranspiration rates for the site are based on historical averages.
This data is collected from C.I.M.I.S.(California Irrigation Management Information System)

IE = All overhead spray = 0.75; Subsurface irrigation such as Bubblers and Drip = 0.81
Data from the C.I.M.I.S Station # 150 was used.

Note: Add project name, fill in highlighted areas with appropriate SF., and confirm/ update colored irrigation efficiency (IE) and plant factor (PF) areas. As a check, project average ETAF needs to be lower than MAWA ETAF (.45).

LIMIT OF WORK

COMMUNITY RECREATION AREA

0 20 40 80

SCALE: 1" = 40'-0"

NORTH

PREPARED BY:

SCHMIDT DESIGN GROUP
1310 Rosecrans St., Suite G, San Diego, CA 92106
619.2363452
LIC. CA-2938 | NV-2991 AZ-34139
SCHMIDTDESIGN.COM

DN: DB,MJ,EC CK: JB PROJECT #: 18-203

PRELIMINARY
NOT FOR CONSTRUCTION

SHEET NUMBER:
LC-1.1

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Source: Schmidt Design Group, 1/28/2025.

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Figure 2-7
Residential West Site Plan

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PLAN 3
MODERN SPANISH

PLAN 1
TRANSITIONAL FARMHOUSE

PLAN 2
TRANSITIONAL MONTEREY

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Source: Bassenian Lagoni Architects, 1/15/25.

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Figure 2-8
Residential West Elevations

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2.4.3.2 Residential North

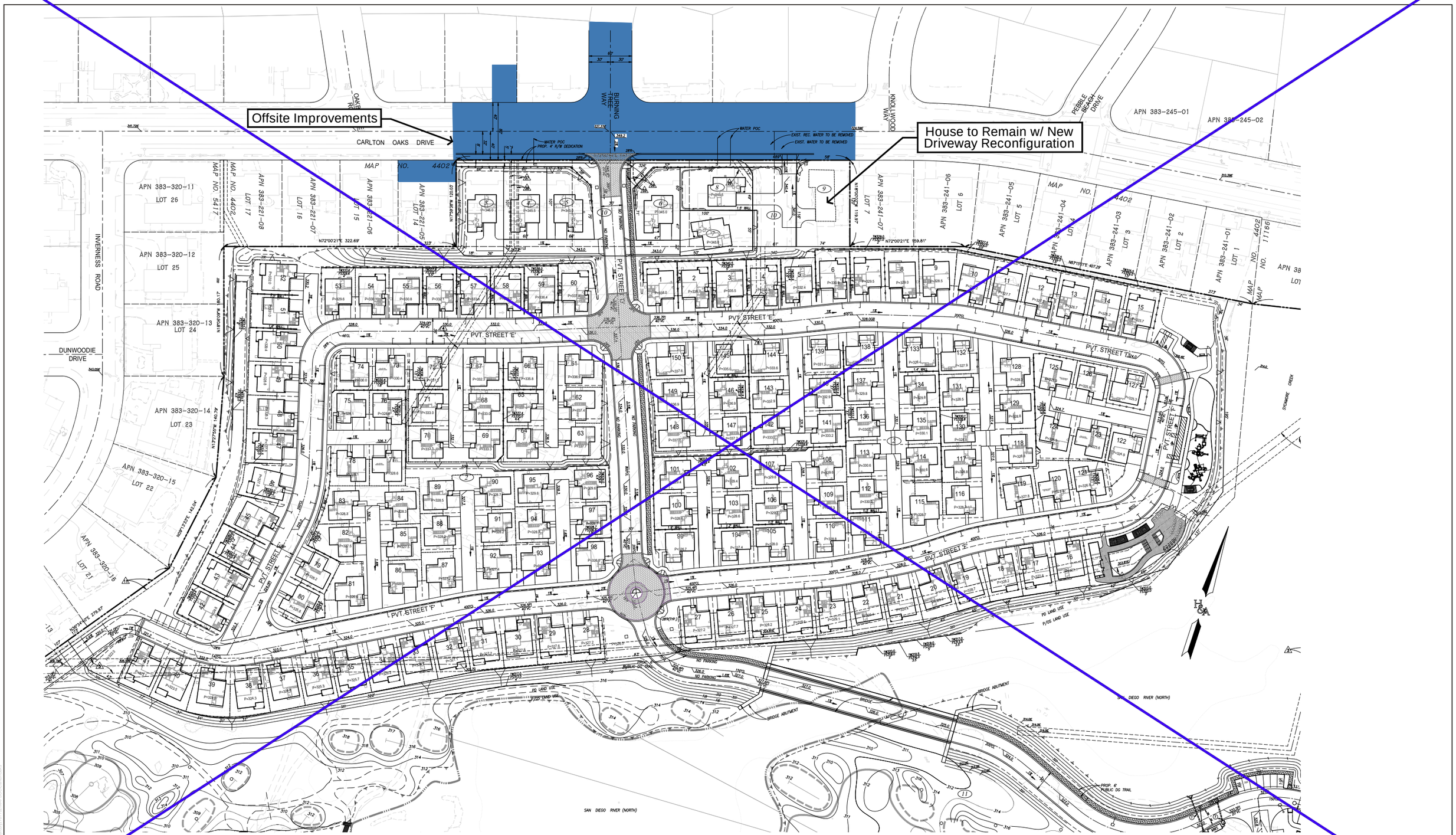
Residential North ~~would be developed~~is mostly located in the ~~northern central~~ PD zone, and a portion is located within the R2 zone. Development within the PD zone will consist of ~~the project site and would have a~~150 detached multifamily residential units and six single-family lots/dwelling units, with a combined density of 8.2 dwelling units per acre ~~within the PD zone~~, which is equivalent to the City's existing density range for the ~~R7zone, and a density of 2.7 dwelling units per acre within the R2~~R7 zone (Figure 2-9, Residential North Site Plan; Figures 2-10 and 2-11, Residential North Elevations). ~~It would consist of~~The 150 detached multifamily residential units ~~and is considered~~will be built as a condominium project, as defined in California Civil Code Section 4125. ~~Additionally, six single family lots would be developed in the PD zone. In addition, one existing home at 9225 Inwood Drive has been included in the project to allow for minor driveway modifications, but no changes to the structure are proposed. In total, Residential North would consist of 156 new~~The multifamily residential units ~~in the PD zone and modification to one existing single family unit in the R2 zone. The six new single family homes along Carlton Oaks Drive and allow for single-story homes on minimum 6,000-square-foot lots with an architectural footprint of 50 by 62 feet, consistent with the existing homes on Carlton Oaks Drive (Figure 2-12, Residential North Single-Story Home Elevation). Residential North would~~will consist of 60 detached homes with pads measuring approximately 47 by 70 feet, and 90 cluster-style, detached homes with pads measuring approximately 50 by 56 feet. Shared driveway access would be provided for clusters of four homes, maximum, each with its own attached two-car garage. Each unit would have a small, private yard but would be within a shared parcel in which the underlying land would be held in common ownership. ~~All units except for the six single-family homes along Carlton Oaks Drive would be two stories.~~ The proposed design for the detached homes and cluster-style detached homes would be a mixture of Modern Farmhouse, Prairie Inspired, and Spanish-Modern (Figure 2-10 and Figure 2-11). The six new single-family homes will be located along Carlton Oaks Drive and allow for single-story homes on minimum 6,000-square-foot lots with an architectural footprint of 50 by 62 feet, consistent with the existing homes on Carlton Oaks Drive (Figure 2-12, Residential North Single-Story Home Elevation). All units except for the six single-family homes along Carlton Oaks Drive would be two stories.

An existing home is located within the R2 zone, at 9225 Inwood Drive and has been included in the project site to allow for minor driveway modifications, but no changes to the structure are proposed. As such, in total, Residential North would consist of 156 new residential units in the PD zone and one existing single-family unit in the R2 zone. The landscape design within this residential development would include flowering accent trees, community shade trees, accent trees, shrubs and ground cover for slopes, private yards, and public green space. Other design features would include an entry monument with stylistic paving materials, and low-impact-development drainage features, such as bioswales, bioretention treatment plantings, and turf block pavers. Figure 2-9 depicts the proposed water quality design features.

Approximately 27,400 square feet of community recreation space would be provided on the eastern boundary of Residential North and would consist of a play structure with resilient surfacing, picnic tables covered by a shade structure, a dog run area, an outdoor pool, a pool house, tables, chaise lounge chairs, and outdoor showers.

Residential North would include 405 parking spaces—314 garaged parking spaces, 6 standard guest parking spaces, 81 parallel guest parking spaces, and 4 parking spaces that are compliant with the Americans with Disabilities Act. The development would be accessed from the proposed private street (i.e., Burning Tree Way), which would extend the existing Burning Tree Way across Carlton Oaks Drive. Internal streets and a roundabout would provide access to homes and the resort facilities. The roundabout would provide traffic calming for the main entrance road. There would also be emergency access (see Section 2.4.4.3, Internal Roadways and Bridges).

That portion of Inwood Drive dedicated and accepted on Map 4402 will be vacated and abandoned on the Final Map. The street vacation will turn into a common area lot for driveway and landscape purposes which will be maintained by the Homeowner's Association (HOA). The location of the Inwood Drive street vacation is depicted in Figure 2-3.



SOURCE: Hunsaker 2025

FIGURE 2-9

Residential North Site Plan

Carlton Oaks EIR

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Offsite Improvements

House to Remain w/ New Driveway Reconfiguration

6-foot-wide Enhanced Decomposed Granite Sidewalk

SOURCE: Hunsaker 2025

FIGURE 2-9

Residential North Site Plan

Carlton Oaks EIR

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PLAN 1A - SPANISH MODERN INSPIRED | PLAN 2B - PRARIE INSPIRED | PLAN 3C - MODERN FARMHOUSE INSPIRED | PLAN 1B - PRARIE INSPIRED (SINGLE STORY) | PLAN 1XA - SPANISH MODERN INSPIRED

PLAN 1C - MODERN FARMHOUSE INSPIRED | PLAN 2A - SPANISH MODERN INSPIRED | PLAN 3B - PRARIE INSPIRED | PLAN 1XC - MODERN FARMHOUSE INSPIRED

PLAN 1B - PRARIE INSPIRED | PLAN 2C - MODERN FARMHOUSE INSPIRED | PLAN 3A - SPANISH MODERN INSPIRED | PLAN 1C - MODERN FARMHOUSE INSPIRED (SINGLE STORY) | PLAN 1XB - PRARIE INSPIRED

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Source: ktgy Architecture + Planning, 1/16/25.

DUDEK

Figure 2-10
Residential North Elevations - 50X56 Lots

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PLAN 3C - MODERN FARMHOUSE INSPIRED | PLAN 2B - PRARIE INSPIRED | PLAN 1A - SPANISH MODERN INSPIRED

PLAN 3B - PRARIE INSPIRED | PLAN 2A - SPANISH MODERN INSPIRED | PLAN 1C- MODERN FARMHOUSE INSPIRED

PLAN 3A - SPANISH MODERN INSPIRED | PLAN 2C - MODERN FARMHOUSE INSPIRED | PLAN 1B - SPANISH MODERN INSPIRED

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Source: ktgy Architecture + Planning, 1/16/25.

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Figure 2-11
Residential North Elevations - 47X70 Lots

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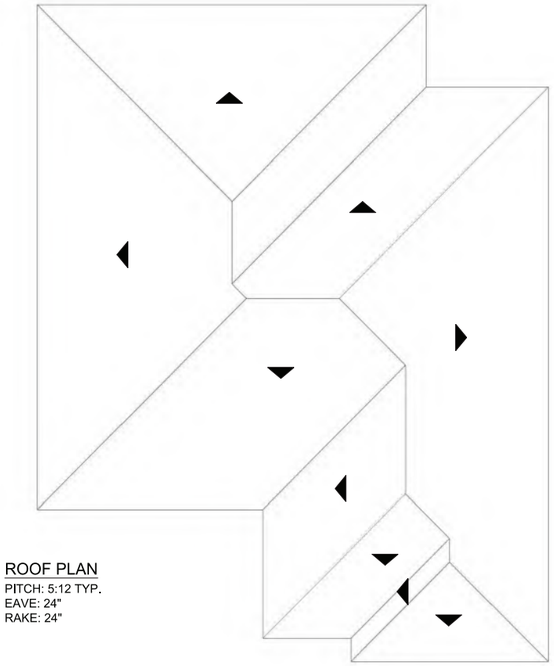
RIGHT ELEVATION

REAR ELEVATION

LEFT ELEVATION



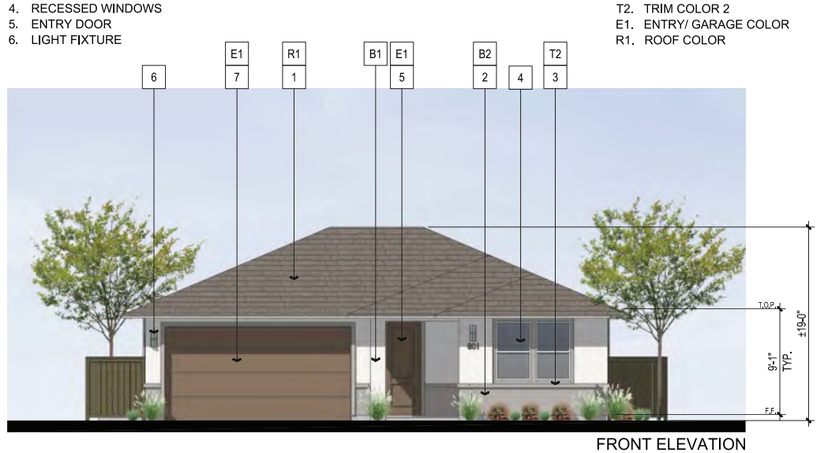
ROOF PLAN
PITCH: 5:12 TYP.
EAVE: 24"
RAKE: 24"

MATERIAL LEGEND

1. CONCRETE FLAT TILE ROOF
2. STUCCO
3. FOAM TRIM
4. RECESSED WINDOWS
5. ENTRY DOOR
6. LIGHT FIXTURE
7. SECTIONAL GARAGE DOOR

COLOR SCHEME 2

B1. BODY COLOR 1
B2. BODY COLOR 2
T1. TRIM COLOR 1
T2. TRIM COLOR 2
E1. ENTRY/ GARAGE COLOR
R1. ROOF COLOR



FRONT ELEVATION

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Source: KTGY, 5/2/2023

DUDEK

Figure 2-12
Residential North Single Story Home Elevation

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2.4.4 Project Access

Access to the proposed project from the regional transportation network would be provided via West Hills Parkway, Mast Boulevard, Carlton Oaks Drive, and Carlton Hills Boulevard. These roads would either provide a direct connection to the proposed project via project drives (i.e., West Hills Parkway and Carlton Oaks Drive) or would provide a link between the proposed project and the regional transportation network (i.e., Mast Boulevard and Carlton Hills Boulevard). These roadways are described in detail below.

2.4.4.1 North–South Roadways

Carlton Hills Boulevard

Carlton Hills Boulevard provides a connection between the project site and SR-125, SR-52, and the commercial centers along Mission Gorge Road. Carlton Hills Boulevard between Mast Boulevard and Mission Gorge Road is a four-lane roadway with a raised median and a posted speed limit of 35 miles per hour (mph). Sidewalks, on-street parking, and Class II bicycle lanes are provided on both sides of Carlton Hills Boulevard. San Diego Metropolitan Transit System (MTS) Bus Route 834 runs clockwise along Carlton Hills Boulevard (southbound direction), providing transit services between the western neighborhoods of the City of Santee and the Santee Transit Center. MTS Bus Route 834 has an existing headway of 60 minutes throughout the day. The City of Santee's *General Plan – Mobility Element* (City of Santee 2017b) classifies Carlton Hills Boulevard as a four-lane major arterial.

West Hills Parkway

West Hills Parkway runs along the western edge of the project site and would provide direct access to Residential West via a single driveway. West Hills Parkway is a four-lane roadway, with a striped or raised median, depending on the location, and a posted speed limit of 45 mph. Sidewalks are provided along the eastern side of West Hills Parkway and intermittently along the western side of the roadway. Parking is prohibited on both sides of the roadway. MTS Bus Route 834 runs clockwise on West Hills Parkway (northbound direction), providing transit services between the western neighborhoods of the City of Santee and the Santee Transit Center. MTS Bus Route 834 has an existing headway of 60 minutes throughout the day. The closest bus stop to the project site is at the northeastern corner of Carlton Oaks Drive and West Hills Parkway. This segment of West ~~Hill~~Hills Parkway is within the City of San Diego, but the *East Elliott Community Plan* (City of San Diego 2015) does not provide a classification for the roadway. The City of Santee's *General Plan – Mobility Element* (City of Santee 2017b) classifies West Hills Boulevard as a four-lane major arterial.

2.4.4.2 East–West Roadways

Mast Boulevard

Mast Boulevard, between the SR-52 eastbound ramps and West Hills Parkway, provides a regional connection between the proposed project and SR-52. This segment of Mast Boulevard is a four-lane roadway with a raised or striped median, depending on the location, and a posted speed limit of 40 mph. Parking is currently prohibited along this segment Mast Boulevard. Sidewalks are available on both sides of this segment, with the exception of the southern side of the roadway between the SR-52 eastbound ramps and the SR-52 westbound ramps. Class II bicycle lanes are provided in both directions. MTS Bus Route 834 runs clockwise on Mast Boulevard (eastbound direction), providing transit services

between the western neighborhoods of the City of Santee and the Santee Transit Center. MTS Bus Route 834 has an existing headway of 60 minutes throughout the day. The City of Santee's *General Plan – Mobility Element* (City of Santee 2017b) classifies Mast Boulevard as a four-lane major arterial east of the SR-52 ramps. The *East Elliott Community Plan* (City of San Diego 2015) does not identify a classification for the portions of Mast Boulevard that are within the City of San Diego.

Carlton Oaks Drive

Carlton Oaks Drive would provide direct access to the project via a single driveway at the Burning Tree Way intersection. Along the proposed project frontage between West Hills Parkway and Fanita Parkway, Carlton Oaks Drive is a two-lane roadway with a continuous left-turn lane and a 35 mph posted speed limit. Sidewalks and Class II bicycle lanes are available on both sides of Carlton Oaks Drive. No transit routes or services are currently available along Carlton Oaks Drive. The City of Santee's *General Plan – Mobility Element* (City of Santee 2017b) classifies Carlton Oaks Drive as a two-lane collector with two-way left-turn lane.

2.4.4.3 Internal Roadways and Bridges

The street types and access roads proposed for the project are depicted in Figure 2-13, Project Access. The resort and Residential North would be accessed from Carlton Oaks Drive at ~~the~~its intersection ~~of~~with Burning Tree Way, approximately 200 feet west of the existing hotel access road (Inwood Drive). Inwood Drive would be closed and replaced with a curb and sidewalk. Additionally, six existing driveway aprons along the project frontage would be closed and replaced with curbs and landscaping.

~~Access~~Primary access to Residential West would be provided via a private driveway from West Hills Parkway, a public road within the City of San Diego's jurisdiction. ~~An access easement would be required from the City of the San Diego across vacant, previously disturbed, City of San Diego Public Utilities Department–owned lands to gain access to the site. The proposed easements would allow private and emergency access and other improvements for the project.~~This private driveway would be 26 feet wide and would include one travel lane in each direction, where it would connect to 36-foot-wide internal roads. Travel to this entrance would be guided by the proposed off-site median on West Hills Parkway, which would allow for vehicular access to the project site from northbound and southbound traffic on West Hills Parkway. The proposed off-site median improvements would involve restriping of an existing striped median to connect to the proposed raised concrete median on West Hills Parkway. In addition, a striped median would be painted on West Hills Parkway, south of the primary residential access road serving Residential West. The medians are depicted in Figure 2-14.

Access to the golf course and resort would be via the same access as Residential North (i.e., at Burning Tree Way~~). and Carlton Oaks Drive).~~ After traveling south along the main entrance to the Residential North community, ~~the~~a private drive would ~~travel~~connect south across a new steel bridge (hereinafter referred to as "Proposed Resort Bridge") over the San Diego River (North Channel~~). The bridge~~), which would ~~connect~~ replace an existing golf cart bridge at the same location. The location of the ~~hotel and~~Proposed Resort Bridge is shown in Figure 2-13, Project Access. The Proposed Resort Bridge would connect the proposed resort hotel area to Residential North. ~~and Carlton Oaks Drive. It~~The Proposed Resort Bridge would be approximately 265 feet long and would accommodate two travel lanes (30 feet in width) and a multi-use ~~trail~~sidewalk (6 feet in width), for a total width of 36 feet. The Proposed Resort Bridge structure would be steel truss supported on concrete abutments at its northern and southern extents~~,~~ and would be able to withstand fires to support safe and efficient emergency evacuation from the project site. The area under the ~~bridge~~Proposed Resort Bridge would vary from 5 to 12 feet tall, which would be tall enough to

accommodate wildlife crossings within the riparian zone and would also accommodate 100-year flood flows. The slopes at the ends of the ~~bridge~~Proposed Resort Bridge would be protected by erosion-control measures, such as rock slope protection, to protect against scour during storm events, and would also have 50-foot-wide fuel modification zones. As part of maintenance of the golf course, the golf course operator would be responsible for brush management and defensible space under the ~~bridge~~ Proposed Resort Bridge and extending outward from the bridge to meet City of Santee defensible space requirements. Given the lack of proposed vegetation around the ~~bridge~~Proposed Resort Bridge and its construction with steel and fire-resistant materials, the ~~bridge~~Proposed Resort Bridge would not be threatened by radiant heat exposure or embers cast from a nearby wildfire event.

~~To provide vehicular access to the golf course while the new~~ Approximately 0.23 miles downstream and west of the Proposed Resort Bridge, a permanent golf cart bridge ~~is under construction~~would be constructed over the San Diego River (i.e., "Proposed Golf Cart Bridge") to allow for connectivity between the northern and southern sides of the San Diego River.

As detailed further in Section 2.5, Project Construction, a temporary ~~rail car~~railcar crossing would be placed at an existing golf cart ~~path crossing west of the new bridge location. The temporary rail car crossing would be replaced with a permanent golf cart path crossing once bridge construction is complete.~~bridge located approximately 0.14 miles west of the Proposed Resort Bridge, as depicted on Figures 2-3 and 2-13.

Easements

As shown on Figure 2-14, Access and Landscape Easements, easements will be required from the City of San Diego across lands owned by the City of San Diego to provide access and landscaping improvements to serve Residential West. The easement area is included in the CEQA Study Area. The access easement will allow primary and emergency vehicular access to the Residential West site from West Hills Parkway. The access easement(s) area includes an emergency access driveway (Parcel B) and a primary access road (Parcel D) along the western border of Residential West. In exchange for this easement from the City of San Diego, the applicant will provide an easement to the City of San Diego for the City's Public Utilities Department (P.U.D) that includes approximately 6,500 square-feet of land as shown in Figure 2-14 (labeled as "P.U.D"). The approximately 6,500 square-feet of P.U.D land is currently golf course and is included within the CEQA Study Area.

Additionally, the applicant would need approval of a landscape easement from the City of San Diego over approximately 0.40 acres (Parcels A, C and E on Figure 2-14) fronting West Hills Parkway to provide landscaping amenities along the Residential West border.

Road Standards

The proposed internal roadways would be built according to the currently adopted Public Works *Standards for Local Streets* (City of Santee 1982) as adopted by Santee City Council on October 25, 1982 by Resolution No. 113-82. The City's Public Works Standards allow for Alternative Standards subject to the discretion of the City engineer. The street design criteria set forth in the City of Santee Public Works *Standards for Local Streets* (City of Santee 1982) would apply to Drives A–F as shown on Figure 2-13 and 20-foot drives within the project site, except for the following Alternative Standards that apply to Drives A–F (see also Appendix S, Revised Planned Development District Standards):

- **Design Speed:** 10 mph
- **Curb-to-Curb Distance:** 20- to 36-foot locations, as shown on the project Tentative Map

- **Minimum Horizontal Radius:** 41 feet
- **Horizontal Alignment:** As shown on the project Tentative Map
- **Minimum Tangent Between Reversing Curves:** As shown on the project Tentative Map
- **Minimum Curb Line Radius:** 28 feet
- **Curbs:** 6-inch curb, 4-inch curb, and rolled curb, as shown on the project Tentative Map
- **Cross Gutters:** 6-foot minimum width
- **Sidewalks:** One side of the street; no sidewalks for 20-foot drives

Fire Code Standards

The project's internal drives (including the ~~bridge~~Proposed Resort Bridge) would also comply with applicable portions of the City of Santee–adopted version of the ~~2022~~2025 California Building Code, Chapter 7A; ~~2022~~2025 California Fire Code, Chapter 49; ~~2019~~2025 California Referenced Standards Code, Chapter 1-7A; and ~~2022~~2025 California Residential Code, Section R327, as adopted by the City of Santee. The proposed internal roadways would be unobstructed and include adequate parking, turning radius, grade maximums, and roadside fuel-modification zones (FMZs). All interior residential streets would be designed to accommodate a minimum 77,000-pound fire truck. Vehicular gates for the project would be equipped with vehicle access devices and key switches so that emergency vehicles can override private access gates. All gates would also have a manual-release device or other means to open the gate in the event of power failure. All project roads (including the ~~bridge~~Proposed Resort Bridge) would also include at minimum a 50-foot FMZ, which would have specific plant restrictions and maintenance requirements, as detailed in the FPP (Appendix R1).

All internal roadways would be a minimum of 26 feet wide, with the exception of the private streets that provide direct vehicular access to each of the cluster units of four units or fewer. These private cul-de-sac roads would be 20 feet wide, as allowed by the exceptions to CFC Section 503.2.1, which states the following:

> Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6,096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4,115 mm).

The City of Santee Fire Chief has determined that the 20-foot standards, as set forth in the Development Standards for access to the cluster of four units or fewer, would not impair or impede adequate emergency fire department access to the project site. The proposed project would also provide emergency access that meets current City requirements for the proposed development.

Through project design, internal streets would be accessible for emergency response vehicles. On-street parking on both sides of the street would only be allowed when there is at least 36 feet of paved-road width. On-street parking on one side of the street would be allowed when there is at least 30 feet of paved-road width. No building elements, balconies, drains, projections, or any other object would encroach into this clear space. Fire lanes would be identified with red-painted curbs with white-stenciled letters stating "NO PARKING – FIRE LANE" every 30 feet along all portions of the fire lane. In addition, signs would provide language identifying the contracted towing company and its phone number, enabling enforcement of the no-parking areas. Parking would meet City of Santee standard parking requirements.

Emergency Access

Two points of primary access for emergency response and evacuation would be provided: Carlton Oaks Drive to the north and West Hills Parkway to the west. These emergency access roadways would be in addition to the primary residential access roads, which could also be used for emergency vehicle access. Emergency access would comply with California Fire Code and City of Santee requirements.

Emergency access would be provided for Residential North and the golf course/resort via a 26-foot-wide private roadway through the existing Vista del Verde condominiums, located in the northeastern corner of the project site. This emergency access road would comply with the City of Santee Fire Department (SFD) requirements, would be for the proposed project only, and would not be open to the public. A new fence with an emergency access gate that complies with the California Fire Code would be erected between the existing adjacent condominium complex and the project site. Vehicular gates would be equipped with vehicle access devices and key switches so that emergency vehicles can override private access gates. All gates would also have a manual release device or other means to open the gate in the event of a power failure.

Emergency access to Residential West would be provided via an extension of Private Drive "C" westerly to West Hills Parkway. West Hills Parkway would be widened within the existing right-of-way (ROW) from Carlton Oaks Drive~~,~~ to approximately 700 feet south of ~~the existing bridge~~Carlton Oaks Drive, to provide a dedicated left-turn lane into Residential West. Emergency access would ~~also~~ be provided to Residential West via an extension of a private drive to West Hills Parkway, which would be 26 feet wide with curb and gutter and asphalt concrete pavement and base, with grades, horizontal alignment, and turnarounds that meet the City of Santee's Fire requirements. This emergency access ~~point~~road would be gated and would not be open to the public except during times of emergency.

The project would also provide a private utility/maintenance road between Residential West and Residential North that would also serve as a pedestrian/golf cart passageway connecting Residential West to the resort. This roadway would not be considered a fire apparatus access road, but would be built to California Fire Code requirements and could be used as an emergency evacuation route, if needed.

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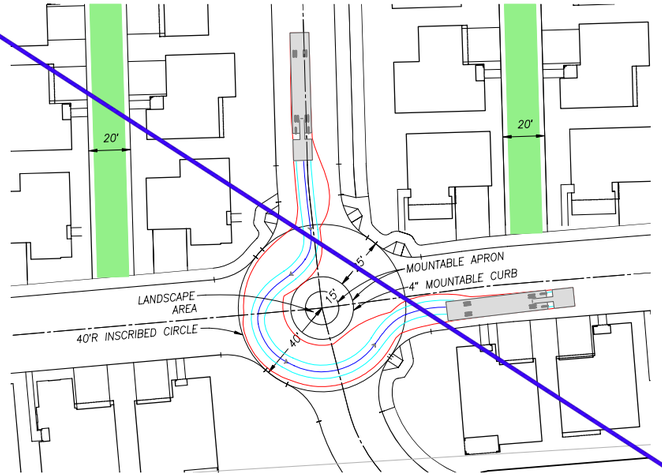


AUTOTURN DETAILS
100' TRACTOR DRAWN AERIAL

TRACTOR:

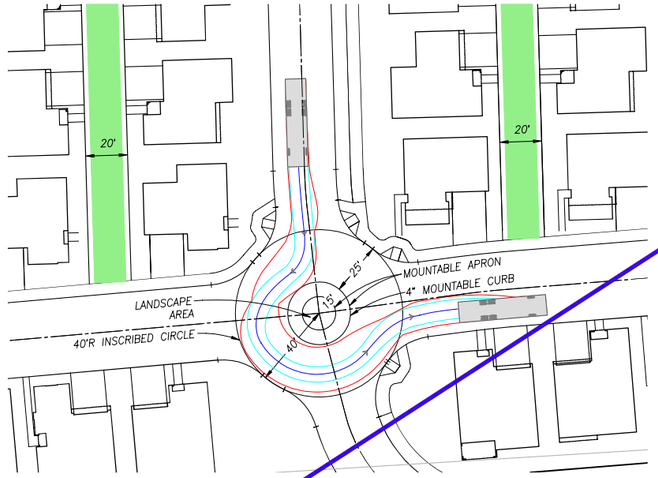
STEERING LOCK ANGLE:	45.0°
LOCK TO LOCK TIME:	6 SEC.
WIDTH:	108 IN.
AXLE TRACK:	82.92 IN.
WHEELBASE:	164 IN.
FRONT OVERHANG:	76.0 IN.
PIN LOCATION:	REAR AXLE

TILLER (REAR STEERABLE):

STEERING LOCK ANGLE:	45.0°
LOCK TO LOCK TIME:	6 SEC.
WIDTH:	108 IN.
AXLE TRACK:	82.92 IN.
WHEELBASE (FROM PIN):	372.0 IN.
REAR OVERHANG:	120.0 IN.
PIN OVERHANG:	60.0 IN.

100' TRACTOR DRAWN AERIAL
ROUNDABOUT TURN MOVEMENT
SCALE: 1"=30'

LEGEND
- PATH
- FRONT TIRES
- VEHICLE BODY



AUTOTURN DETAILS
42' FIRE TRUCK

STEERING LOCK ANGLE:	45.0°
LOCK TO LOCK TIME:	6 SEC.
WIDTH:	118.0 IN.
AXLE TRACK:	111.0 IN.
WHEELBASE:	252.0 IN.
FRONT OVERHANG:	85.0 IN.

42' FIRE TRUCK
ROUNDABOUT TURN MOVEMENT
SCALE: 1"=30'

FIRE ACCESS PLAN
NOT TO SCALE

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Source: Hunsaker & Associates, 2/12/2024.

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Figure 2-13
Project Access

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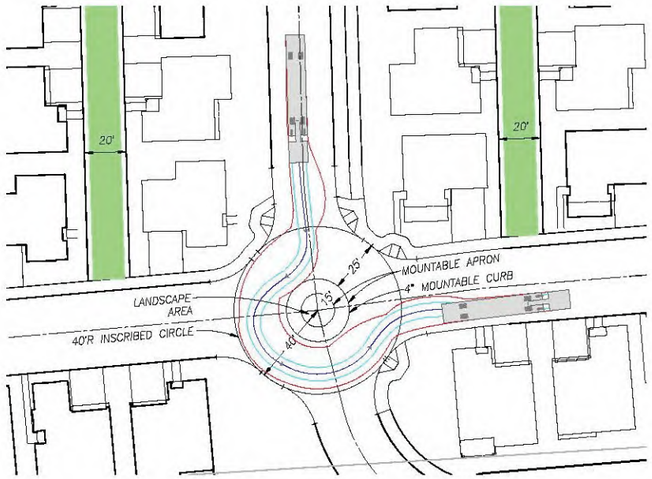


AUTOTURN DETAILS
100' TRACTOR DRAWN AERIAL

TRACTOR:

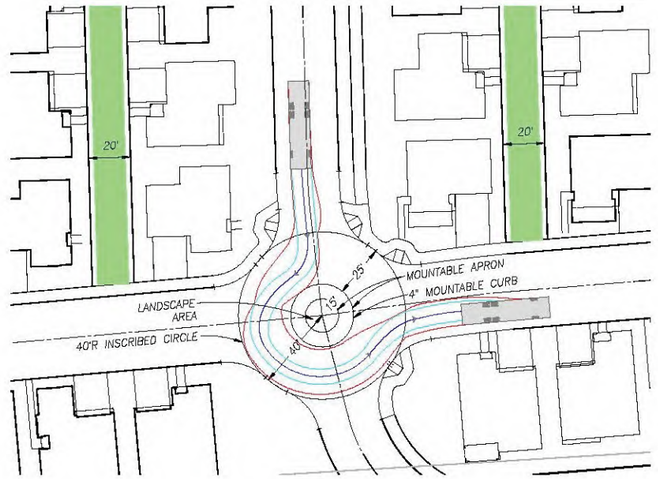
STEERING LOCK ANGLE:	45.0°
LOCK TO LOCK TIME:	6 SEC.
WIDTH:	108 IN.
AXLE TRACK:	82.92 IN.
WHEELBASE:	164 IN.
FRONT OVERHANG:	76.0 IN.
PIN LOCATION:	REAR AXLE

TILLER (REAR STEERABLE):

STEERING LOCK ANGLE:	45.0°
LOCK TO LOCK TIME:	6 SEC.
WIDTH:	108 IN.
AXLE TRACK:	82.92 IN.
WHEELBASE (FROM PIN):	372.0 IN.
REAR OVERHANG:	120.0 IN.
PIN OVERHANG:	60.0 IN.

100' TRACTOR DRAWN AERIAL ROUNDABOUT TURN MOVEMENT
SCALE: 1"=30'

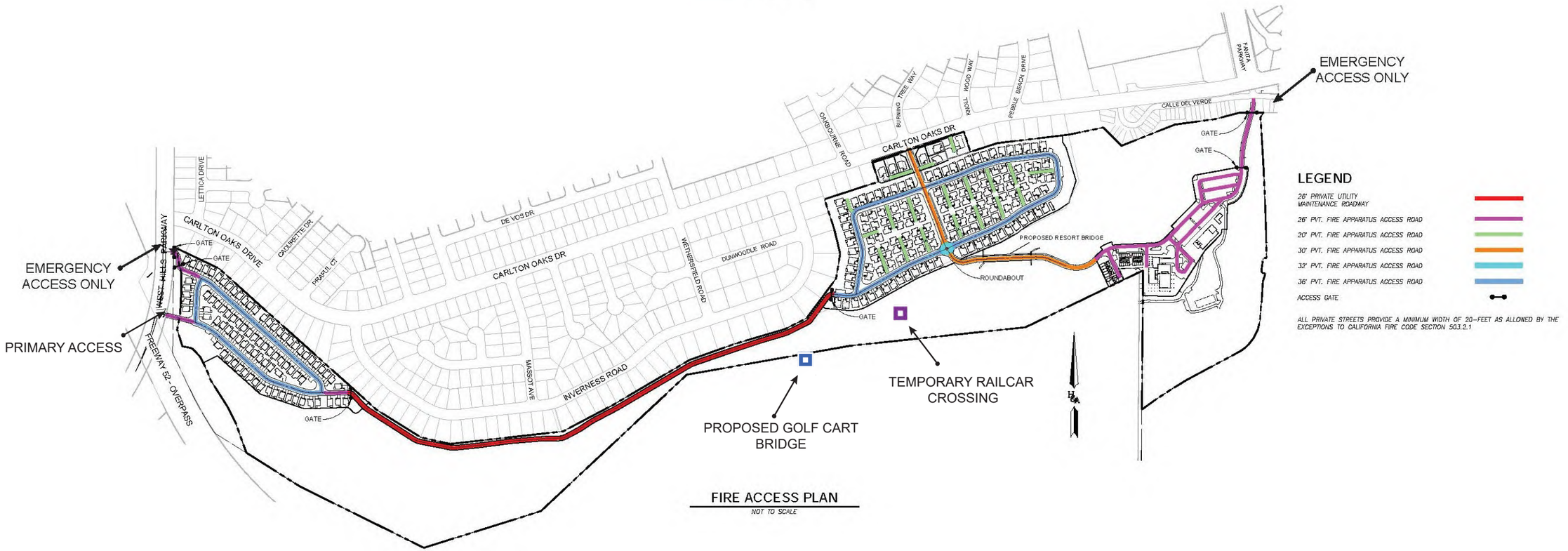
LEGEND
- PATH
- FRONT TIRES
- VEHICLE BODY



AUTOTURN DETAILS
42' FIRE TRUCK

STEERING LOCK ANGLE:	45.0°
LOCK TO LOCK TIME:	6 SEC.
WIDTH:	118.0 IN.
AXLE TRACK:	111.0 IN.
WHEELBASE:	250.0 IN.
FRONT OVERHANG:	85.0 IN.

42' FIRE TRUCK ROUNDABOUT TURN MOVEMENT
SCALE: 1"=30'



FIRE ACCESS PLAN
NOT TO SCALE

Source: Hunsaker & Associates San Diego, Inc.2026

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Figure 2-13
Project Access

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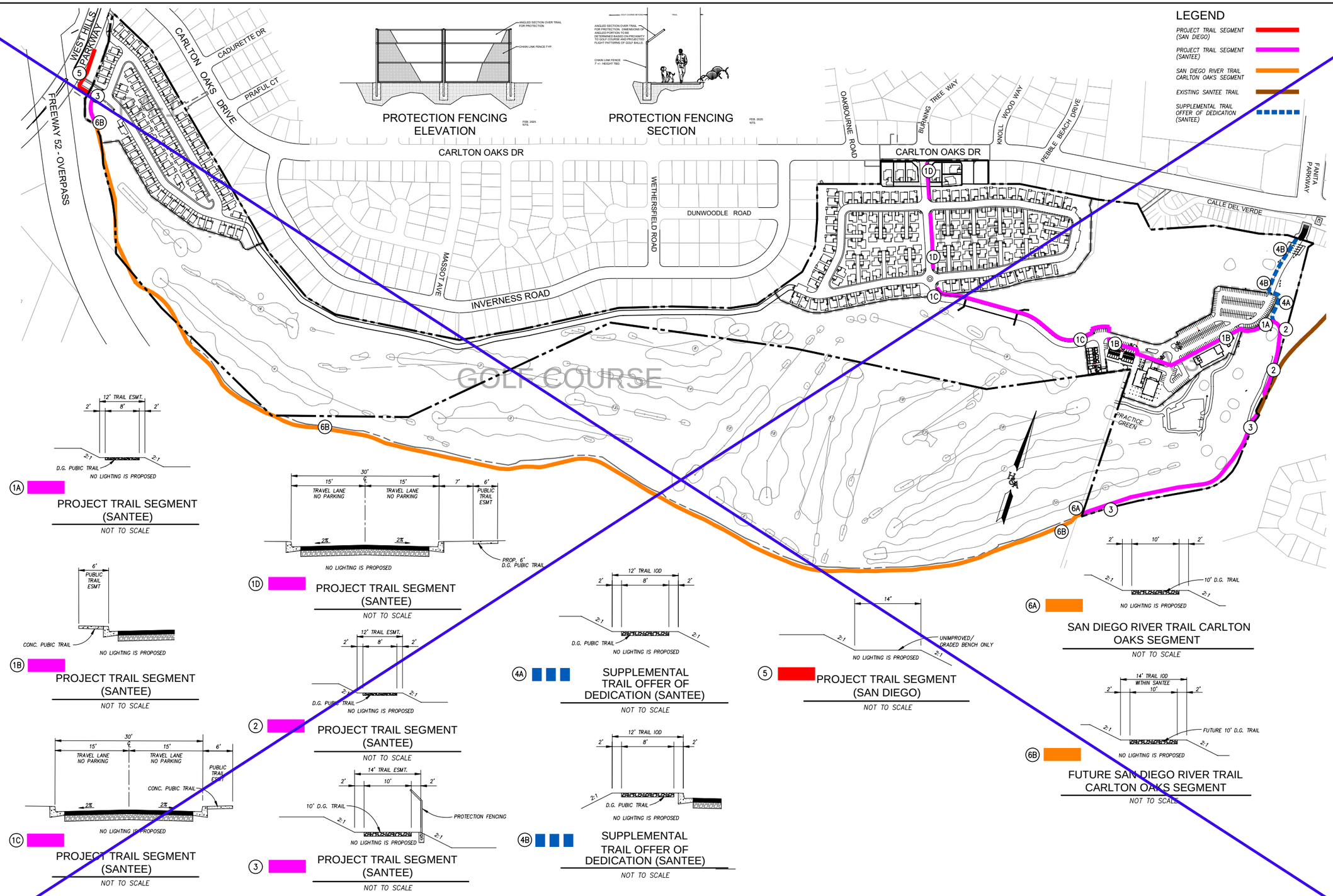

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Source: Hunsaker & Associates San Diego, Inc.,1/30/2025.

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Figure 2-14
Proposed Trail Segment Widths

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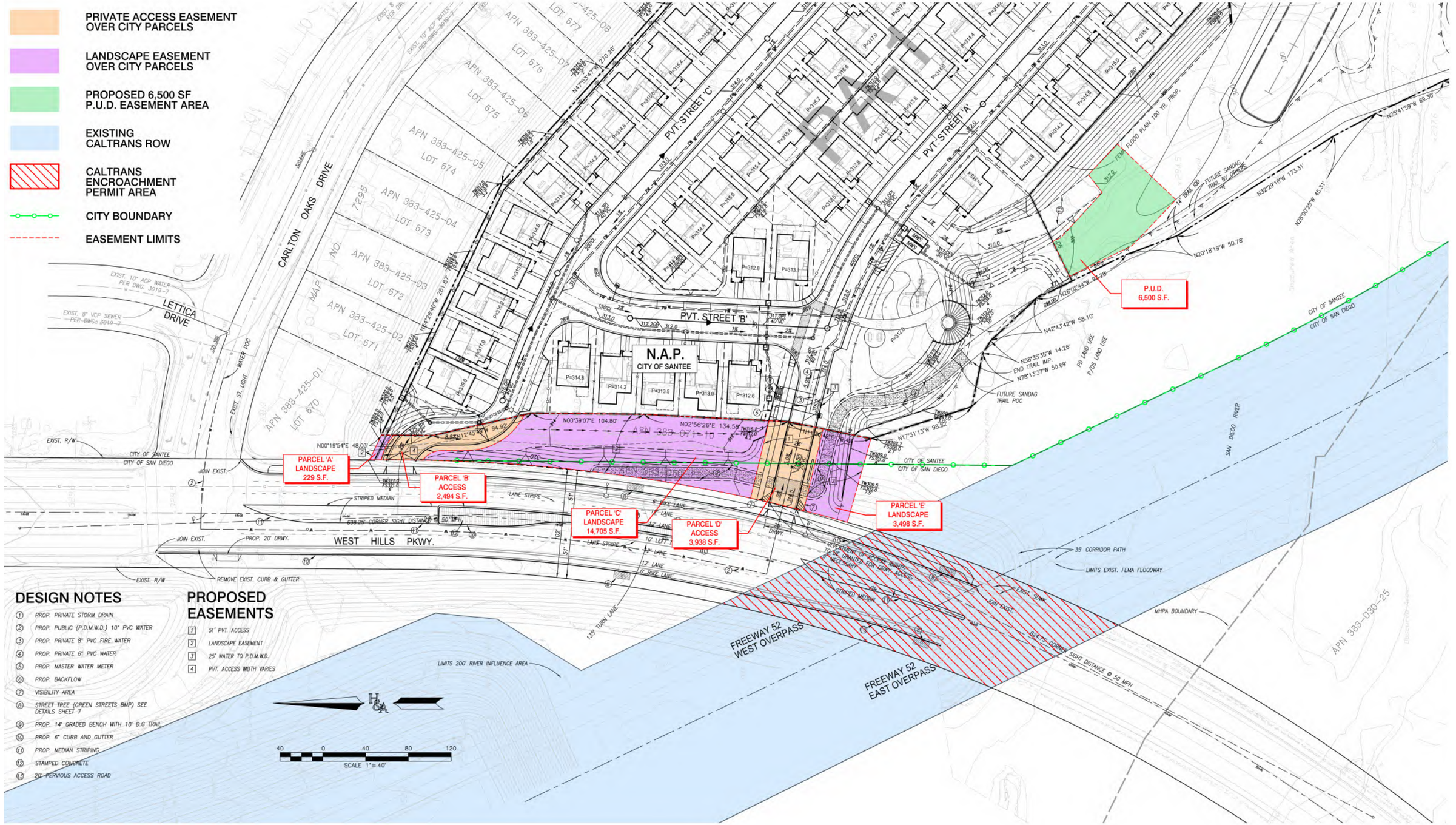

SOURCE: Hunsaker 2026

FIGURE 2-14

Access and Landscape Easements

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2.4.5 Utilities

Electricity and Natural Gas

San Diego Gas and Electric (SDG&E) would provide electricity and natural gas service to the proposed project. These utilities would be extended to the project site from existing local distribution systems in the region. The existing east–west SDG&E electrical transmission easement on the project site would not be altered as part of the proposed project. New electricity and natural gas facilities would be installed on and off the project site in ~~joint~~ utility trenches that would be located in public and private ROWs, respectively, as required by the City of Santee. In conjunction with electricity and natural gas facilities, telephone, cable television, and internet facilities would be installed in the joint utility trenches.

The project would require installation of four new utility poles, which would be up to approximately 45 to 55 feet in height. The poles would be placed in the off-site improvement area north of the project site. Two utility poles would be placed within the public ROW on Carlton Oaks Drive, and one utility pole would be placed in the public ROW on Burning Tree Way. For the fourth pole, an existing stub pole and anchor would be removed from the ROW in front of 8726 Carlton Oaks Drive and a new utility pole would be placed on the southeastern portion of the driveway. Another option may be considered for the fourth pole to re-feed the home at 8726 Carlton Oaks Drive via a trench from the converted underground system on the south side of Carlton Oaks Drive to the southeast corner of the home; a trench and conduit would then be placed up the driveway to the easterly side of the house to tie into the existing weather head on the roof of the home. Telecommunication and cable services would require conduit/cable running upward on the outside of the exterior wall to maintain the overheard points of connection to the home. In the off-site improvement area, the existing SDG&E cable serving 8713 Carlton Oaks Drive would be removed and refed from a transformer on Oakbourne Road to the same location at the residence.

Water

The proposed project would receive water from the Padre Dam Municipal Water District (PDMWD) and would provide water service via two private water systems. One private system would deliver domestic water, and the second private water system would provide water for fire protection. One looped private fire protection system would serve the country club and resort, as well as the two residential areas. A public water line would be extended from an existing water main in Carlton Oaks Drive, down to West Hills Parkway, and would be continued as a private main within the project site.

Sewer

The proposed project would receive sewer service from the PDMWD. A private pump station and sewer system would be installed to pump sewage along the northern boundary of the proposed golf course to an existing sewer line, which is north of the existing golf course, south of the existing residential development, and in between the proposed Residential West and Residential North sites.

Residential West would be served by a private 8-inch-diameter sewer main connected to a private pump station. The pump station would pump sewage along the northern boundary of the proposed golf course to the east, and connect to the existing 15-inch trunk main, located north of the existing golf course, south of the existing residential development, and in–between the proposed sites for Residential West and Residential North. The lift station would have emergency power generation, emergency sewer storage, emergency force-main connections, and odor-control

equipment, including a chemical scrubber at the wet well (with provisions for adding a more aggressive odor-control system, if necessary). The emergency power generator would be mounted on an exterior concrete pad to provide backup power if commercial power were to go out. The emergency power generator would have a sound-attenuated, weatherproof enclosure.

Construction of the Residential North property would also involve relocation of the existing 15-inch-diameter gravity sewer into the southern private drive.

The sewer collection system for Residential North would be a private sewer system consisting of 4- and 8-inch-diameter collection lines flowing to an existing, public 15-inch-diameter gravity sewer line. The clubhouse and resort would be served by a private, 8-inch-diameter gravity sewer main, which would connect to an existing 24-inch-diameter public main that bisects the resort area.

No off-site sewer system improvements would be needed for the proposed project.

Storm Drainage

The proposed project would generally maintain existing drainage patterns. Site drainage would be directed on site via overland flow, surface swales, curbs and gutters, and the private storm drain system. The private storm drains would collect runoff and convey it to proposed proprietary biofiltration units for treatment prior to discharging into the golf course and the Sycamore Canyon Creek, which connects to the San Diego River.

The project would ensure that post-project peak flow rates do not exceed pre-project peak flow rates to the San Diego River.

An existing 72-inch storm drain that discharges into an existing artificial pond would be rerouted to a bypass storm drain pipe that runs parallel to an on-site storm drain (i.e., north to south) through the residential developments. This would then directly discharge into the on-site San Diego River.

The project will not substantially increase the rate or amount of surface runoff, and the runoff generated will not exceed the capacity of the existing storm drain system.

2.4.6 Project Trail Segments

The San Diego River Trail is a regional Class I multi-use path that runs along the San Diego River and connects the Lakeside Baseball Fields to the western terminus of the City of Santee. Currently, there is a gap in the ~~trail~~San Diego River Trail between the intersection of Mast Boulevard/SR-52 eastbound ramps and the eastern proposed project boundary. The San Diego Association of Governments (SANDAG) has developed a plan to complete this portion of the San Diego River Trail by constructing it along the southern edge of the project site. A Mitigated Negative Declaration was adopted on June 16, 2017 (SANDAG ~~2017and~~2017) and the bicycle way is currently in the engineering design phase; a construction schedule has yet to be set. The SANDAG segment would be funded through Transnet, the regional half-cent sales tax for transportation administered by SANDAG, although construction funds have not yet been identified. The segment of the San Diego River Trail that runs along the ~~project boundary~~southern project boundary (hereinafter referred to as the Future San Diego River Trail Carlton Oaks Segment), as depicted on Figure 2-15, Proposed Trail Segment Widths, is not part of the proposed project, but the

project applicant would continue to work with the City of Santee, City of San Diego, and SANDAG to ensure that the proposed project's design would not impede implementation of the ~~trail~~San Diego River Trail.

As part of the proposed project, ~~a~~ multipurpose decomposed granite public ~~trail~~trails would be provided on the northern side of the San Diego River, near the eastern and western boundaries of the project site, linking with existing and planned trails east and west of the site (termed ~~the~~ Project Trail ~~Segment~~Segments herein) (Figure 2-~~3). A portion of the~~15). Table 2-1, Project Trail ~~Segment on the eastern side of the project site would begin at the entrance~~Segments, illustrates the locations, and dimensions of Project Trail Segments that would be implemented under the project. The specific locations of ~~Residential North at~~the Project Trail Segments, including their dimensions, and their connections to the Future San Diego River Trail Carlton Oaks ~~Drive, traverse through the resort and along~~Segment and existing Mast Park West Trail, are depicted on Figure 2-15. All Project Trail Segments have been designed to meet the ~~southeastern border of the project site, and end slightly west of the jurisdictional line between~~minimum Class I bicycle path requirements for the City of Santee ~~and the City of San Diego (Figure 2-3). This portion of the trail would vary in width from 6 to 10 feet and would be a decomposed granite path (Figure 2-14~~.

Table 2-1. Project Trail Segments

Project Trail Segments # in Figure 2-15	Jurisdiction	Location	Dimensions
Project Trail Segment 1	City of San Diego	Project Trail Segment 1 would be located along the project western boundary within the city of San Diego paralleling West Hills Parkway. This trail segment would connect to Project Trail Segment 2 within the city of Santee.	14 feet wide (10-foot-wide decomposed granite public trail with 2-foot shoulders on each side)
Project Trail Segment 2	City of Santee	One portion of Project Trail Segment 2 (located adjacent to Residential West) would connect Segment 1 to the Future San Diego River Trail Carlton Oaks Segment. Another portion of Project Trail Segment 2 is located along the southeastern project boundary starting at the jurisdictional line between the cities of San Diego and Santee. This trail segment will connect the Future San Diego River Trail Carlton Oaks Segment to an existing City of Santee trail (Mast Park West Trail).	14 feet wide (10-foot-wide decomposed granite public trail with 2-foot shoulders on each side)
Project Trail Segment 3	City of Santee	Project Trail Segment 3 connects an existing Santee trail (Mast Park West Trail) to Project Trail Segment 4 and is located on northeastern portion of project site.	12 feet wide (8-foot-wide decomposed granite public trail with 2-foot shoulders on each side)
Project Trail Segment 4	City of Santee	Project Trail Segment 4 connects Project Trail Segment 3 to the northeastern project site boundary/the property line of the Vista del Verde community.	12 feet wide (8-foot-wide decomposed granite public trail with 2-foot shoulders on each side)

Source: Figure 2-15, Proposed Trail Segment Widths~~).~~

Safety fencing, approximately 10 feet tall, would be constructed along ~~the~~ Project Trail Segment 2, which is adjacent to the golf course. Additionally, this portion of the trail would link to the existing Mast Park West Trail and to the future planned trail known as the Carlton Oaks Golf Course Segment (SANDAG 2017). ~~Figure 2-15 shows a portion of the Project Trail Segment on the northern side of the bridge looking east at the resort~~As detailed in Table 2-1, Project Trail Segments 1 through 4 would provide trail connections on the project site, along West Hills Parkway and along the eastern and southeastern project boundary. The project would also facilitate public trail connectivity by connecting proposed trails to an existing off-site Santee trail (Mast Park West Trail) and the Future San Diego River Trail Carlton Oaks Segment.

~~A portion of the Project Trail Segment on the western side of the project site would be constructed beginning at the City of Santee's jurisdictional line and ending at the property line (Station 38+60, shown in Figure 2-3). This portion of the trail would be 10 feet wide and consist of decomposed granite. Safety fencing would be constructed along the Project Trail Segment adjacent to the golf course. This portion of the trail would link to the future planned trail known as the Carlton Oaks Golf Course Segment.~~ As depicted on Figure 2-9, the project would also include a 6-foot-wide enhanced decomposed granite sidewalk alongside the east side of the proposed road from Carlton Oaks and through the resort, ultimately connecting to Project Trail Segment 4 on the east side of the project site, within the City of Santee. The Proposed Resort Bridge would include a 6-foot-wide concrete sidewalk, which would connect to the 6-foot-wide enhanced decomposed granite sidewalk on both sides. Figure 2-16, Photo Simulation of the Proposed Resort Bridge located over the San Diego River, provided for illustrative purposes, shows a portion of the 6-foot-wide concrete sidewalk on the northern side of the Proposed Resort Bridge looking east at the resort.

In addition, the project applicant will also provide an Irrevocable Offer of Dedication for portions of the Carlton Oaks Golf Course Segment that are located within the project site but that are not being constructed by the project applicant because these segments would not be connected to any trail and would therefore not be accessible. These will be provided to the City on the project's subdivision map.

~~Along the Residential West boundary, a 14-foot-long graded bench (located within the Carlton Oaks Golf Course Segment) would be provided within the easement areas that the City of San Diego would grant to the applicant as part of this project.~~

~~As an alternative to the trail alignment currently proposed through Residential North and the resort area, a supplemental trail Offer of Dedication is shown on the project site plan, should the City of Santee request this supplemental trail alignment instead. The supplemental trail Offer of Dedication is for a trail that would be 12 feet wide and start from an area east of the resort parking lot to the property line of the Vista del Verde community (Figure 2-3). The supplemental trail would be within the project development footprint analyzed in this EIR. The applicant is not proposing to construct this trail segment as part of the project, and this segment is only an alternative to the proposed Project Trail Segment located through the resort.~~

Source: Cary Bickler, INC 10/2024

DUDEK

Figure 2-15

Photo Simulation of the Proposed Steel Bridge Located Over the San Diego River including a Segment of the Proposed Trail System

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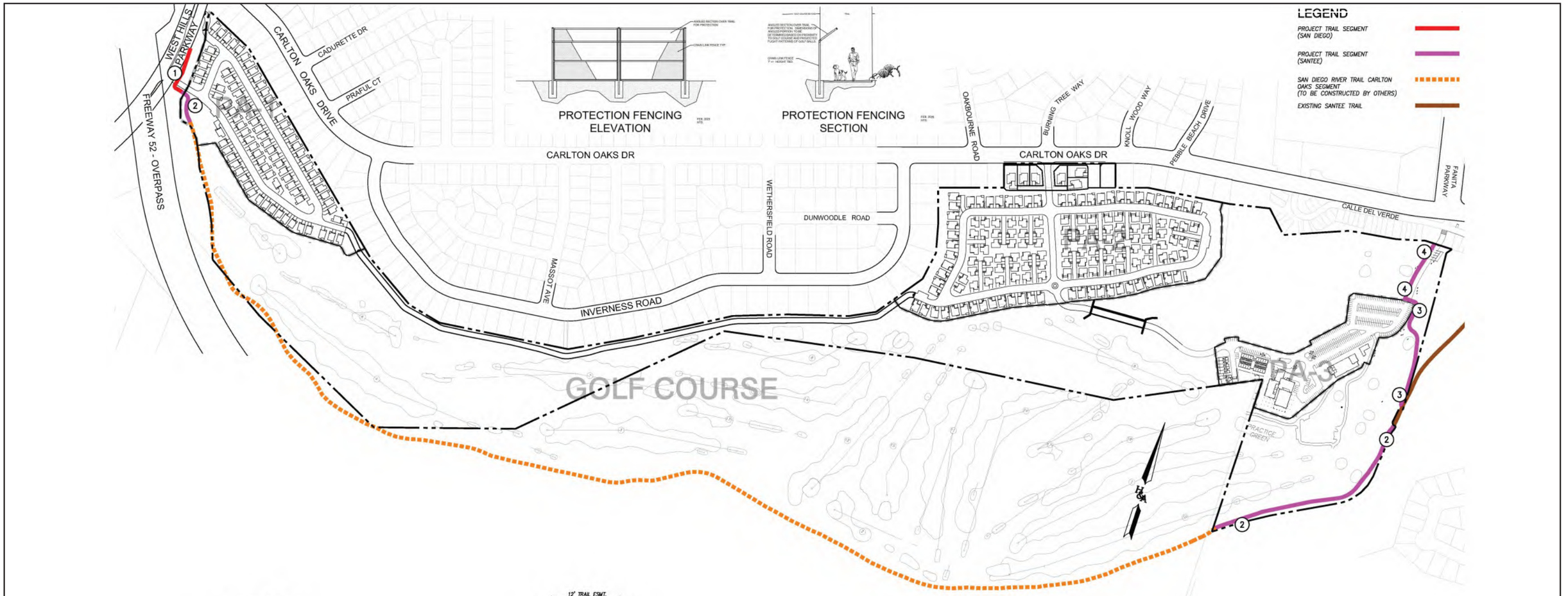
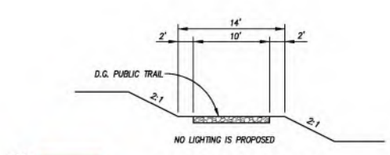
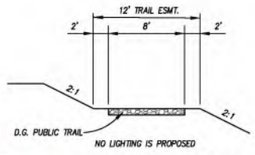




1 PROJECT TRAIL SEGMENT (SAN DIEGO)

NOT TO SCALE



3 PROJECT TRAIL SEGMENT (SANTEE)

NOT TO SCALE

2 PROJECT TRAIL SEGMENT (SANTEE)

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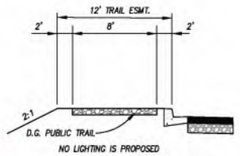

4 PROJECT TRAIL SEGMENT (SANTEE)

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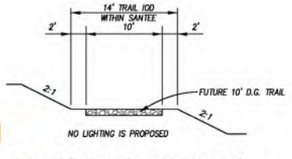

TO BE CONSTRUCTED BY OTHERS

FUTURE SAN DIEGO RIVER TRAIL CARLTON OAKS SEGMENT

NOT TO SCALE

Source: Hunsaker & Associates San Diego, Inc.2026

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Figure 2-15
Proposed Trail Segment Widths

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GOLF COURSE
CLUB HOUSE
HOTEL
RESIDENTIAL
INTERIM GOLF COURSE OPERATIONS
SOIL STOCKPILE

PHASE	DESCRIPTION
PHASE 1	STOCKPILING SOIL - 6 MONTHS
PHASE 2	DEMO - 2.5 MONTHS
PHASE 3	ROUGH GRADE ENTIRE SITE - PA1, PA2, PA3 AND GOLF COURSE, INSTALL BACKBONE IMPROVEMENTS AND BRIDGE FROM PA2 to PA3 - 8 MONTHS
PHASE 4	PA1 AND PA2 STREETS AND IMPROVEMENTS - 6 MONTHS
PHASE 5	FINAL GOLF COURSE PREPARATION AND COMPLETION- 2 MONTHS - BEGINS 4 MONTHS AFTER START OF PHASE 3
PHASE 6	PA3 STREETS, IMPROVEMENTS, AND INTERIM CLUBHOUSE - 6 MONTHS
PHASE 7	PA1 AND PA2 VERTICAL/HOUSE CONSTRUCTION - 2 YEARS
PHASE 8	RESORT/HOTEL/CLUBHOUSE VERTICLE CONSTRUCTION - 2.5 YEARS

*NOTE: BACKBONE = MAIN LINES WET/DRY UTILITIES; IMPROVEMENTS = INTERNAL WET/DRY LATERALS TO THE FACILITIES BEING SERVED.

CITY SANTEE OFFSITE RESIDENTIAL
CITY SAN DIEGO OFFSITE RESIDENTIAL
WEST HILLS PARKWAY
CARLTON OAKS DRIVE
CADURETTE DR
PRAFUL CT
FREEWAY 52 - OVERPASS
PA-1
RESIDENTIAL
DE VOS DR
CARLTON OAKS DR
MASSOT AVE
INVERNESS ROAD
WETHERSFIELD ROAD
DUNWOODLE ROAD
OAKBOURNE ROAD
BURNING TREE WAY
KNOLL WOOD WAY
PEBBLE BEACH DRIVE
CARLTON OAKS DR
FANITA PARKWAY
CALLE DEL VERDE
PA-2
RESIDENTIAL
BRIDGE
PA-3
HOTEL
CLUBHOUSE
GOLF COURSE

PROJECT PHASING
SCALE: 1"=200'

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Source: Hunsaker & Associates San Diego, Inc.,1/31/2025.

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Figure 2-16
Conceptual Phasing Plan

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Source: Cary Bickler, INC 10/2024

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Figure 2-16
Photo Simulation of the Proposed Resort Bridge over the San Diego River

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2.4.7 100-Year Floodway Improvements

The project site is within the regulatory limits of the San Diego River (floodplain and floodway) and receives runoff from the Sycamore Canyon Creek (Santee Lakes) channel, the San Diego River (North Channel), and several storm drain outfalls from existing developments along the Carlton Oaks and Mast Boulevard roadway corridors. In addition, runoff from Forester Creek joins the San Diego River (South Channel) along the southeasterly limits of the property. Under existing conditions, the project site includes a vegetated earth berm along the southern and eastern boundaries, which directs low flows from the San Diego River and Forester Creek along the southern limits of the golf course (Appendix L, Flood Study). This berm will remain in place and unaltered under the proposed conditions, effectively isolating the project site from the upstream offsite areas during small storm events and ensuring that existing low-flow conditions remain unaffected by the proposed project.

As detailed in Appendix L, Flood Study, of the Draft EIR, the project incorporates several design features and constructs a number of off-site improvements that are intended to protect the proposed structures and preserve the integrity of the overall river corridor and ensure that stream functions, flood risk, erosion potential, flow velocity, and sediment transport are not adversely impacted or altered by the proposed improvements. These design features include the following: slope surface stabilization and reinforcement to prevent erosion and scour; storm drain facilities improvements within the golf course to improve drainage flow; an extension of the existing 27-inch-diamater storm drain under the proposed vehicle access road located in the northeastern corner of the site to a new headwall and discharge onto the golf course; overflow structures for the biofiltration basins to connect to storm drain pipes and also discharge to the San Diego River; energy dissipation devices provided at all discharge locations to reduce flow velocity; and post-development site drainage directed on-site via overland flow, surface swales, curbs, gutters, and/or the private storm drain systems to modular wetland proprietary biofiltration units to address water quality requirements. All improvements would be constructed to maintain the existing flow capacity, drainage patterns, and retain the integrity of associated natural resources. The proposed grading for the clubhouse, hotel, and golf course would occur within the regulatory floodway. Development associated with the proposed project would include elevating the grade of the clubhouse and hotel area above the floodplain~~. The grading for portions of the residential development areas would be within the existing floodplain limits. A small portion of the Residential North development encroaches into the existing floodplain.~~ (Appendix L, Flood Study).

A Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) would be processed through the Federal Emergency Management Agency to revise the flood mapping at the project site due to the proposed alteration of the floodway. A CLOMR would be required to be approved by the Federal Emergency Management Agency, the City of Santee, and the City of San Diego prior to the issuance of a grading permit for the project. The CLOMR would demonstrate that, built as proposed, the project would meet or exceed minimum local and federal regulations regarding structures within a floodplain and floodway.

2.4.8 Lighting and Signage

New non-residential lighting would be installed for signage, commercial accents, wayfinding, and security. Pedestrian areas such as pathways and entryways into the project site would be well-lit for safety and security. The lighting for Residential West and Residential North would be decorative and employ light-emitting diode (LED) technology. The Correlated Color Temperature would be a warm light at 3000 Kelvin color temperature. The lights would have an up-light rating of zero; thus, no light would extend above the light fixture housing. The definition for

this type of lighting per the Illuminating Engineering Society of North America is described as "full cutoff" (Hilton 2024).

The mounting height of the light poles along the roadways within Residential West and Residential North would not exceed 18 feet, or exceed 12 feet along the access road between Residential West and Residential North. In addition, these light poles would be placed on the property side of the drive aisle, with the light source facing away from the residential property line and toward the street. Back-side shields also would be installed to ensure that 0.0 foot-candles of light would spill onto existing, adjacent properties.

Proposed signage would include on-site and off-site signage in various forms, including wall signs, digital displays, hotel building identification, residential building identification, retail and restaurant building identification, parking entry identification, loading dock entry identification, and wayfinding signage. No billboard signage is proposed. No lighting is proposed within the golf course. All lighting installed at the project site would be downward facing and shielded.

2.4.9 Project Design Features

Sustainability Features

The proposed project would include green building features to conserve energy, reduce water use, and reduce greenhouse gas emissions. All construction would meet or exceed California Green Building Standards Code (CALGreen) Part 11, Title 24 building code regulations. The following project design features (PDFs) would be incorporated into project design:

PDF-1: California Energy Code. The project will comply with California Title 24, Part 6 Energy Code (~~2022~~2025, or most recent in effect at the time of building permit application). The following energy-efficient items will be required in all residential units: ~~improved~~ heating, ventilation, and air-conditioning systems with sealed (tight) air ducts; ~~enhanced~~ ceiling, attic, and wall insulation; installed energy-conserving appliances, such as whole-house fans; high-efficiency water heaters (i.e., tankless water heaters); energy efficient three-coat stucco exteriors; energy efficient appliances; programmable thermostat timers; and high-efficiency window glazing.

PDF-2: CALGreen Code. As a matter of regulatory compliance, the project will comply with Section 5.106.5.2 of the California Green Building Standards Code (i.e., CALGreen Code) (~~2022~~2025, or most recent in effect at the time of building permit application). The project will provide designated parking for shared vehicles and clean air vehicles at the resort facility and at the project's parks. The project will also implement the latest CALGreen Code standards when building permits are requested.

PDF-3: Electric-Only Uses. All uses on site, with the exception of the restaurant, will be "all electric." Natural gas will only be installed for the restaurant's use.

PDF-4: Energy Star Appliances. Energy Star-rated appliances will be installed in all residences, and Energy Star-rated appliances, such as refrigerators, will be installed at the hotel and restaurant.

PDF-5: Low-Flow Water Appliances. Low-flow toilets, faucets, and shower heads will be installed throughout the entire project.

PDF-6: Recyclables and Yard Waste. Areas for storage and collection of recyclables and yard waste will be provided.

PDF-7: Residential Electric Vehicle Charging. Every residential dwelling unit garage (242 units) will have Level 2 electric vehicle equipment installed.

PDF-8: Non-Residential Electric Vehicle Charging. Forty-five percent of all non-residential parking spaces will be electric vehicle capable (132 spaces), and 33% of these electric-vehicle-capable parking spaces will have electric vehicle charging stations installed (44 units). [*EV capable* means that dedicated electrical-panel capacity and raceway infrastructure will be provided to support a future 40-ampere, 208/240-volt branch circuit for future, dedicated Level 2 electric vehicle equipment.]

PDF-9: Tree Planting. Approximately 645 new trees will be planted within the development: 414 new trees in the residential development, 60 new trees on the golf course, and 171 new trees at the hotel site and access road.

PDF-10: On-Site Solar Energy Generation. At least 1,168 kilowatts (kW) of solar energy generation will be installed on site (i.e., 1,089 kW on the residential units and 79 kW on the new resort). This exceeds the Sustainable Santee Plan (SSP) requirements. Under the SSP the project will be required to install 1 kW per unit for each multifamily unit, 2 kW per unit for each single-family unit, and 1.5 kW per square foot for commercial buildings. Under the SSP, 236 kW will be required for the multifamily development, 12 kW will be required for the single-family housing units, and roughly 78 kW will be required for the 51,926 square feet of commercial facilities. Given this, the SSP calls for at least 326 kW in total.

Fire Protection Features

A portion of the project site is within a Very High Fire Hazard Severity Zone that predominately encompasses the far western portion of the project site primarily under the jurisdiction of the City of Santee, and a small area under the jurisdiction of the City of San Diego. The project site is within the SFD jurisdictional response area. SFD Station 5, located at 9130 Carlton Oaks Drive, is the closest fire station to the project site and would likely be the first to respond. Additional information regarding wildfire protection services for the project is provided in Section 3.14, Public Services.

A Fire Protection Plan (Appendix R1) and Wildfire Evacuation Plan (Appendix R2) were prepared for the project to provide fire planning guidance, including requirements for reducing fire risk, an evaluation of demand for fire protection services, and requirements for provision of at least two evacuation routes for residents. Site access, including internal project roadways, emergency access roads, and site access points would comply with the requirements of the California Fire Code and City of Santee Municipal Code adopted at the time an application for building permits is filed. Potential wildfire impacts from construction and operation of the proposed project and fire protection measures included as part of the project are discussed further in Section 3.18, Wildfire. In addition, PDF-11 and PDF-12 provide fire protection and emergency access measures.

PDF-11: Fire Protection Measures. The project proponent will implement the following fire protection measures:

- **Ignition-Resistant, Planned, and Maintained Landscape**: All site landscaping of common areas and fuel-modification zones (FMZs) will be subject to strict plant types that are lower-ignition plants, with landscaping closest to structures requiring irrigation to maintain high plant moisture, which equates to difficult ignition. FMZs will be a minimum of 100 feet from the structure outward, which will reduce the risk of an ignition spreading from the project site to adjacent land uses, and also the spread of fire toward on-site structures. Roadside FMZs will extend 50 feet from the roadside on both sides, which will reduce the risk of ignition related to vehicles traveling within the project site, and also provide fire buffered corridors to support safer evacuations. Additionally, twice-annual inspections of FMZs and ongoing maintenance will be implemented to ensure long-term effectiveness of FMZs. Further, the project will benefit from the golf course, which includes irrigated and maintained, low-fuel, highly ignition-resistant landscaping and open water, and functions as a large fuel break.
- **FMZ Around Perimeter of Project**: A 100-foot-wide FMZ will be required from each structure outward toward open space areas and will include specifically selected plant species, very low fuel densities (i.e., 30%–50% retention of native plants in outer zones and irrigated inner zones), and ongoing Homeowner's Association (HOA)-funded and -applied maintenance, resulting in a wide buffer between the developed areas and off-site native fuels. All project roads and the ~~steel bridge~~Proposed Resort Bridge at the abutments will also include, at minimum, a 50-foot FMZ. The roadside FMZs will have plant restrictions and maintenance requirements, as detailed in the project's Fire Protection Plan. Roadside FMZs associated with the ~~steel bridge~~Proposed Resort Bridge will be the responsibility of the golf course operator. The golf course operator, as part of maintenance of the golf course, will be responsible for proper brush management, and defensible space will be cleared underneath the ~~bridge~~Proposed Resort Bridge and extending outward from the ~~bridge~~Proposed Resort Project.
- **Twice-Annual FMZ Inspections**: The HOA for the residential areas and the owner/property management agency of the resort will have a contracted, third-party, City of Santee Fire Department (SFD)-approved FMZ inspector perform two inspections per year to ensure that FMZs are maintained in a condition that is consistent with the City of Santee's and the Fire Protection Plan's requirements.
- **Ignition-Resistant Structures**: All structures will be built to the ignition-resistant requirements found in California Building Code Chapter 7A that have been developed and codified as a direct result of post-fire save-and-loss assessments. These measures will result in homes that are designed, built, and maintained to withstand fires and embers associated with wildfires. Ignition-resistant structure design features will include the following:
  - Exterior walls of all structures and garages will be constructed with approved, noncombustible (e.g., stucco, masonry, approved cement fiber board) or ignition-resistant material from grade to the underside of the roof system. Wood-shingle and shake wall coverings are prohibited. Any unenclosed under-floor areas will have the same protection as exterior walls. Per City of Santee Building Code Chapter 7A, exterior wall coverings will extend from the top of the foundation to the underside of the roof sheathing, and terminate at 2-inch nominal solid-wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure. The underside of any cantilevered or

overhanging appendages and floor projections will maintain the ignition-resistant integrity of exterior walls, or projection will be enclosed to grade.

- Eaves and soffits will meet the requirements of Surface Feet per Minute (SFM) 12-7A-3 or be protected by ignition-resistant materials or noncombustible construction on the exposed underside, per the City of Santee Building Code.
- There will be no use of paper-faced insulation or combustible installation in attics or other ventilated areas.
- There will be no use of plastic, vinyl (with the exception of vinyl windows with metal reinforcement and welded corners), or light wood on the exterior.
- All roofs will be a Class A–listed and fire-rated roof assembly, installed per the manufacturer's instructions, to the approval of the City of Santee. Roofs will be made tight, with no gaps or openings on ends, in valleys, or elsewhere between the roof covering and decking to prevent intrusion of flames and embers. Any openings on the ends of roof tiles will be enclosed to prevent intrusion of burning debris. When provided, roof valley flashings will not be less than 0.019 inches (No. 26 gage galvanized sheet) corrosion-resistant metal installed over a minimum 36-inch-wide underlayment consisting of one layer of 72-pound American Society for Testing and Materials (ASTM) 3909 cap sheet running the full length of the valley.
- No vents will be placed in soffits, cornices, rakes, eaves, or eave overhangs, or between rafters at eaves or in other overhang areas. Gable end and dormer vents will be at least 10 feet from the property lines or provided with alternative designs that are resistant to ember penetration. Vents in allowed locations will be protected with wire mesh having no openings larger than 0.125 inches. Vent openings will not exceed 144 square inches. Vents will be designed to resist the intrusion of burning embers and debris.
- Vents will not be placed on roofs unless they are approved for Class A roof assemblies and contain an approved baffle system, such as Brandguard or O'Hagin vents, to stop intrusion of burning material, or are otherwise approved.
- Turbine vents are prohibited.
- Exterior glazing in windows, sliding glass doors, and garage doors, or decorative or leaded glass in doors, will be dual pane with one tempered pane, glass block, or have a 20-minute fire rating. Glazing will comply with California Building Code Chapter 7A.
- Any vinyl frames will have welded corners and metal reinforcement in the interlock area to maintain integrity of the frame certified to ANSI/AAMA/NWWDA 101/I.SI. S 2 97 requirements.
- Skylights will be tempered glass.
- Rain gutters and downspouts will be noncombustible and designed to prevent the accumulation of leaf litter and debris, which can ignite roof edges.
- Doors will conform to SFM 12-7A-1, or will be of approved noncombustible construction, or will be solid-core wood with stiles and rails not less than 1-3/8 inches thick, or have a 20-minute fire rating. Doors will comply with City of Santee Building Code Chapter 7A. Garage doors will be solid-core, 1.75-inch-thick wood or metal to comply with the City of Santee Building Code.

- Decks and their surfaces, stair treads, landings, risers, porches, and balconies will comply with City of Santee Building Code Chapter 7A and be of ignition-resistant construction; heavy timber; exterior-approved fire-retardant wood; or approved, noncombustible materials.
- Decks and overhangs projecting over vegetated slopes are not permitted. Decks will be designed to resist failing from the weight of a firefighter during fire conditions. Plastic or vinyl decking or railings are not allowed. The ends of decks will be enclosed with the same type of material as the remainder of the deck.
- Combustible awnings, canopies, or similar combustible overhangs are not allowed.
- No combustible fences will be allowed within 5 feet of structures on any lots. The first 5 feet from a structure will be noncombustible or meet the same fire-resistive standards as walls.
- All chimneys and other vents on heating appliances using solid or liquid fuel, including outdoor fireplaces and permanent barbeques and grills, will have spark arrestors that comply with the City of Santee Fire Code, which requires that openings do not exceed 0.25 inches. Arrestors will be visible from the ground.
- Any liquid propane gas tanks (except small barbecue and outdoor heater tanks), firewood, hay storage, storage sheds, barns, and other combustibles will be located at least 30 feet from structures and, within the FMZ, 30 feet from flammable vegetation. No flammable vegetation will be allowed under or within 30 feet of liquid propane gas tanks, or tanks will be enclosed in an approved, ignition-resistant enclosure with 10 feet clearance of flammable vegetation around it. In no case will a tank be closer than 10 feet from a structure. The City of Santee Fire Code requires 10 feet of clearance of native vegetation, weeds, and brush from under and around liquid propane gas tanks.
- Storage sheds, barns, and outbuildings will be constructed of approved, noncombustible materials, including noncombustible Class A roofs, and will be subject to the same restrictions as the main structure on the site.
- Any of the above-listed structures (e.g., outbuildings, storage sheds, barns, separate unattached garages) that are 500 square feet or smaller and 10 feet or more from an adjacent structure will not be required to include automatic fire sprinklers. Locations and required FMZs for these smaller structures will be subject to approval of the City of Santee's Fire Marshal and Building Official, based on the size of the structure.

- **Interior Fire Sprinklers:** Sprinklers in residences will be designed to provide additional time for occupants to escape the home, and sprinklers in multifamily and commercial structures will be designed to provide structural protection. Fire sprinklers are successful at assisting responding firefighters by either extinguishing a structural fire, or at least containing the fire to the room of origin and delaying flash-over. This benefit also reduces the potential for an open space–vegetation ignition by minimizing the possibility for structural fires to grow large and uncontrollable, resulting in embers that are blown into wildland areas.
- **Firefighting Water:** Water will be provided specifically for firefighting throughout the project site with fire hydrants that are accessible to fire engines. The project will provide firefighting water volume, availability, and sustained pressures to the SFD's satisfaction. Additionally, the project will provide the number and location of fire hydrants consistent with SFD Design Standards and the City of Santee Fire Code, and subject to SFD approval.

- **Water Utilities Constructed First:** As required by standard fire code regulations, before any combustible materials are brought onto the site for construction, the project must have all underground utilities in place; fire hydrants operational; water mains, curbs, gutters, sidewalks, and an approved all-weather roadway in place; and interim FMZs established and approved.
- **Homeowner Education:** Annual reminder notices will be provided to each homeowner encouraging them to review and be familiar with community evacuation protocols. The HOA will coordinate with local fire agencies to hold an annual fire safety and evacuation preparedness informational meeting. The meeting will be attended by representatives of appropriate fire agencies, and important fire and evacuation information will be reviewed. One focus of these meetings, and of the HOA's annual message, will be on the importance of each resident preparing and being familiar with their own *Ready, Set, Go!* evacuation plan. This proactive educational component of disclosing potential wildfire risks will be incorporated into the HOA's covenants, conditions, and restrictions.

Traffic and Circulation Features

PDF-12A: Traffic Control Plan. A traffic control plan will be prepared by the project proponent and implemented during construction, as required by the City of Santee and City of San Diego public improvement permits, which will be obtained to construct access roads to the residential developments and resort. The traffic control plan will include procedures that will be followed to properly and safely close lanes and redirect traffic, if necessary, during construction. Adherence to the traffic control plan will ensure that emergency response vehicles can safely access the project site and the vicinity, and that project construction will not conflict with established emergency evacuation routes. The traffic control plan will be consistent with the procedures and measures established by the Unified San Diego County Emergency Services Organization and County of San Diego in the *Operational Area Emergency Operations Plan* (2022), which has been adopted by both the City of Santee and City of San Diego. The traffic control plan will also ensure that construction activities comply with the applicable City of Santee ordinances and regulations related to road closures and roadway construction. Furthermore, the traffic control plan will include information on how contractors are to comply with applicable requirements set forth by the County of San Diego's *Multi-Jurisdictional Hazard Mitigation Plan* (2023) for emergency events.

PDF-12B: Intersection Safety Improvements. The following improvements, which are included as part of the development footprint, would be made at the following intersections to improve pedestrian and bicycle safety:

- **West Hills Parkway and Mast Boulevard.** Bicycle detection (signal software upgrade and/or camera installation, or electro-magnetic loop detectors within the asphalt) to be added to the approaches of the intersection where Class II bicycle lanes are present.
- **West Hills Parkway and Carlton Oaks Drive.** Continental cross-walks installed at all legs of the intersection, pedestrian countdown signals installed at each corner of the intersection, and lead pedestrian intervals for all crossing phases of the intersection, if the current signal controller can accommodate it. These improvements are included within the off-site impact area included as part of the proposed project.

- **West Hills Parkway and Mission Gorge Road.** Bicycle detection (signal software upgrade and/or camera installation, or electro-magnetic loop detectors within the asphalt) to be added to the approaches of the intersection where Class II bicycle lanes are present.

Stormwater and Pollution-Control Features

The proposed project would implement the following PDFs related to stormwater:

PDF-13: Stormwater Pollution Prevention Plan (SWPPP). A project-specific SWPPP in compliance with the effective Construction General Permit and Jurisdictional Runoff Management Programs for the City of Santee and City of San Diego will be prepared and implemented. The SWPPP will identify which construction best management practices (BMPs) will be implemented to prevent stormwater runoff, and will include a monitoring plan for measuring BMP effectiveness. BMPs will include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The construction SWPPP will also specify properly designed, centralized storage areas that will keep these materials out of the rain. When grading will be conducted during the rainy season, the primary BMPs selected will focus on erosion control (i.e., keeping sediment in place), and then on sediment control (i.e., keeping sediment on site). Measures will include a range of stormwater control BMPs, such as installing erosion-control materials (e.g., silt fences, staked fiber rolls, geofabric) to prevent silt runoff to storm drains and waterways, as well as sediment basin BMPs (e.g., sediment basins, check dams, sediment traps).

PDF-14: Storm Water Quality Management Plan (SWQMP). A Priority Development Project SWQMP will be prepared that identifies site design and source- and pollutant-control best management practices (BMPs) to reduce the discharge of pollutants to the maximum extent practicable. The SWQMP will incorporate the following quantifiable and nonquantifiable sustainability features that will manage stormwater source and pollutant loads:

- Prevent illicit discharges into the Municipal Separate Storm Sewer System (MS4).
- Install storm drain stenciling or signage.
- Protect outdoor materials storage areas from rainfall, run-on, run-off, and wind dispersal.
- Protect materials stored in outdoor work areas from rainfall, run-on, run-off, and wind dispersal.
- Protect trash storage areas from rainfall, run-on, run-off, and wind dispersal.

In addition, as identified in the project-specific Priority Development Project SWQMP, the proposed project will implement site design BMPs, where applicable and feasible. Site-design BMPs include the following:

- Maintain natural drainage pathways and hydrologic features.
- Conserve natural areas, soils, and vegetation.
- Minimize impervious areas.
- Minimize soil compaction.
- Incorporate impervious area dispersion.

- Install landscaping with native and/or drought-tolerant species.

Low-impact development and stormwater pollutant control BMPs designed to retain, biofilter, and treat stormwater runoff generated on the project site will be implemented. Applicable BMPs are identified in the City of Santee's 2021 *Jurisdictional Urban Runoff Management Program* (JRMP), following the City of Santee's 2016 *BMP Design Manual*.

A Green Street SWQMP will be prepared for the project components that fall within the City of San Diego's jurisdiction. The applicable source control and site design BMPs will be implemented, in addition to the Green Street elements specified in the project's Green Street SWQMP. Applicable BMPs are identified in the City of San Diego's 2025 JRMP and follow the City of San Diego's 2024 *BMP Design Manual*.

PDF-15: Scour and Erosion Prevention Measures. The project will incorporate the following features to eliminate potential scour and erosion of the proposed slopes adjacent to the floodway and floodplain:

- Geotextile turf reinforcement mat that binds to the soil for slope surface stabilization and slope reinforcement.
- Geotechnical soil reinforcement to ensure that high-flow velocities will not erode or damage the embankment.
- Rock riprap and/or concrete energy dissipators for all storm drain outlets to reduce the rate of storm runoff velocity to a nonerosive level and to prevent erosion and siltation.

Scenic View Features

PDF-~~-~~16: Security Fence Coloring. Security fences will be powder-coated and colored dark evergreen, dark brown, or black to make the safety fencing appear more see-through than untreated, light-grey fencing that can act as a visual barrier.

2.4.10 Stockpiling Sites

The project would require the import of soil to raise the proposed resort, hotel, and residential development out of the City of Santee and Federal Emergency Management Agency–mapped floodplain. This import of soil would most likely take place over an extended period of time, prior to the start of grading.

One temporary site for the stockpiling of soil is potentially proposed. The stockpiling site would be on the eastern side of the project site within the current golf course driving range. It would accommodate import of approximately 279,020 cubic yards of soil, and temporary BMPs for sediment and erosion control would be provided. Access to the stockpiling site would be from Inwood Drive.

To comply with federal and state water quality regulations, a SWPPP would be prepared during the final engineering phase prior to issuance of a grading permit, and temporary sediment- and erosion-control BMPs would be implemented (see PDF-9 for more information). The SWPPP would be implemented in compliance with the 2022 Construction Stormwater General Permit, Order 2022-0057-DWQ, City of Santee requirements as outlined in its *Guidelines for Surface Water Pollution Prevention* (City of Santee 2015), the City of Santee's JRMP (City of Santee

2021), the City of San Diego's *Stormwater Standards* (City of San Diego 2024), and the City of San Diego's JRMP (City of San Diego 2025). The site would not be disturbed prior to preparation of the SWPPP, approval of a Notice of Intent, and receiving a waste discharge identification number.

2.4.11 Off-Site Improvements

The following off-site improvements would be required as part of the proposed project:

1. **Emergency Vehicle Access Roadway Construction**: The project would include construction of a 26-foot-wide emergency vehicle access roadway from the Vista del Verde community south onto the golf course property to the developed portion of the resort. One parking spot on the Vista del Verde property may be removed but would be relocated within that property. The project would also include installation of a motorized gate and replacement of the existing chain-link fence with a steel tubular fence on the boundary of the golf course.
2. **West Hills Parkway Widening**: West Hills Parkway would be widened within the existing ROW, from Carlton Oaks Drive~~, approximately~~ to 700 feet south of ~~the existing bridge~~Carlton Oaks Drive, to provide a dedicated left-turn lane into Residential West. Updates would include installation of a ~~striped~~raised concrete median and increased width for bike lanes. ~~Trees~~The widening and installation of a raised concrete median with left turn lane into Residential West on West Hills Parkway would be located between the project's proposed emergency access road to the north and the project's primary access to the south (approximately 270 feet in length). This median will not restrict left turns onto West Hills Parkway from the residential area. Striped medians would be added on West Hills Parkway, south of the residential area primary access road to Residential West. Additionally, trees are proposed on both sides of West Hills Parkway to provide source control of stormwater, limit stormwater transport and pollutant conveyance to the collection system, restore predevelopment hydrology to the extent possible, and provide environmentally enhanced roads. This work would occur within the City of San Diego's jurisdiction, and therefore would follow City of San Diego standards.
3. **PDMWD Public Water Main Extension**: To provide a connection to the proposed private water system, a PDMWD water main would be extended from Carlton Oaks Drive, south along West Hills Parkway, and into Residential West.
4. **Residential North and Resort Area Access**: Carlton Oaks Drive would provide access to Residential North and the resort at the intersection of Burning Tree Way, approximately 200 feet west of the existing hotel access road (i.e., Inwood Drive). Inwood Drive would be closed and replaced with curbs and sidewalks. Additionally, six existing driveway aprons along the project frontage would be closed and replaced with curbs, landscaping, and other improvements, such as overhead power undergrounding. Overhead power undergrounding would extend north of Carlton Oaks Drive and would require four new utility poles (see Section 2.4.5, Utilities, for additional detail). Potable and recycled water would be connected to existing main lines in Carlton Oaks Drive and extended into the project site.
5. **Drainage Improvements**: Existing drainage pipes discharge to the golf course at five locations along the northern subdivision boundary, as described below. All project-related improvements would be constructed in a manner that would maintain the existing flow and drainage patterns.
    a. **Current:** An existing 42-inch-diameter storm drain discharges to the site from a headwall approximately 15 feet off site, within a public easement (City of Santee-owned) on an existing residential lot (Lot 17 of Map 4402).

- **Improvement:** The off-site flows would be picked up on site by proposed private 36-inch/42-inch reinforced concrete pipe storm drain improvements just west of buildings 42–52 within an HOA common area and would be discharged into the San Diego River (North Channel). Riprap would be placed between the existing outfall at the north to the proposed storm drain headwall on site to the south.

b. **Current:** An existing 27-inch storm drain extends onto the project site from an existing residential lot (Lot 14 of Map 5417).
   - **Improvement:** This pipe would be extended under the proposed access road to a new headwall and discharge onto the golf course.

c. **Current:** An existing 18-inch storm drain discharges to the site from a headwall approximately 15 feet off site within a public easement (City of Santee-owned) on an existing residential lot (Lot 230 of Map 6973).
   - **Improvement:** The off-site flows would be picked up on site by proposed 18-inch reinforced concrete pipe storm drain improvements and extended southeasterly under the proposed access road then discharged into the San Diego River (North Channel).

d. **Current:** An existing 47- by 71-inch storm drain discharges to the site from a headwall approximately 20 feet off site within a public easement (City of Santee-owned) on an existing residential lot (Lot 239 of Map 6973).
   - **Improvement:** The off-site flows would be picked up on site by a proposed 43-inch by 68-inch reinforced concrete pipe storm drain and extended southerly under the proposed access road then discharged onto the golf course just north of the San Diego River (North Channel).

e. **Current:** An existing 72-inch-diameter storm drain pipe discharges to the site from the headwall immediately off site at the northern property line of Residential West. The existing headwall includes a large concrete energy dissipator and concrete channel. These storm drain facilities are on existing residential lots (Lots 679 and 680 of Map 7295) and within an existing, City of Santee-owned public easement.
   - **Improvement:** The off-site flows would be picked up on site by proposed private 84-inch storm drain improvements between Building 18 and 19 then within private drive "C" southeasterly and discharged onto the golf course through a proposed 90-inch storm drain just north of the San Diego River (North Channel).

6. **Sewer Maintenance Hole Improvements:** Three existing sewer maintenance holes are located off site within a PDMWD easement in the Vista del Verde condominium property. The need for engineered sewer maintenance hole liners would be determined in the project design phase. All work would be limited to within the already disturbed public easement area.

2.4.12 Irrevocable Offer of Dedication Termination

The applicant is requesting the termination of an Irrevocable Offer of Dedication associated with the previous map (Parcel Map ~~16798~~No. 16978) originally required for the right to extend and maintain drainage facilities, excavation, and embankment slopes beyond the limits of the extension of Fanita Parkway as offered and rejected on Parcel Map No. 16978.

2.4.13 Roadway Vacations

The applicant is requesting the vacation of certain Offer of Dedication for public roadways, including Fanita Parkway, as offered for dedication and rejected on Map No. 11166, which will be vacated and terminated pursuant to State law. This Offer of Dedication is located off-site, adjacent to the northeastern corner of the project site within the Vista Del Verde community. This is included as Figure 2-17, Offer of Dedication Vacation.

The applicant is also requesting the vacation and abandonment of a portion of Inwood Drive, dedicated and accepted on Map 4402, which would be included on the Final Map. The applicant has included this requested vacation and abandonment of a portion of Inwood Drive (dedicated and accepted on Map 4402) on the Tentative Map. The street vacation will turn into a common area lot for driveway and landscape purposes which will be maintained by the HOA. The location of the Inwood Drive street vacation is depicted in Figure 2-3.

2.5 Project Construction

Construction of the proposed project, including ~~the~~ residential development, golf course improvements, trail segments, clubhouse, and resort, would occur in eight phases (Figure 2-~~16~~18, Conceptual Phasing Plan). In the resort area, improvements needed for interim golf operations would occur first, and construction of the hotel and cottages would occur in later phases. The objective of project phasing is to coordinate the provision of public facilities and services with the anticipated sequence pattern of development. The conceptual phasing plan may change in response to changing market conditions or other unforeseen conditions. The phasing of development and implementation of public facilities may be modified as long as the required public improvements are provided at the time of need. The conceptual phases for the proposed project are as follows:

- **Phase 1:** Stockpiling soil – 6 months
- **Phase 2:** Demolition – 2.5 months
- **Phase 3:** Rough grade the entire site (Residential West and North, resort, and golf course), install backbone improvements (main lines for wet/dry utilities), and construct ~~bridge~~the Proposed Resort Bridge from Residential North to resort – 8 months
- **Phase 4:** Construct Residential West and North streets and improvements (internal wet/dry laterals to facilities) – 6 months
- **Phase 5:** Final golf course preparation and completion – 2 months beginning 4 months after start of Phase 3
- **Phase 6:** Construct resort streets, improvements, and interim clubhouse – 6 months
- **Phase 7:** Construct Residential West and North houses – 2 years
- **Phase 8:** Construct resort, hotel, and clubhouse – 2 years

Phases would take approximately 2 months to 2 years to complete. Phases 4 through 8 would overlap as development progresses. In the residential areas, construction of the residential units would be staggered. Project construction ~~is expected~~was assumed to begin in the third quarter of 2025 and be completed by the first quarter of 2029.[1] Construction activities would occur between 7 a.m. and 7 p.m., in compliance with the City of Santee Noise Ordinance (Municipal Code Section 5.04.090) and the City of San Diego Noise Ordinance (Municipal Code Section 59.5.0404). Construction staging activities would occur within the project site. All proposed staging areas are paved or heavily disturbed, with no existing vegetation. There will be approximately 1 to 3 months of overlap amongst the construction phases.

Generally, construction materials used for the proposed project would consist of wood, paints and finishing products, insulation, glass, rebar, structural steel, concrete, electrical and mechanical systems, and landscaping materials. Standard off-road construction equipment would be used, including dozers, excavators, loaders, backhoes, rollers, compactors, and scrapers. Off-road equipment would be operational for approximately 8 hours per day during construction. Additional equipment would include trucks for delivery of construction materials, disposal of demolished and excavated materials, and transport of water for dust control. A maximum of 210 construction workers would access the site during the peak of construction, with an average of approximately 80 workers per day during non-peak times. Additionally, construction activities are anticipated to generate a maximum of 111 haul-truck trips per day to transport miscellaneous material and equipment during peak times, with minimal truck trips occurring during non-peak times.

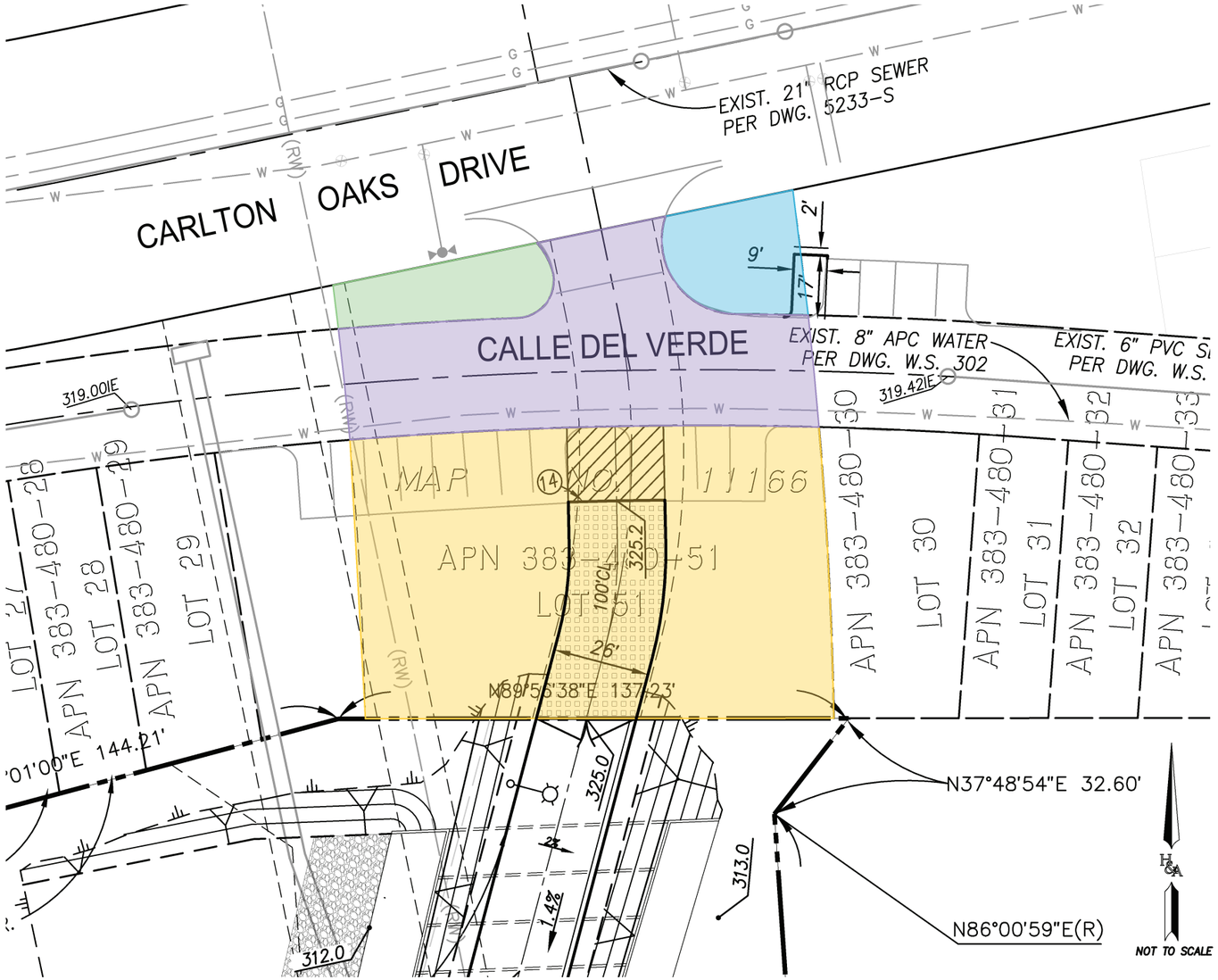
Demolition and grading activities would occur first. The clubhouse, restaurant/bar, pro shop, 52-room hotel, and surface lots would be demolished to accommodate construction of the proposed project. Grading of the project site would occur at the same time as demolition of these facilities. The total graded area would be 118.7 acres and would require import of approximately 279,020 cubic yards of soil, 258,244 cubic yards of raw cut, and 512,445 cubic yards of raw fill. There would be approximately 72,579 cubic yards of shrink and 47,760 cubic yards of construction spoils (Figure 2-~~17~~ 19, Cut and Fill Plan). Grading is expected to consist of cuts and fills to create building pads, install streets, and raise the southern portion of the project site (near the San Diego River) approximately 10 to 20 feet. All cut and fill slopes would be constructed at a maximum ratio of 2:1. Figure 2-~~17~~ 19 shows the conceptual cut and fill plan. Construction waste generated from demolition and excavation would be transported from the site and disposed of at the closest approved landfill or recycling facility. The project would comply with all applicable construction recycling regulations.

[1] Although the assumed construction schedule has passed, basing the Draft EIR's analysis on an earlier construction start year is considered conservative for Draft EIR impact analyses, as, for example, air quality standards, such as construction equipment and vehicle emission standards, generally become more stringent over time.

To provide vehicular access to the golf course while the Proposed Resort Bridge is under construction, a temporary railcar crossing (hereinafter referred to as "Temporary Railcar Crossing") would be placed at an existing golf cart bridge located approximately 0.14 miles west of the Proposed Resort Bridge. For the Temporary Railcar Crossing, temporary steel beams and plates would be placed on top of the existing golf cart bridge to allow for a road wide enough to provide access for construction equipment. The railcar, steel beams, and plates would be removed once construction is complete to allow use of the existing golf cart bridge after construction.

LOCATION MAP
NOT TO SCALE

LEGEND
CEQA STUDY AREA
SUBDIVISION BOUNDARY



PORTION OF LOT 51 PER MAP NO. 11166 RESERVED FOR FUTURE STREET

PORTION OF LOT 45 PER MAP NO. 11166 RESERVED FOR FUTURE STREET

PORTION OF LOT 44 PER MAP NO. 11166 RESERVED FOR FUTURE STREET

PORTION OF LOT A PER MAP NO. 11166 RESERVED FOR FUTURE STREET

Source: Hunsaker & Associates San Diego, Inc.2026

DUDEK

Figure 2-17
Offer of Dedication Vacation

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PHASE	DESCRIPTION
PHASE 1	STOCKPILING SOIL - 6 MONTHS
PHASE 2	DEMOLITION - 2.5 MONTHS
PHASE 3	ROUGH GRADE THE ENTIRE SITE (RESIDENTIAL WEST AND NORTH, RESORT, AND GOLF COURSE), INSTALL BACKBONE IMPROVEMENTS (MAIN LINES FOR WET/DRY UTILITIES), AND CONSTRUCT THE PROPOSED RESORT BRIDGE FROM RESIDENTIAL NORTH TO RESORT - 8 MONTHS
PHASE 4	CONSTRUCT RESIDENTIAL WEST AND NORTH STREETS AND IMPROVEMENTS (INTERNAL WET/DRY LATERALS TO FACILITIES) - 6 MONTHS
PHASE 5	FINAL GOLF COURSE PREPARATION AND COMPLETION - 2 MONTHS; BEGINNING 4 MONTHS AFTER START OF PHASE 3
PHASE 6	CONSTRUCT RESORT STREETS, IMPROVEMENTS, AND INTERIM CLUBHOUSE - 6 MONTHS
PHASE 7	CONSTRUCT RESIDENTIAL WEST AND NORTH HOUSES - 2 YEARS
PHASE 8	CONSTRUCT RESORT, HOTEL, AND CLUBHOUSE - 2 YEARS

*NOTE: BACKBONE = MAIN LINES WET/DRY UTILITIES; IMPROVEMENTS = INTERNAL WET/DRY LATERALS TO THE FACILITIES BEING SERVED.
AS WITH ALL CONSTRUCTION, THERE WILL BE APPROXIMATELY 1-3 MONTHS OF OVERLAP AMONGST THE PHASES.

GOLF COURSE
CLUB HOUSE
HOTEL
RESIDENTIAL
INTERIM GOLF COURSE OPERATIONS
SOIL STOCKPILE

CITY SANTEE OFFSITE RESIDENTIAL
CITY SAN DIEGO OFFSITE RESIDENTIAL
WEST HILLS PARKWAY
CARLTON OAKS DRIVE
FREEWAY 52 - OVERPASS
CADURETTE DR
PRAFUL CT
DE VOS DR
CARLTON OAKS DR
MASSOT AVE
INVERNESS ROAD
WETHERSFIELD ROAD
DUNWOODLE ROAD
OAKBOURNE ROAD
BURNING TREE
KNOLL WOOD
PEBBLE BEACH DRIVE
FANITA PARKWAY
CALLE DEL VERDE
PA-1
RESIDENTIAL (NORTH)
PA-2
RESIDENTIAL (WEST)
PA-3
HOTEL
CLUBHOUSE (RESORT)
GOLF COURSE

PROJECT PHASING
SCALE: 1"=200'

Source: Hunsaker & Associates San Diego, Inc.2026

DUDEK

Figure 2-18
Conceptual Phasing Plan

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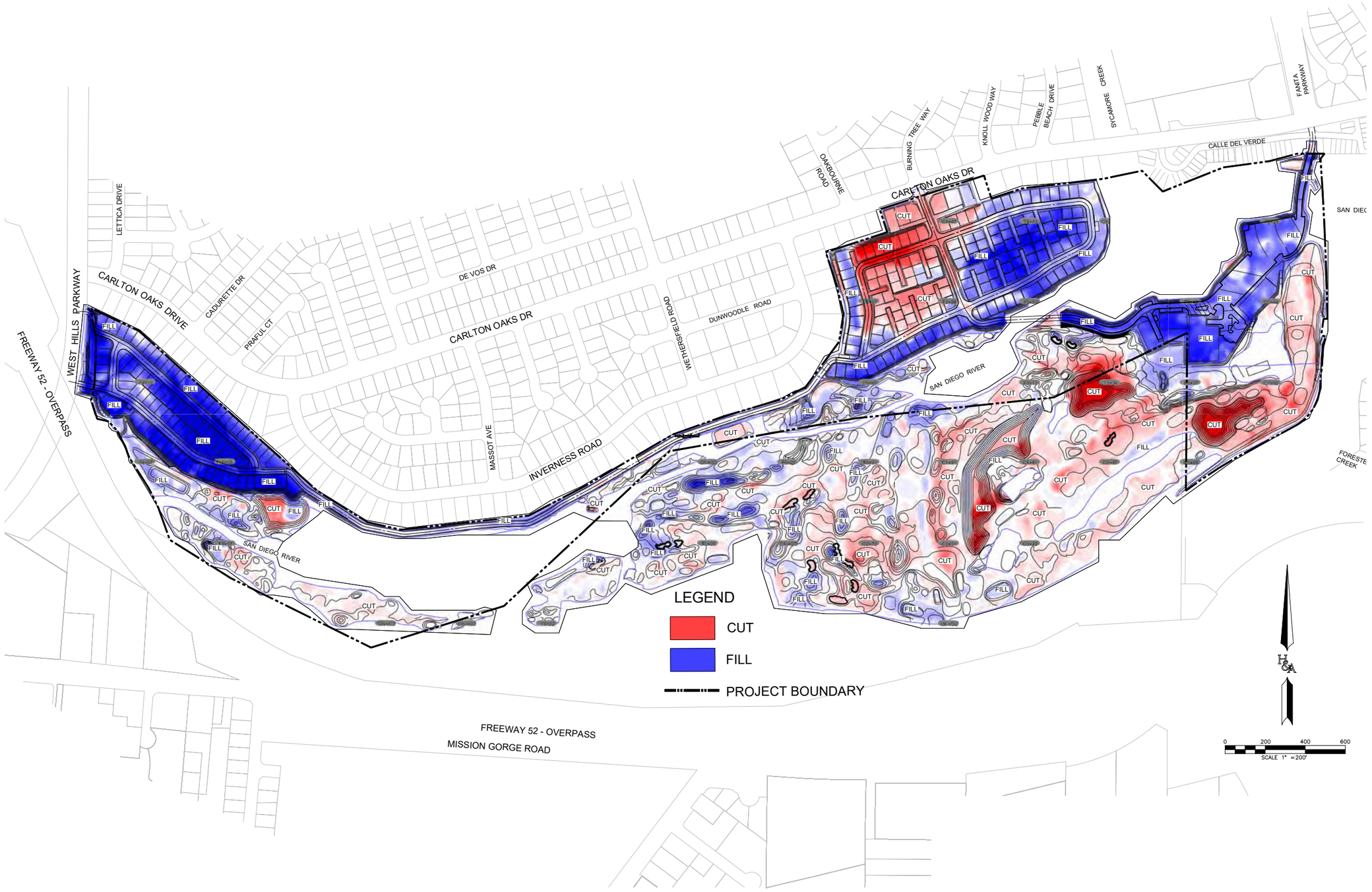

Source: Hunsaker & Associates San Diego, Inc.,1/30/2025.

DUDEK

Figure 2-19
Cut and Fill Plan

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2.6 Project Operation

The completed project would consist of a golf course, clubhouse, hotel, retail and resort amenities, and residential homes. In addition to guest rooms, the hotel and clubhouse would provide space for special events, such as golf tournaments, weddings, banquets, and conferences. The redesigned and redeveloped golf course would provide recreational opportunities for the community. Retail options could include a restaurant, bar, and a pro shop. There would be a nominal increase in the number of employees needed for the redesigned clubhouse and resort compared to the existing facilities at the project site. The number of staff needed for golf course and hotel maintenance and operation would be similar to existing staff levels; however, the proposed project is expected to require a few additional catering staff to accommodate the anticipated increase in events. Events currently occur, on average, once a week, but are expected to increase to two to three per week. Catering staff would only be present when events are occurring. Even with the additional catering staff, the proposed project would not be expected to employ more than 100 people at one time.

2.6.1 Operating Equipment

Operating equipment would be needed for multiple components of the completed project. The proposed clubhouse and hotel would be served by a central plant, which would include a conventional emergency generator, central chiller, cooling tower, boiler plant, dedicated outside air-handling systems, air-handling units, fans, and a domestic hot-water plant. Residential units would include equipment typical for any residential development, such as circuit breakers, air conditioning and heating systems, and hot-water heaters.

2.7 Required Project Approvals

As the lead agency under CEQA, the City of Santee would be responsible for carrying out the proposed project and permitting the portions of the project that fall within the City of Santee's jurisdiction. As a responsible agency under CEQA, the City of San Diego would be responsible for permitting the portions of the proposed project that fall within its permitting authority. The following permits and approvals would be required to implement the proposed project.

2.7.1 City of Santee

As the CEQA lead agency, the City of Santee would use this EIR and supporting documentation in its decision to approve the required discretionary permits. The following permits and approvals may be required by the City of Santee for implementation of the proposed project:

- Certification of the EIR
- Adoption of the Mitigation Monitoring and Reporting Program
- Adoption of the Findings of Fact
- Adoption of the Statement of Overriding Considerations, if applicable
- Approval of the proposed project
- Approval of the Tentative Map
- Approval of the Development Review Permit
- Approval of the Conditional Use Permit

- Issuance of Ministerial Construction Permits (e.g., building, grading, final mapping)
- The termination of that certain Irrevocable Offer of Dedication for the right to extend and maintain drainage facilities, excavation, and embankment slopes beyond the limits of the extension of Fanita Parkway as offered and rejected on Parcel Map No. 16978.
- Vacation of certain Offer of Dedication for public roadways, including Fanita Parkway, as offered for dedication and rejected on Map No. 11166, which is proposed to be vacated and terminated pursuant to State law.

2.7.2 City of San Diego

As previously noted, a portion of the proposed golf course is located within the City of San Diego. As a responsible agency under CEQA, the City of San Diego would use this EIR and supporting documentation in its decision to approve required discretionary permits. The following permits and approvals may be required by the City of San Diego for implementation of the proposed project:

- Responsible agency findings and considering of EIR
- Issuance of a Site Development Permit
- Approval of ~~landscaping, utility, access, and maintenance~~various easements
- Issuance of Ministerial Permits (including grading permits)

- ~~Approval of a City of San Diego Multi-Habitat Planning Area (MHPA) Boundary Line Adjustment and Boundary Line Correction~~
  - ~~MHPA is designated over the existing golf course along the southern edge of the project site. Within the project site, the MHPA covers 12.86 acres of golf course and 0.33 acres of avoided riparian habitat. The golf course was established in 1958 and renovated in 1989, long before the original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. A Boundary Line Adjustment to remove the 0.33 acres of riparian habitat from the MHPA may be required and Boundary Line Correction may be warranted for the 12.53 acres of MHPA that overlaps with the existing golf course.~~

2.7.3 Federal and State Agencies

Prior to construction of the proposed project, the project proponents would be required to obtain the following permits and approvals from state and federal agencies, as applicable:

- **U.S. Army Corps of Engineers:** Clean Water Act Section 404 authorization (Nationwide Permits 14, 29, 33, 39, and 42)
- **U.S. Fish and Wildlife Service**: City of San Diego Permit (with conformance to Environmentally Sensitive Lands regulations) for impacts in the City of San Diego and/or Endangered Species Act Section 7 Incidental Take Permit for Endangered Species Compliance or an individual Section 10 Permit
- **Federal Emergency Management Agency:** CLOMR and LOMR
- **Regional Water Quality Control Board**: Clean Water Act Section 401 Water Quality Certification

- **California Department of Fish and Wildlife**: California Fish and Game Code Section 1602 Streambed Alteration Agreement and Incidental Take Permit under Section 2081 (if required)
- **State Water Resources Control Board**: National Pollutant Discharge Elimination System General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit)
- **Federal Aviation Administration**: Project determination and approval for construction equipment and operational structures
- **California Department of Transportation:** Obtain an encroachment permit for West Hills Parkway improvements due to overlap with City of San Diego right-of-way.

2.8 References

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3.3 Biological Resources

3.3.1 Overview

This section describes the existing conditions, applicable policies and regulations related to biological resources and provides an analysis of impacts that may result from construction and operation of the proposed project. The information in this section is based on the *Revised Biological Survey Report for the Carlton Oaks Country Club and Resort Project, Santee, San Diego County, California* (Revised Biological Survey Report) dated May 2025, and revised in July 2026, prepared for the proposed project, which is included as Appendix E to this Draft Environmental Impact Report (EIR).

3.3.2 Environmental Setting

The project site is currently operating as the Carlton Oaks Country Club with an existing golf course, golf driving range, clubhouse, and hotel. The golf course covers most of the project site, with the clubhouse and related structures located in the north-central portion of the project site. The project site is located along the boundary between the City of Santee and the City of San Diego, situated north of State Route (SR) 52 where it traverses in an east–west direction. The project site is currently operating as the Carlton Oaks Country Club with an existing golf course, golf driving range, clubhouse, hotel, and banquet hall. The golf course covers most of the project site, with the clubhouse and related structures located in the north-central portion of the project site. The golf course includes two artificial water features not associated with Sycamore Creek.

The surrounding land uses consist of a mix of residential and commercial development, transportation corridors, and open space, which contains undeveloped areas within the upstream and downstream segments of the San Diego River. The northern boundary of the project site is bound by single-family homes and condominiums. The southern and eastern boundaries of the existing golf course abut the San Diego River (South Channel) and Forester Creek, adjacent to SR-52. The southern boundary of the site consists of a 10- to 12-foot-tall berm that separates the river channel from the golf course and is occasionally used as an informal recreation path. Some areas of the berm have eroded to 5 feet in height. To the west of the project site is West Hills Parkway and SR-52, with open space and general commercial uses west of these transportation corridors.

Unless otherwise referenced, the information in this section below summarizes the physical and biological characteristics of the site, as discussed in the Biological Survey Report (Appendix E). It includes extensive references to primary and secondary sources that have informed the background discussions provided below.

The biological study area (BSA) includes a 100-foot buffer around the approximately 165 ~~acres~~acre project site and all off-site improvement areas.

3.3.2.1 Driving Range Remedial Work

In 2023, as part of the existing golf course's continued operations, soil extracted from another project was transported to the driving range location of the project site to create a berm to aid in golf ball retention. In total, approximately 1,000 cubic yards were moved to the existing driving range during a year-long period. A small bulldozer was used to spread the soil on the site's natural surface contours to create a berm along the outer edge

of the driving range, adjacent to Sycamore Canyon Creek. No subsurface disturbance occurred as a result of the soil deposition.

Current activity at this location includes maintenance and ball catching activity. The driving range is vegetated with lawn grass; no native vegetation exists within the driving range. A 6–8-foot-tall chain link fence exists along the edge of the driving range, separating it from the vegetation adjacent to Sycamore Canyon Creek.

On August 19, 2024, the City of Santee issued a Notice of Violation to the landowner of the project site. The Notice of Violation identified the transportation of the dirt to the driving range without the required permit as a violation of the City of Santee's Municipal Code. The applicant was directed to remove the transported dirt from the driving range and restore the area to pre-construction conditions to the satisfaction of the City Engineer. The appropriate regulatory agencies were also informed of the potential violation and they requested that any restoration be completed prior to the raptor season of 2025.

By the end of 2024, the soil and berm were removed, and the soil was transported off site. The driving range at the project site was returned to its existing topographic contours prior to the soil deposition. The remediation work involved removing the soil and berm from the driving range to restore the site to its original condition. The 1,000 cubic yards of soil was transported off site to a residential construction site located just north of Robertson Street and west of Day Street in the unincorporated town of Ramona approximately 25 miles away. Equipment used for this effort involved a 966 loader, a D6 dozer, and a water equipment truck for dust control.

Although the transportation of the dirt to the driving range and the related remedial measures that were taken are not components of the currently proposed project, the City of Santee has requested that the EIR include information regarding any biological issues that may have resulted from the creation of the berm and the later removal of the soil, which is more particularly described in the *Memorandum for the Carlton Oaks Country Club and Resort – Driving Range Berm* (Appendix N in Appendix E, Biological Survey Report).

Construction of the berm with a small dozer did not affect sensitive vegetation communities, did not appear to result in sedimentation into the riparian area, and is very unlikely to have had significant noise effects on adjacent least Bell's vireo (*Vireo bellii pusillus*) during the nesting season. Nor were there any effects from the soil removal activities. Although no raptor nests are known within Carlton Oaks golf course or near to the driving range, the soil removal was completed prior to February 1, 2025, which is the beginning of the raptor nesting season, avoiding potential impacts on nesting raptors. These conclusions are discussed in the Memorandum for the *Carlton Oaks Country Club and Resort – Driving Range Berm* (Appendix M in Appendix E).

3.2.2.2 Physical Characteristics

Topography

The project site is located immediately north of SR-52 and immediately south of Carlton Oaks Drive. The topography of the project site is relatively flat as a majority is within the ~~historical~~ floodplain of the San Diego River.

Hydrology

The proposed project site lies within the Lower San Diego River Watershed (Hydrologic Unit Code [HUC] 10: 1807030407) and contains the lower San Diego River and Forester Creek. These drainages are all characterized

by vegetated streambeds and riparian habitats that run through urban areas. The southern boundary of the project site parallels the San Diego River (South Channel). Sycamore Canyon Creek enters the site in the northeast merges with the San Diego River (North Channel), then traverses the existing golf course, joining the San Diego River (South Channel) in the southwestern portion of the project site.

The drainages are surrounded by open space. Single-family residences are scattered throughout the area, whereas concentrated, low-density residential uses surround the project site. Developed areas along the San Diego River are likely causing drainages to receive additional inputs via urban runoff. The lower San Diego River and Forester Creek are listed as impaired waterbodies under Section 303(d) of the Clean Water Act (CWA).

No vernal pools or similar ephemeral, seasonally inundated depressions were found to occur within the BSA.

Soils

No steep slopes or rock outcrops are present in the BSA. The Natural Resources Conservation Service (NRCS) has mapped the following soil series as occurring within the delineated jurisdictional waters based on the Soil Survey Geographic (SSURGO) database (USDA/NRCS 2006): Redding, Riverwash, Visalia, and Vista.

Soil series included within the SSURGO mapping unit (San Diego County Area; CA638) are described based on the official soil descriptions provided by the U.S. Department of Agriculture (USDA 2012). Detailed information regarding soils is provided in Appendix E.

3.3.2.3 Biological Resources

Literature and Database Review

In 2018 and 2019, searches of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Plants, *San Diego Plant Atlas*, SanBIOS, U.S. Fish and Wildlife Service's (USFWS) Carlsbad Fish and Wildlife Office species occurrence data, and the National Wetlands Inventory (NWI) database were conducted to determine the potential for sensitive plant and wildlife species to occur within the vicinity of the project site.

Field Surveys

ICF biologists conducted field surveys in March through September 2019. Surveys were updated by ICF in ~~April~~March 2022 through ~~July 2022. The Crotch's bumble bee (*Bombus crotchii*) surveys were conducted in~~ August 2024. Dudek performed surveys in 2025 related to western spadefoot and to verify and update the vegetation mapping and aquatic resource delineation. Table 3.3-1 provides a summary of all of the biological surveys and assessments conducted within the BSA. Vegetation mapping was conducted over the entire BSA. Survey areas for special-status species were restricted to suitable habitat for those species within the BSA. A full explanation of survey methods and results is discussed in the Revised Biological ~~Study~~Survey Report (Appendix E).

Focused surveys were conducted for the following:

- Rare plants, with a focus on San Diego ambrosia (Ambrosia pumila)
- Crotch's bumble bee (Bombus crotchii)

- Southwestern pond turtle (Actinemys pallida)
- Coastal California gnatcatcher (Polioptila californica californica)
- Least Bell's vireo (Vireo bellii pusillus)
- Southwestern willow flycatcher (Empidonax *traillii extimus*)
- Western spadefoot *(Spea hammondii)*

The uplands within the BSA were assessed for suitability for Quino checkerspot butterfly (*Euphydryas editha quino*). and western burrowing owl (*Athene cunicularia hypugaea*); suitable habitat was found to be missing for both. No suitable Quino checkerspot habitat was found to be present, and there were no suitable burrow resources within open habitat for burrowing owl.

Table 3.3-1. Biological Survey Dates

Date	Survey Activity	Survey Personnel
3/14/2019	Quino checkerspot butterfly habitat assessment	James Hickman
4/6/2019	California gnatcatcher	James Hickman
4/16/2019	Least Bell's vireo	Ryan Layden
4/17/2019	Jurisdictional Delineation	Lanika Cervantes, Nicole Salas
4/19/2019	California gnatcatcher	James Hickman
4/24/2019	Vegetation mapping and rare plant survey	Kelsey Dix, Shawn Johnston
4/26/2019	California gnatcatcher	James Hickman
4/30/2019	Least Bell's vireo	Ryan Layden
5/3/2019	California gnatcatcher	James Hickman
5/17/2019	Least Bell's vireo	Ryan Layden
5/24/2019	California gnatcatcher	James Hickman
5/29/2019	Least Bell's vireo	Ryan Layden
5/29/2019	Southwestern willow flycatcher	Brian Lohstroh
6/10/2019	Least Bell's vireo	Ryan Layden
6/10/2019	Southwestern willow flycatcher	Brian Lohstroh
6/24/2019	Least Bell's vireo	Ryan Layden
6/24/2019	Southwestern willow flycatcher	Brian Lohstroh
6/24/2019	Rare plant survey	Kelsey Dix, Shawn Johnston
6/27/2019	California gnatcatcher	James Hickman
7/2/2019	Southwestern willow flycatcher	Brian Lohstroh
7/8/2019	Least Bell's vireo	Ryan Layden
7/8/2019	Southwestern willow flycatcher	Brian Lohstroh
7/22/2019	Least Bell's vireo	Ryan Layden
9/3/2019	Southwestern pond turtle	Will Kohn
9/4/2019	Southwestern pond turtle	Will Kohn
9/5/2019	Southwestern pond turtle	Will Kohn, Marcus Goncalves

Table 3.3-1. Biological Survey Dates

Date	Survey Activity	Survey Personnel
9/6/2019	Southwestern pond turtle	Will Kohn
3/11/2020	Jurisdictional Delineation mapping refinement	Meris Guerrero
12/7/2021	Jurisdictional Delineation mapping refinement	Meris Guerrero
12/21/2022	Vegetation mapping	Shawn Johnston
4/28/2022	Rare plant survey	Shawn Johnston, Alix Fowler
5/9/2022	Least Bell's vireo	Ryan Layden
5/20/2022	California gnatcatcher, western pond turtle visual	Brian Lohstroh
5/23/2022	Least Bell's vireo	Ryan Layden
5/27/2022	California gnatcatcher, western pond turtle visual	Brian Lohstroh
6/3/2022	California gnatcatcher, western pond turtle visual	Brian Lohstroh
6/7/2022	Least Bell's vireo	Ryan Layden
6/8/2022	Rare plant survey	Shawn Johnston, Alix Fowler
6/14/2022	California gnatcatcher	Brian Lohstroh
6/21/2022	Least Bell's vireo	Ryan Layden
6/21/2022	California gnatcatcher	Brian Lohstroh
6/29/2022	California gnatcatcher	Brian Lohstroh
6/29/2022	Mitigation site assessment	Alix Fowler, Dick Rol
7/8/2022	Least Bell's vireo	Ryan Layden
8/9/2024	Crotch's bumble bee habitat assessment, Crotch's bumble bee survey	Brian Lohstroh
8/16/2024	Crotch's bumble bee survey	Brian Lohstroh, Antonette Gutierrez
8/26/2024	Crotch's bumble bee survey	Brian Lohstroh, Antonette Gutierrez
8/30/2024	Crotch's bumble bee survey	Brian Lohstroh, Antonette Gutierrez
3/30/2025	Western spadefoot survey	Brock Ortega[2]
8/19/2025	Rookery assessment	Brock Ortega[2]
9/1/2025	Vegetation mapping refinement	Brock Ortega[2]
9/8/2025	Jurisdictional Delineation mapping refinement	Anna Touchstone, Katie Dayton, Megan Minter[2]

Notes:

[1] All surveys performed by ICF unless otherwise noted.
[2] Survey performed by Dudek.

Vegetation Communities

Biological surveys were conducted throughout the BSA. ~~Thirteen~~Eighteen vegetation communities or ~~landcover~~land cover types were observed within the BSA. Table 3.3-2 provides the amount of each vegetation community present within the BSA, as illustrated on Figure 3.3-1. The majority of the BSA (~~80~~78%) is made up of developed and

disturbed habitats, with the remainder (~~20~~22%) consisting of natural habitats. The vegetation communities and land cover types observed were coastal and valley freshwater marsh, developed (including golf course, culvert, spillway), Diegan coastal sage scrub – disturbed, disturbed habitat, disturbed wetland, eucalyptus woodland, freshwater (jurisdictional ponds), mule fat scrub – disturbed, non-native grassland, non-native riparian, southern cottonwood–willow riparian forest (including disturbed), southern willow scrub, and southern riparian scrub.

Table 3.3-2. Existing Vegetation ~~Within~~Communities and Land Cover Types within the Biological Study Area (Acres)

Vegetation Community	Project Site		100-Foot Buffer	Total in BSA
	On Site	Off Site		
Natural Habitats				
Coastal and Valley Freshwater Marsh	~~0.68~~1.21	~~0.00~~0	~~0.00~~0	~~0.68~~1.21
Diegan Coastal Sage Scrub – disturbed	0.50	0.11	~~0.00~~0	0.61
Disturbed Wetland	0.~~15~~32	~~0.00~~0	~~0.00~~0	0.~~15~~32
Fresh Water	5.31	~~0.00~~0	~~0.00~~0	5.31
Mule Fat Scrub – disturbed	0.~~52~~49	~~0.00~~0	0.35	0.~~87~~83
Non-native Grassland	0.~~09~~15	~~0.00~~0	0.02	0.~~11~~17
Non-native Riparian	0.~~31~~12	~~0.00~~0	~~0.00~~0	0.~~31~~12
Southern Cottonwood–Willow Riparian Forest	~~4.93~~9.29	~~0.00~~0	~~18.94~~19.12	~~23.87~~28.42
Southern Cottonwood–Willow Riparian Forest – disturbed	~~8.76~~9.19	~~0.00~~0	0.69	9.~~45~~88
Southern Willow Scrub	0.17	0	0	0.17
Southern Riparian Scrub	~~0.00~~0	~~0.00~~0	0.98	0.98
Natural Habitat Subtotals[1]	~~*21.25*~~*26.75*	*0.11*	~~*20.98*~~*21.15*	~~*42.36*~~*48.01*
Developed and Other Landcover				
Developed	7.11	3.30	22.28	32.69
Developed – Golf Course	124.80	0.02	0.91	125.73
Developed – Culvert	~~7.21~~<0.01	~~3.38~~0	~~21.00~~0	~~31.59~~<0.01
Developed – ~~Golf Course~~Spillway	~~128.86~~0.03	~~0.00~~0	~~0.83~~0	~~129.69~~0.03
Disturbed Habitat	~~5.65~~0.52	0.12	0.~~48~~45	~~6.25~~1.09
Eucalyptus Woodland	~~1.32~~0.10	0~~0.02~~	0.~~34~~08	~~1.68~~0.17
Non-native Woodland	~~0.52~~5.57	<0.~~00~~01	0.~~00~~10	~~0.52~~5.67
Developed and Other Subtotals	~~*143.56*~~*138.13*	*3.~~52~~44*	~~*22.65*~~*23.73*	~~*169.73*~~*165.38*
Project ~~Totals~~[1]Totals	164.~~82~~88	3.~~63~~55	~~43.62~~44.88	~~212.07~~213.39

Note:
[1] Totals may not match sum of categories due to rounding.

The existing golf course~~, which~~ is ~~primarily considered~~ "developed~~,~~"" and consists of managed ornamental plantings, including trees and fairways, which are dominated by exotic and ornamental grasses. Areas of

jurisdictional wetlands were identified as their applicable vegetation community. The San Diego River (North Channel) runs through the golf course and has associated riparian habitat, including coastal and valley freshwater marsh, southern cottonwood–willow riparian forest, and disturbed wetland. Within the golf course are also ~~non-jurisdictional artificial~~two human-made ponds ~~that were~~. The western pond contains both native (freshwater marsh, southern willow scrub, southern cottonwood-willow riparian forest) and non-native vegetation communities (disturbed wetland) but the eastern pond contains no native vegetation and is used to irrigate the golf course grounds and was therefore identified as developed. A portion of the existing golf course was subject to the lease originally entered into between the golf course operator and the City of San Diego (as the lessor), dated January 30, 1959 (1959 Lease) for the operation, maintenance, repair, restoration, and replacement of a golf course. The 1959 Lease was terminated, and a subsequent lease was entered into by the parties, effective on January 12, 2012, for the same golf course purposes (2012 Lease). Within the project site, the City of San Diego Multi-Habitat Planning Area (MHPA) covers 12.86 acres of golf course and 0.33 acres of avoided riparian habitat that is located within the 2012 Lease area. The golf course was established in 1958, followed by the 1959 Lease for such purposes, and was subsequently renovated in 1989, long before the original MHPA boundary for the site was established as part of the City of San Diego Multiple Species Conservation Program (MSCP) mapping efforts, which became effective in March 1997. The City of San Diego also subsequently entered into the 2012 Lease that allowed for the continued use as a golf course.

Small amounts of other upland vegetation communities exist, primarily around the edges of the project site, including eucalyptus woodland, non-native grassland, and Diegan coastal sage scrub – disturbed. Detailed information regarding vegetation communities is provided in Appendix E.

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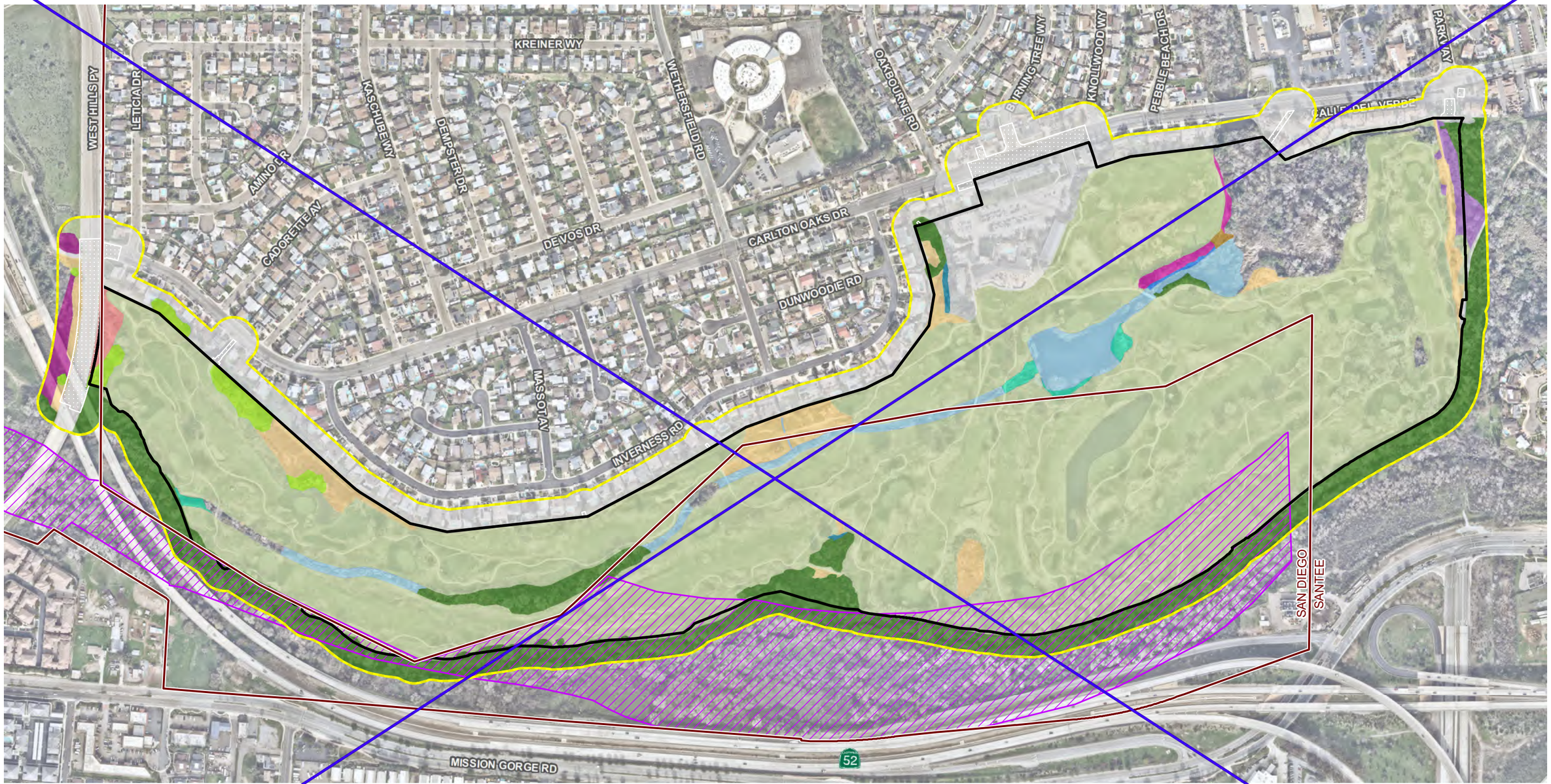

Project Site
Biological Study Area
Offsite Areas
City of Santee/San Diego Municipal Boundary
City of San Diego MHPA

Vegetation Classification (Holland Code)

Riparian
- Mule Fat Scrub-disturbed (63310)
- Non-Native Riparian (65000)
- Southern Cottonwood-Willow Riparian Forest (61330)
- Southern Cottonwood-Willow Riparian Forest-disturbed (61330)
- Southern Riparian Scrub (63320)

Wetlands
- Coastal and Valley Freshwater Marsh (52410)
- Disturbed Wetland (11200)
- Fresh Water (64140)

Upland
- Diegan Coastal Sage Scrub-disturbed (32500)
- Non-Native Grassland (42200)
- Non-Native Woodland (79000)

Developed/Disturbed
- Developed (12000)
- Developed-Golf Course
- Disturbed Habitat (11000)
- Eucalyptus Woodland (79100)

Source: Biological Resources-ICF (2022); Imagery-SANGIS (2023)

DUDEK

N

0 225 450 Feet

1 in = 450 feet

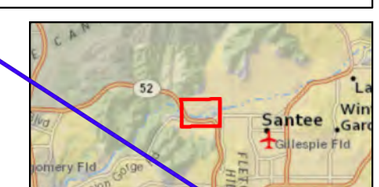

Figure 3.3-1
Vegetation Communities

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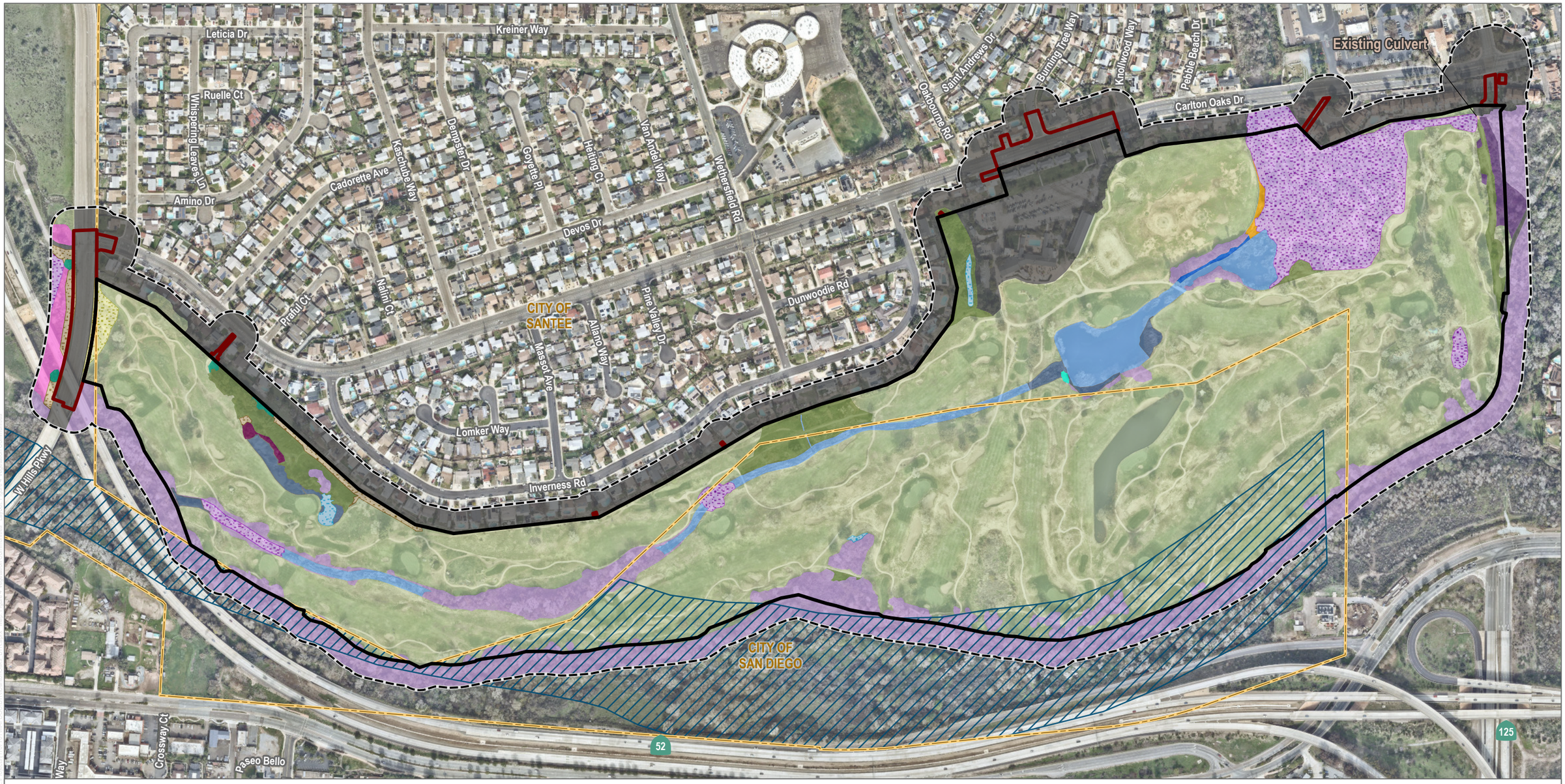

- Project Boundary
- Off-Site Work Area
- Biological Study Area
- City Boundary
- City of San Diego MHPA

Vegetation Communities and Land Cover Types

Riparian
- Mule Fat Scrub (Disturbed)
- Southern Cottonwood-Willow Riparian Forest
- Southern Cottonwood-Willow Riparian Forest (Disturbed)
- Southern Riparian Scrub
- Southern Willow Scrub
- Non-Native Riparian

Wetlands
- Coastal and Valley Freshwater Marsh
- Disturbed Wetland
- Fresh Water

Upland
- Diegan Coastal Sage Scrub (Disturbed)
- Non-Native Grassland
- Non-Native Woodland

Land Cover Types
- Developed
- Developed-Golf Course
- Developed Culvert
- Disturbed Habitat
- Eucalyptus Woodland
- Spillway

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 215 430 Feet

FIGURE 3.3-1

Vegetation Communities

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Special-Status Plant Species

ICF botanists Shawn Johnston and Kelsey Dix conducted focused surveys for special-status plant species within the BSA on April 24 and June 24, 2019 (see Table 3.3-1). The survey completed on June 24, 2019, included a focus on inspecting the BSA for San Diego ambrosia, a federally endangered plant known from the San Diego River floodplain.

Focused plant surveys were updated in 2022. Shawn Johnston conducted a reference site visit at a population of San Diego ambrosia during the week of May 16, 2022, observed the phenology of the known location of San Diego ambrosia, and determined that the species would be readily observable during early June 2022 if it were present within the BSA. ICF botanists Shawn Johnston and Alix Fowler conducted rare plant survey updates on April 28 and June 8, 2022.

Surveys were conducted in accordance with survey protocols set forth by Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 2000), Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018), and CNPS Botanical Survey Guidelines (CNPS 2001). Soil maps and vegetation maps were reviewed to identify areas with higher potential to support special-status plant species.

~~No~~No City of San Diego MSCP covered plant species, nor California Endangered Species Act (CESA)- or Federal Endangered Species Act (FESA)-listed plant species, were observed within the BSA. Four special-status plant species with a California Rare Plant Rank (CRPR) were observed within the BSA within the City of San Diego: Palmer's sagewort (*Artemisia palmeri*; CRPR 4.2), San Diego marsh-elder (*Iva hayesiana*; CRPR 2B.2), Southern California black walnut (*Juglans californica* var. *californica*; CRPR 4.2), and southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*; CRPR 4.2) (Figure 3.3-2, Sensitive Plant Species). Southwestern spiny rush was the only special-status plant species observed within the City of Santee.

Focused surveys were conducted for San Diego ambrosia in the BSA in 2019 and 2022, during dates when San Diego ambrosia would be most readily detectable, but none were observed. San Diego ambrosia is a narrow endemic in the City of San Diego's MSCP Subarea Plan (City of San Diego 1997). It typically occurs on terraces of creek beds, seasonally dry drainages, and floodplains outside of tree canopy. It is often associated with riverwash and sandy alluvium, such as those present in the BSA; however, the BSA has long existed as a developed golf course, which is generally unsuitable for this species. San Diego ambrosia is considered absent from the BSA because of negative results from focused surveys.

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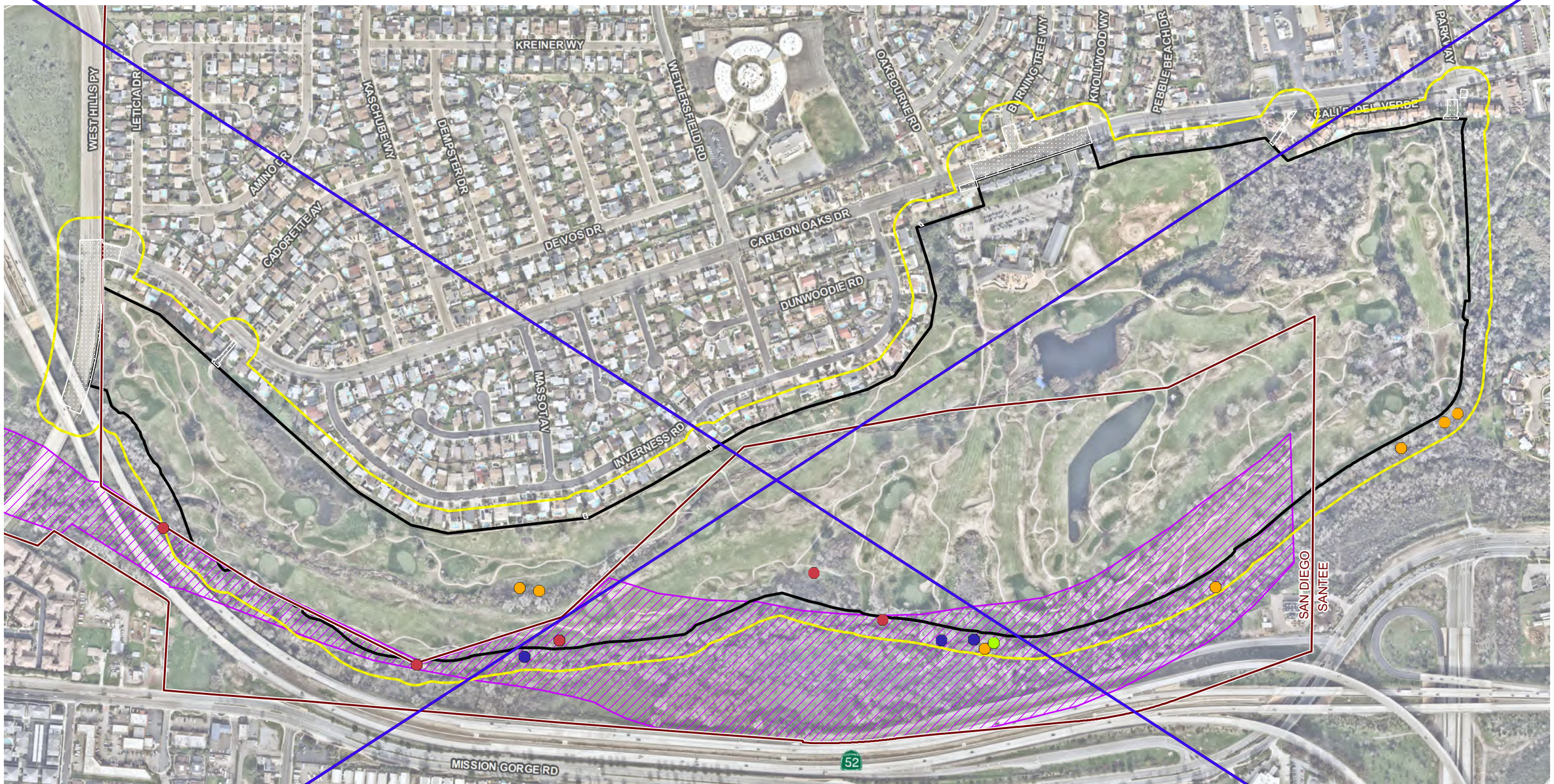

Project Site
Biological Study Area
Offsite
City of Santee/San Diego Municipal Boundary
City of San Diego MHPA

Sensitive Plant Species

- Palmer's sagewort *(Artemisia plamerii)*
- San Diego marsh-elder *(Iva Hayesiana)*
- Southern California black walnut *(Juglans californica)*
- Southwestern Spiny Rush *(Juncus acutus)*

Source: Biological Resources-ICF (2022); Imagery-SANGIS (2023)

DUDEK

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0 225 450 Feet

1 in = 450 feet

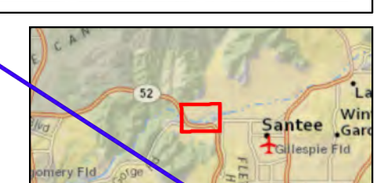

Figure 3.3-2
Sensitive Plant Species

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SOURCE: SANGIS 2025; Open Street Map 2023

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0 220 440 Feet

FIGURE 3.3-2

Sensitive Plant Species

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Special-Status Wildlife Species

In 2019, ICF biologists conducted protocol-level surveys for southwestern pond turtle, coastal California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher~~, and Crotch's bumblebee~~ within areas of suitable habitat for each of the species. No suitable breeding habitat for tricolored blackbird exists in the BSA. In addition, no suitable breeding or overwintering habitat was observed for monarch butterfly (*Danaus plexippus*) in the BSA.

In March 2019, ICF conducted a habitat assessment for Quino checkerspot butterfly and found no suitable habitat; therefore, the species was determined to be absent and no surveys were required. In 2022, ICF repeated protocol-level surveys for coastal California gnatcatcher and least Bell's vireo and conducted focused visual surveys for southwestern pond turtle. The 2022 survey update for least Bell's vireo included suitable habitat previously surveyed in 2019, excluding the San Diego River south of the golf course. The San Diego River was excluded from the survey because CNDDB data (CDFW 2022) and the 2019 survey results show the San Diego River (South Channel) to be consistently occupied by least Bell's vireo; therefore, the San Diego River is considered occupied habitat. The proposed Carlton Oaks Country Club and Resort Project (project) does not propose any direct impacts within the San Diego River (South Channel). ICF conducted four focused surveys for Crotch's bumble bee in potentially suitable habitat within the BSA in August 2024.

Survey results determined that southwestern pond turtle, coastal California gnatcatcher, southwestern willow flycatcher, and Crotch's bumble bee were absent from the BSA. Context supporting the reasonableness of the results follows:

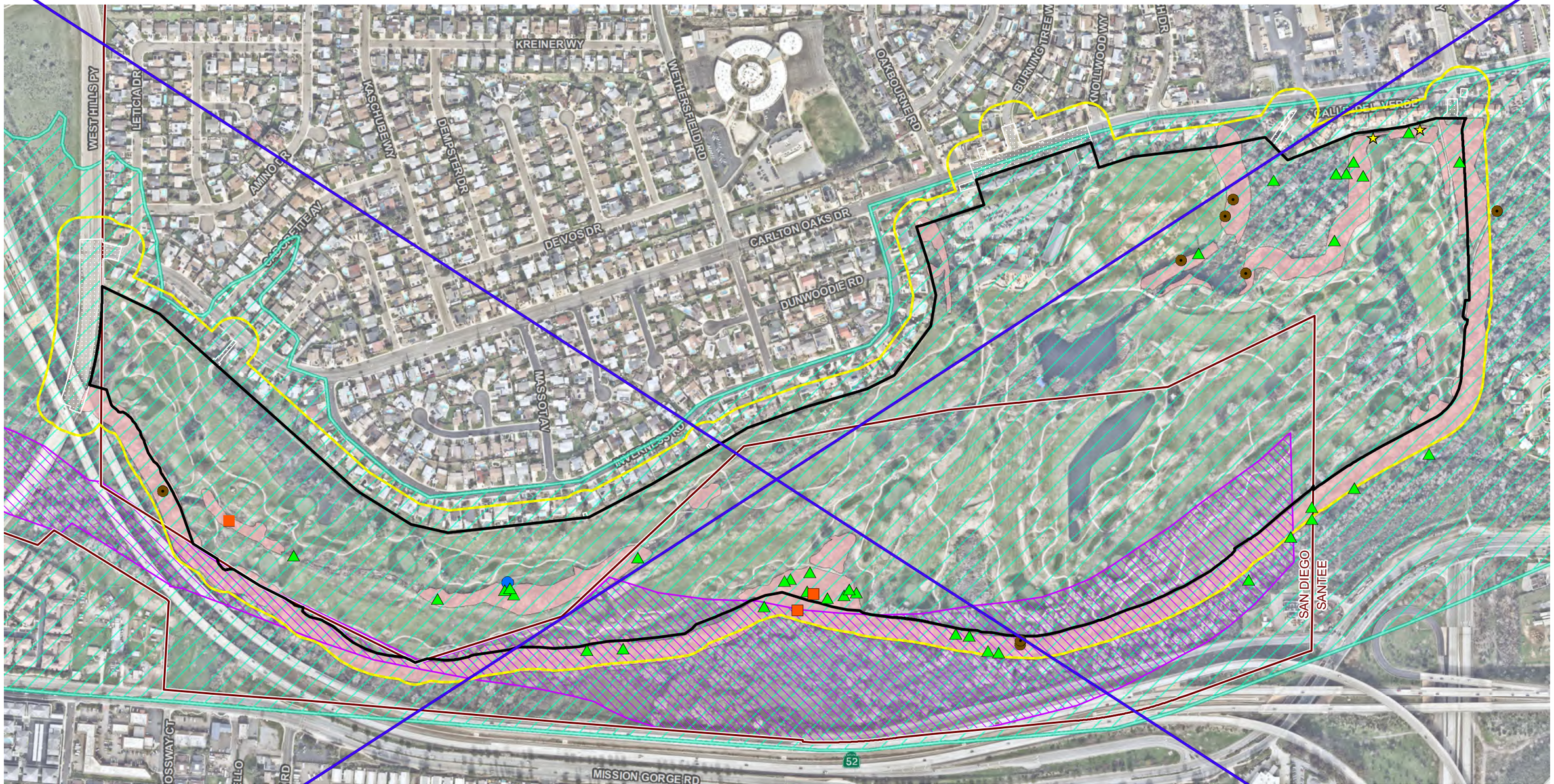
- Ponds within the survey area have intermittent hydrology (i.e., they dry out during some summers). Although pond turtles require permanent waters, visual and trapping surveys were conducted, with negative results.
- Coastal California gnatcatcher is a widespread and frequent resident in suitable coastal sage scrub habitat to the west in Mission Trails. Very little potential habitat for coastal California gnatcatcher is present within the study area, which consists primarily of roadside broom-baccharis establishing on dirt slopes. Protocol-level surveys did not detect the species.
- Potentially suitable habitat for southwestern willow flycatcher is present along the southern edge of the study area (outside of the project site), but this species was not detected during protocol surveys conducted in 2019. Because no habitat for this species will be affected, surveys were not required to be updated. This species has not been reported to breed in the San Diego River in recent years, so the negative results are not anomalous.
- Crotch's bumble bee is nearly endemic to California, and its range includes most of the state. The species has been documented in the City of Santee. Patches of potentially suitable habitat were observed around the golf course. Very few other species of bumble bee were observed, suggesting that habitat suitability for any bumble bee, including Crotch's bumble bee, is very low.

Focused surveys in 2019 and 2022 revealed multiple breeding pairs of least Bell's vireo to be present throughout the BSA (Figure 3.3-3, Least Bell's Vireo ~~Distribution~~Survey Results). No least ~~Bell's~~Bell's vireo were observed utilizing golf course ponds or the riparian vegetation behind the existing Carlton Oaks Country Club. Other FESA species were not expected or were determined to have low potential to occur based on biological determination, including factors such as of lack of suitable habitat or being located outside of the species' range. Analysis of *not-expected* and *low potential to occur species* are described in *Appendix E, ~~Sensitive~~Special-Status Animal Species Potential to Occur ~~in~~, of* the Revised Biological ~~Study~~Survey Report (Appendix E).

Five non-listed special-status and/or MSCP covered species birds were incidentally detected during focused surveys or other biological surveys within the BSA: Cooper's hawk (*Accipiter cooperi*), vermilion flycatcher (*Pyrocephalus obscurus flammeus*), western bluebird (*Sialia mexicana*), yellow warbler (*Setophaga petechia*), and yellow-breasted chat (*Icteria virens*) (Figure 3.3-4, Other Sensitive Species). MSCP-covered southern mule deer (*Odocoileus hemionus*), was also observed. Double-crested cormorant (*Phalacrocorax auritus*) is not a special status or MSCP-covered species, but the on-site rookery is a CDFW-protected wildlife nursery site and is therefore discussed in the Wildlife Nursery Sites section of Threshold 4, within Section 3.3.4, Project Impact Analysis.

Monarch butterfly was incidentally observed foraging on site during surveys for crotch's bumble bee in August 2024. Monarch is proposed threatened under the federal ESA. This species breeds exclusively on milkweeds (*Asclepias* spp.) and in California, may overwinter in protected groves of large trees generally within 1 mile of the Pacific coast. The proposed project site does not contain milkweed for reproduction, and does not contain suitable overwintering habitat, as the site is in an inland valley subject to occasional winter frosts. No proposed critical habitat for this species is present on the proposed project site or anywhere in San Diego County (89 FR 100662). Very limited nectar forage plants for this species are found within the golf course.

In addition, one special-status avian species and two special-status reptile species were determined to have high potential to occur (therefore, treated as if they were observed in suitable habitat) within the BSA, but were not detected incidentally during other biological surveys. These include Belding's orange-throated whiptail (*Aspidoscelis hyperythra hyperythra*), two-striped garter snake (*Thamnophis hammondii*), and white-tailed kite (*Elanus leucurus*). These represent locally common species that occur in limited ranges or species that have been affected by development. Although focused surveys were not conducted to determine the presence/absence of these species, there is a reasonable assumption that these species would periodically to frequently utilize the habitats within the BSA due to the suitability of the habitat and the local distribution of these species. Western spadefoot, a federal candidate for listing, was determined to have low potential to occur. However, because marginal habitat for western spadefoot was located, a focal survey for egg clusters and larvae was performed in 2025; the survey was negative. Additional details regarding survey methods and results are provided in the Revised Biological ~~Study~~Survey Report (Appendix E).



Project Site
Biological Study Area
Offsite Areas

City of Santee/San Diego Municipal Boundary
City of San Diego MHPA

Least Bell's Vireo Critical Habitat
Potentially Suitable Habitat
Brown-headed cowbird *(Molothrus ater)*

Least Bell's Vireo (*Vireo bellii pusillus*)
- Female
- Male
- Male with fledgling
- Pair

Source: Biological Resources-ICF (2022); Imagery-SANGIS (2023)

DUDEK

N

0 225 450 Feet

1 in = 450 feet

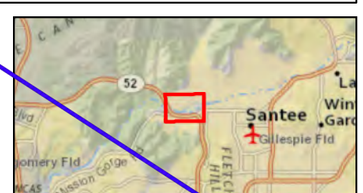


Figure 3.3-3
Least Bell's Vireo Distribution

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Project Boundary
Off-Site Work Areas
Biological Study Area

City of San Diego MHPA
City Boundary
Least Bell's Vireo Critical Habitat (USFWS)

Potentially Suitable Habitat
Potentially Suitable Habitat, not surveyed by ICF but assumed occupied LBVI

2022 Observations
Least Bell's Vireo (*Vireo bellii pusillus*)
Female
Male
Male with fledgling

2019 Observations
Brown-Headed Cowbird (*Molothrus ater*)

Least Bell's Vireo (*Vireo bellii pusillus*)
Male
Male with fledgling
Pair

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 220 440 Feet

FIGURE 3.3-3

2019/2022 Least Bell's Vireo Survey Results

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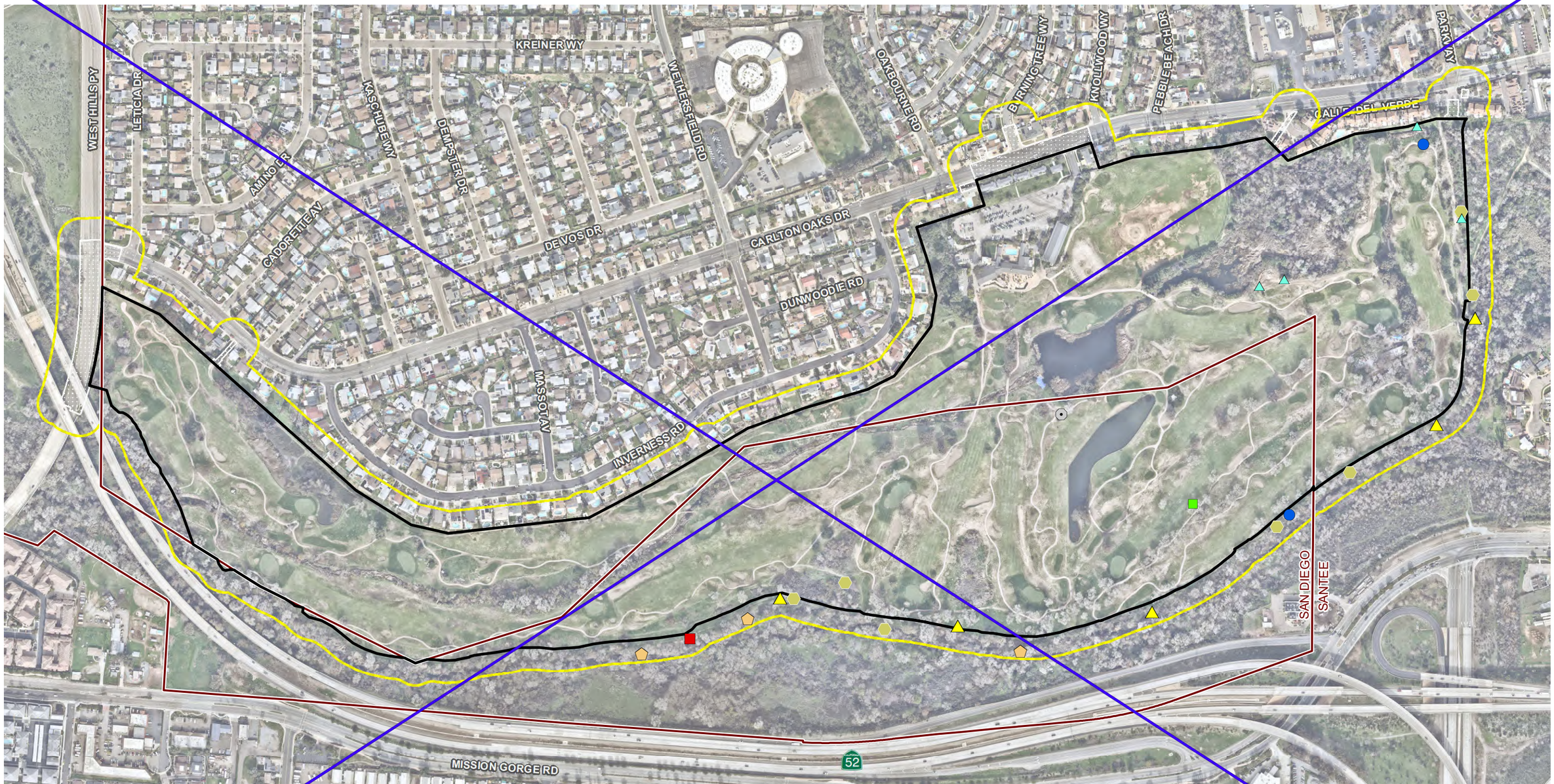

Project Site
Biological Study Area
Offsite Areas
City of Santee/San Diego Municipal Boundary

Other Sensitive Species*
Cooper's hawk
Double-crowned cormorant rookery
Southern mule deer
Western bluebird
Yellow warbler
Yellow-breasted chat
Monarch Butterfly
Vermilion Flycatcher

*Least Bell's Vireo Observations are on Figure 6.

Source: Biological Resources-ICF (2022); Imagery-SANGIS (2023)

DUDEK

0 225 450 Feet
1 in = 450 feet

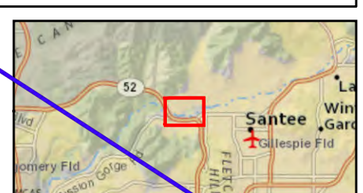

Figure 3.3-4
Other Sensitive Species
Carlton Oaks Country Club and Resort

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Project Boundary
Off-Site Work Area
Biological Study Area

City Boundary
City of San Diego MHPA

Other Sensitive Species*
Cooper's hawk
Double-crowned cormorant rookery
Southern Mule Deer
Western bluebird
Yellow warbler
Yellow-breasted chat
Monarch Butterfly
Vermillion Flycatcher

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 220 440 Feet

FIGURE 3.3-4
Other Sensitive Species

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3.3.2.4 Jurisdictional Waters and Wetlands

A jurisdictional delineation was conducted for this project in 2019 and was updated in 2026 and is included as ~~an appendix~~Appendix I, Updated Jurisdictional Delineation Report, of the Biological Survey Report (Appendix E). Methods and results of the jurisdictional delineation are included here.

Prior to the field visit, aquatic resources were identified using high-resolution aerial imagery overlaid with geographic information system (GIS) data from the NWI and national hydrography dataset (NHD) (USFWS 2019; USGS 2023). These were used to identify the locations of potential areas of U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW jurisdiction within the BSA). In addition to the regionally available data (e.g., NWI and NHD), the approximate location and extent of aquatic resources were identified based on observed vegetation types, topographic changes, and visible drainage patterns. The proposed project is located within the 100-year floodway and floodplain of the San Diego River.

On April 17, 2019, ICF delineators Lanika Cervantes and Nicole Salas conducted the jurisdictional field delineation within the project site; a survey buffer was not included in the field jurisdictional delineation. The large, internal area along Sycamore Canyon Creek and the San Diego River (North Channel) in the northeastern portion of the project site was not delineated because these areas would be avoided by the proposed project (avoidance area). Areas of the San Diego River (North Channel) within the project site, outside of that large avoidance area, were delineated in 2019.

~~Survey results detected 10 features, including two excluded golf course ponds and one concrete V ditch, within the delineation area, which~~In September 2025, Dudek biologists visited the project site to verify and update the aquatic resource delineation previously prepared by ICF. While the mapping remained largely the same, an additional previously un-delineated portion of the site in the northeast corner was included in the 2025 delineation as well as a previously un-mapped wetland in the northwest portion of the site. Furthermore, the extents of riparian habitat have changed since 2019 and were re-delineated by Dudek. An addendum memo to the project's approved aquatic resource delineation report was prepared to summarize the findings of the 2025 site visit and is included as Appendix I to Appendix E of this Draft EIR.

Within the project site, aquatic resources were identified, evaluated, and mapped for potential USACE, RWQCB, and CDFW jurisdiction pursuant to the regulations described in Section 3.3.3, Applicable Laws and Regulations. Each feature evaluated within the proposed project site is depicted on Figure 3.3-5, Jurisdictional Waters and Wetlands, described below, and summarized ~~in Table~~by resource agency in Tables 3.3-3, 3.3-4, and ~~Table 3.3-4~~3.3-5. The totals presented in each table should not be summed due to overlap between resources.

~~Table 3.3-3. Summary of U.S. Army Corps of Engineers and Regional Water Quality Control Board Aquatic Resources Within the Project Site (Including Avoidance Areas)~~

~~Feature~~	~~Linear Feet~~	~~OHWM Width[1]~~	~~USACE/RWQCB[2]~~ ~~Non-Wetland[3] (Acres)~~	~~Wetland[4] (Acres)~~	~~Excluded Waters[5] (Acres)~~
~~Aquatic Resource~~					
~~NWW[1]~~	~~7,218~~	~~54~~	~~7.486~~	~~–~~	~~–~~
~~NWW[2]~~	~~416~~	~~24~~	~~0.24~~	~~–~~	~~–~~
~~NWW[3]~~	~~139~~	~~3~~	~~0.01~~	~~–~~	~~–~~
~~NWW[4]~~	~~76~~	~~–~~	~~–~~	~~–~~	~~–~~
~~NWW[5]~~	~~163~~	~~20~~	~~0.09~~	~~–~~	~~–~~
~~WW[1]~~	~~–~~	~~–~~	~~–~~	~~0.05~~	~~–~~
~~WW[2]~~	~~–~~	~~–~~	~~–~~	~~0.20~~	~~–~~
~~Non-Jurisdictional Feature~~					
~~EW[1]~~	~~–~~	~~–~~	~~–~~	~~–~~	~~1.77~~
~~EW[2]~~	~~–~~	~~–~~	~~–~~	~~–~~	~~1.06~~
~~EW[3]~~	~~253~~	~~–~~	~~–~~	~~–~~	~~0.01~~
~~*Subtotal*~~	~~8,265~~	~~–~~	~~7.82~~	~~0.25~~	~~2.84~~
~~**Total**~~	~~**8,265**~~	~~–~~		~~**8.07**~~	~~**2.84**~~

~~**Notes:** OHWM = ordinary high water mark; USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board.~~
~~[1] Based on average OHWM width in the delineation area.~~
~~[2] USACE/RWQCB jurisdiction was not delineated in the large, interior avoidance area on the northeastern side of the project site.~~
~~[3] Total acreage may not add up to the total shown; total is reflective of rounding GIS raw data in each category.~~
~~[4] Acreage does not include wetlands within the stream channel (i.e., wetlands below the OHWM).~~
~~[5] 33 Code of Federal Regulations 328.3(b)(4)(i) – artificially constructed lakes and ponds created in dry land are **not** considered waters of the United States.~~

~~[6] **Of this, 0.02 acres is concrete/riprap-lined.**~~**Table 3.3-3. Summary of Potential USACE Aquatic Resources within the Project Site**

Feature[1]	USACE		
	Non-wetland Waters (Acres)	Wetland Waters (Acres)	Total (Acres)
NWW 1	8.42	7.17	15.59
NWW 3	0.01	0	0.01
NWW 5	0.09	0	0.09
Total	**8.53**	**7.17**	**15.70**

Notes: Totals may not sum due to rounding. USACE = U.S. Army Corps of Engineers. NWW = non-wetland water.
[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both non-wetland waters and wetlands.

Table 3.3-4. Summary of California Department of Fish and Wildlife Jurisdictional Resources Within the Project Site (Including Avoidance Areas)

Aquatic Resource	Linear Feet	Top of Bank Width[1] (Feet)	CDFW Unvegetated Streambed (Acres)	CDFW Vegetated Streambed (Acres)	CDFW Riparian (Acres)
NWW[1]	7,218	65	2.970	13.708	0.476
NWW[2]	416	60	—	0.606	—
NWW[3]	139	6	—	0.019	—
NWW[4]	76	—	—	—	0.059
NWW[5]	163	30	—	0.122	0.214
Subtotal[2]	*8,012*	—	*2.970*	*14.455*	*0.749*
Total	**8,012**	—			**18.175**

Notes: CDFW = California Department of Fish and Wildlife.

[1] Based on average width in the proposed project site.

[2] Total acreage may not add up to the total shown; total is reflective of rounding GIS data in each category.

Table 3.3-4. Summary of Potential RWQCB Aquatic Resources within the Project Site

Feature1	RWQCB		
	Non-wetland Waters (Acres)	Wetland Waters (Acres)	Total (Acres)
NWW 1	8.42	7.17	15.59
NWW 2	0.23	0	0.23
NWW 3	0.01	0	0.01
NWW 4	0	0.01	0.01
NWW 5	0.09	0	0.09
WW 1	0	0.05	0.05
WW 2	0	0.20	0.20
WW 3	0	0.01	0.01
WW 4	0	0.01	0.01
Total	**8.76**	**7.44**	**16.20**

Notes: Totals may not sum due to rounding. RWQCB = Regional Water Quality Control Board. NWW = non-wetland water; WW = wetland water.

[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both non-wetland waters and wetlands.

Table 3.3-5. Summary of Potential CDFW Aquatic Resources within the Project Site

Feature[1]	CDFW		
	Riparian Habitat (Acres)	Streambed (Acres)	Total (Acres)
NWW 1	9.46	9.82	19.28
NWW 2	0	0.61	0.61
NWW 3	0	0.02	0.02
NWW 4	4.29	0	4.29
NWW 5	0.67	0.14	0.81
NWW 6	0	0.07	0.07
RIP 1	1.18	0	1.18
WW 1	0.23	0	0.23

Feature[1]	CDFW		
	Riparian Habitat (Acres)	Streambed (Acres)	Total (Acres)
WW 2	0.48	0	0.48
WW 3	0.01	0	0.01
WW 4	0.01	0	0.01
Total	**16.32**	**10.65**	**26.97**

Notes: Totals may not sum due to rounding. CDFW = California Department of Fish and Wildlife. NWW = non-wetland water; WW = wetland water; RIP = riparian

[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both streambed and riparian habitat.

Ten ~~aquatic resources~~features within the delineation area were identified and mapped for potential USACE, RWQCB, and CDFW jurisdiction~~. At least 8.07 acres of non-wetland and wetland aquatic resources likely subject to USACE and~~ by ICF in 2019, 2020, and 2021. While the mapping remained largely the same, the 2025 delineation efforts conducted by Dudek resulted in the identification of an additional previously un-mapped feature in the northeast corner of the site, as well as a previously un-mapped wetland in the northwest portion of the site. Additionally, the extents of riparian habitat expanded since ICF's mapping efforts. Therefore, a total of eleven potentially jurisdictional aquatic features were identified within the project site as shown on Figure 3.3-5. Approximately 15.70 acres of non-wetland and wetland aquatic resources likely subject to USACE and 16.20 acres of RWQCB regulatory jurisdiction (i.e., are waters of the state/United States) occur within the delineation area (i.e., ~~the project site); the full extent of USACE/RWQCB jurisdiction was not determined within sections of NWW1 within Avoidance Areas in the northeastern side of the project site because these areas would not be affected by the project. Additionally, 18.175 acres (8,012 linear feet)~~the project site). Additionally, there are 26.97 acres of streambed and riparian resources would be subject to CDFW jurisdiction pursuant to Sections 1600–1616 of the California Fish and Game Code (CFGC). The total acreages for each agency should not be summed due to overlap between jurisdictional aquatic resources. Descriptions for each feature are included in Appendix E.

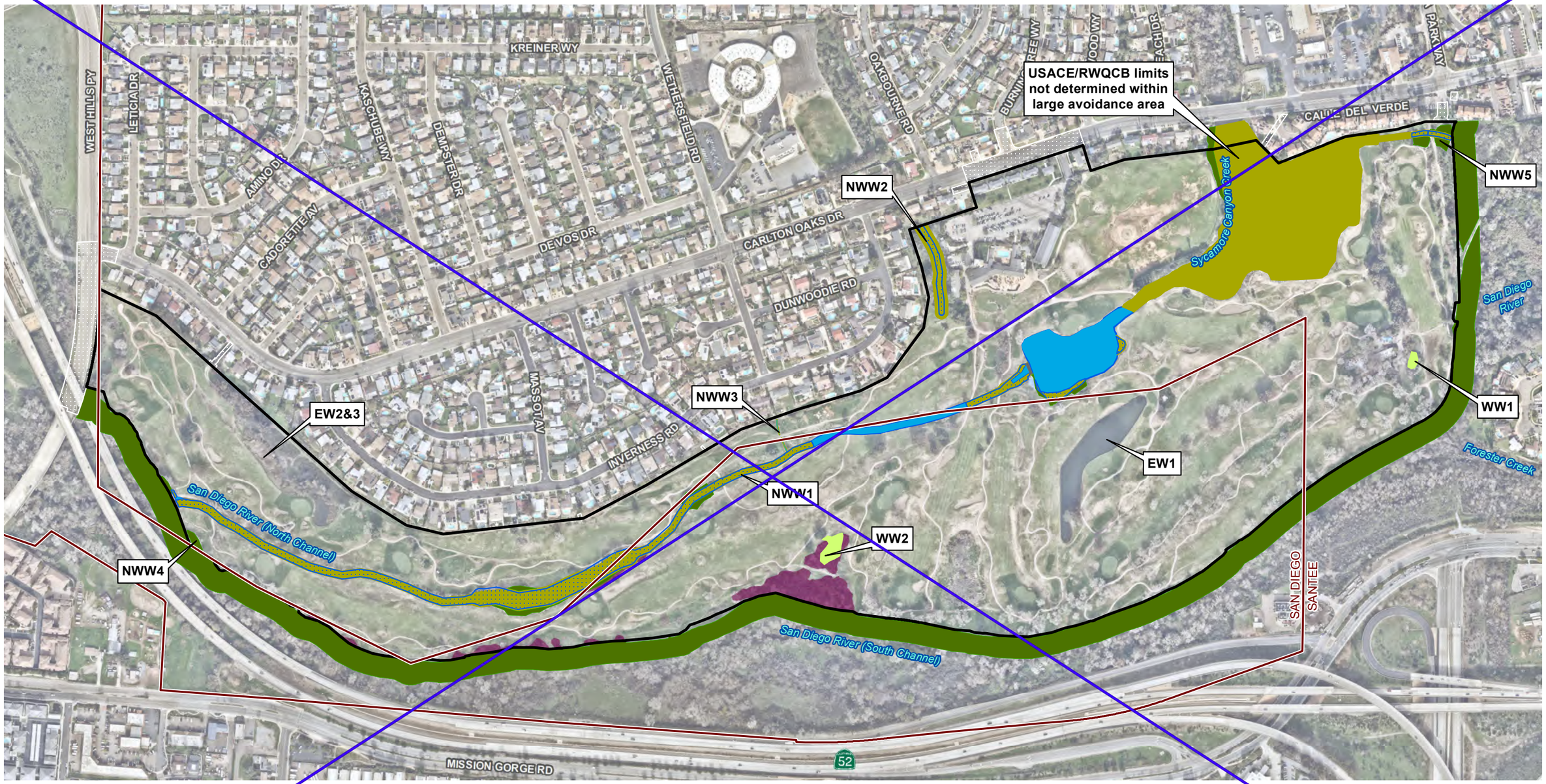
~~Finally,~~The ICF delineation determined that three of the mapped aquatic resources—~~EW1, EW2~~EW 1, EW 2, and ~~EW3~~EW 3—are ornamental and/or artificial aquatic resources, constructed on dry land. These types of features are excluded aquatic resources (33 CFR 328.2(b)) and are not considered waters of the United States. ~~The two managed golf course ponds and concrete V-ditch are artificial, ornamental waters created on dry land for primarily aesthetic reasons for the existing Carlton Oaks golf course. EW2 and EW3 receive urban runoff and stormwater runoff originating from the residential development north of the proposed Residential West area. The artificial V-ditch and western golf course pond are not an aquatic resource because the V-ditch and western pond are not "a relocated tributary, excavated in a tributary, or drain wetlands." Additionally, EW1 (south of the proposed Residential North) is filled with non-potable water and is used to irrigate the golf course grounds.~~

~~Historical aerials confirmed the three features were constructed in dry land (Appendix J in Appendix E, Biological Survey Report). Prior to the construction of the golf course the San Diego River was leveed and rerouted to the south of the proposed project site in the 1960s. This converted the majority of the project site, including the areas inclusive of EW1, EW2, and EW3, to uplands (Attachment 1, Figure 1 in Appendix J of Appendix E), and the surrounding area began to develop with residential homes and the golf course. The excluded waters were constructed into golf course ponds and the concrete V-ditch in the 1980s, where the site had been upland habitat since the rerouting of the San Diego River.~~

~~Per the 2015 Clean Water Rule (33 CFR 328.3(b)(4)(ii)) artificial, constructed lakes and ponds created in dry land are excluded by rule. Both the golf course ponds (EW1and EW2) meet this definition and are therefore, not considered waters of the United States. Likewise, and in accordance with 33 CFR 328.3(b)(3) the concrete V-ditch (EW3) is a ditch that carries ephemeral flows and is not a relocated tributary and was not constructed in a tributary. Thus, EW3 is not considered a water of the United States.~~

An approved jurisdictional determination from the USACE was obtained confirming that CWA jurisdiction does not exist over the excluded waters (i.e., ~~EW1, EW2~~EW 1, EW 2, and ~~EW3~~EW 3) (see Appendix J ~~in~~of Appendix E).

~~[1] Based on average width in the proposed project site.~~
~~[2] Total acreage may not add up to the total shown; total is reflective of rounding GIS data in each category.~~



Project Site
Offsite Areas
City of Santee/San Diego Municipal Boundary

Waters of the U.S. and State
- Nonwetland Water
- Nonwetland Water (Riprap-lined)
- Wetland Waters
- Wetland Waters Within OHWM

CDFW Waters
- Unvegetated Streambed
- Vegetated Streambed
- Riparian

*Within the City of San Diego, these areas are also ESL Wetlands.

City of San Diego ESL Wetland
- Southern Cottonwood-Willow Riparian Forest (61330)

Source: Jurisdictional Resources-ICF (2021); Imagery-SANGIS (2023)

DUDEK

N

0 225 450 Feet

1 in = 450 feet

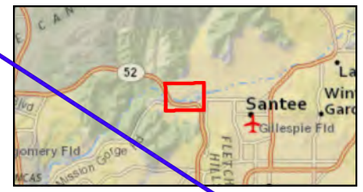


Figure 3.3-5
Jurisdictional Waters and Wetlands

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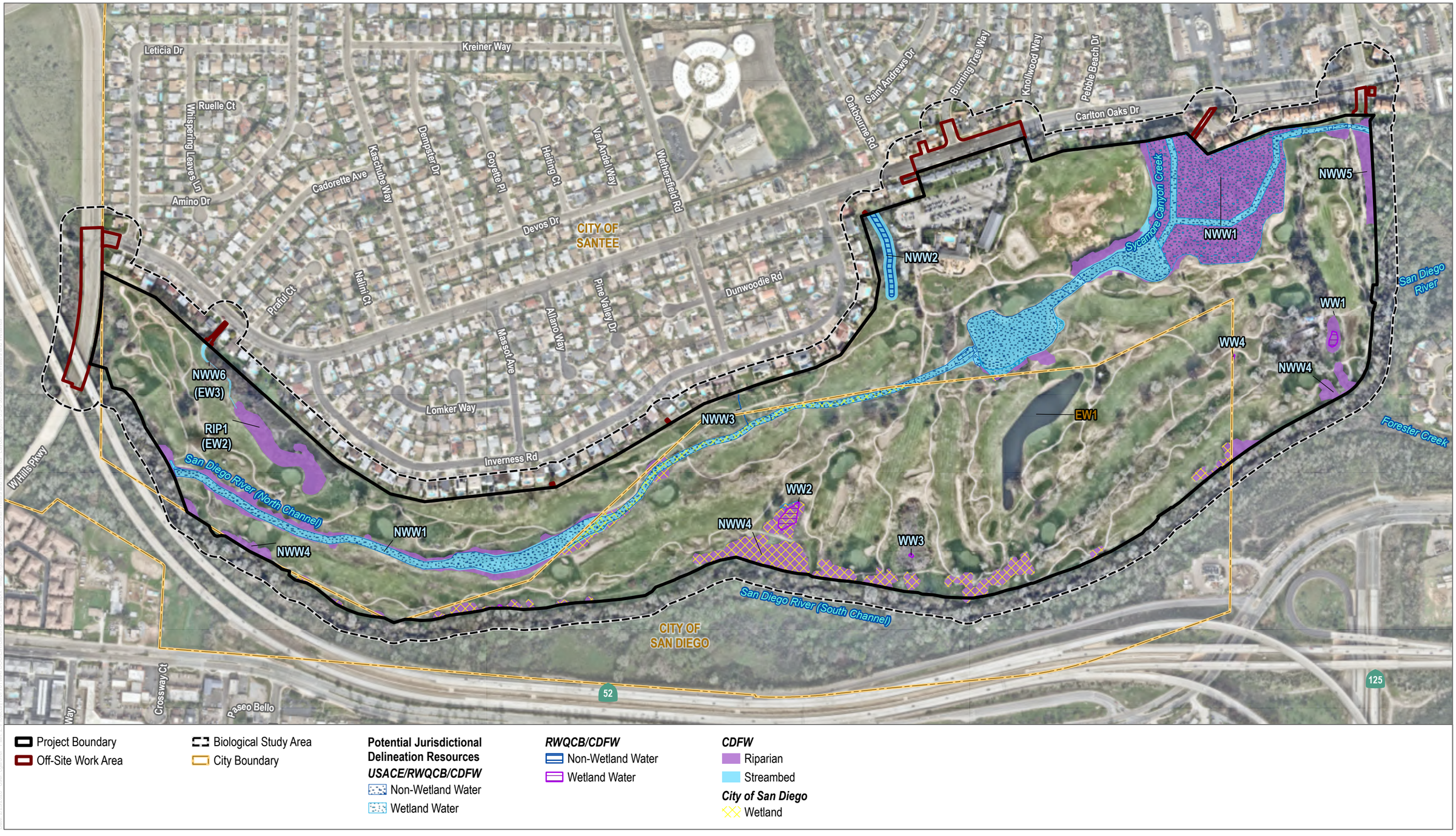

Project Boundary
Off-Site Work Area
Biological Study Area
City Boundary

Potential Jurisdictional Delineation Resources

USACE/RWQCB/CDFW
Non-Wetland Water
Wetland Water

RWQCB/CDFW
Non-Wetland Water
Wetland Water

CDFW
Riparian
Streambed

City of San Diego
Wetland

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

FIGURE 3.3-5
Jurisdictional Waters and Wetlands

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City of San Diego ESL Wetlands

City of San Diego Environmentally Sensitive Lands (ESL) regulations have protections for wetlands. City of San Diego Municipal Code Chapter 11, Article 3, Division 1 includes the following wetland definition: "Wetlands are defined as areas which are characterized by any of the following: (1) All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to … riparian forest … riparian woodlands, riparian scrub…." Riparian habitat alongTherefore, the San Diego River (South Channel)majority of the jurisdictional habitats within the BSA within the City of San Diego limits meets this definition ofare considered City of San Diego Environmentally Sensitive Lands (ESL Wetlands) wetlands. The riparian and wetland habitat along the San Diego River (North Channel) within the City of San Diego also meetswetlands total 5.76 acres, including 1.75 acres within the definition of ESL Wetlands (Feature NWW1,MHPA and 4.01 acres outside the MHPA as discussedsummarized in Appendix E, SectionTable 3.3.1). 6.

Table 3.3-6. Summary of City of San Diego Wetlands within the Project Site

	City of San Diego Wetlands		
	Within MHPA	Outside MHPA	Total
Feature	Acres	Acres	Acres
Aquatic Resource			
NWW 1	0.05	1.78	1.83
NWW 3	0	0.01	0.01
NWW 4	1.70	1.75	3.45
WW 2	0	0.48	0.48
Total	**1.75**	**4.01**	**5.76**

Notes: Totals may not sum due to rounding. NWW = non-wetland water; WW = wetland water.

The City of San Diego ESL regulations state "It is intended for this definition to differentiate for the purposes of delineating wetlands, between naturally occurring wetlands and wetlands intentionally created by human actions" with artificially created areas not considered wetlands under this definition. Excluded Waters 1, 2, and 3 are water bodiesAccordingly, areas within the site that exhibit wetland characteristics but are artificially created do not qualify as wetlands under the City of San Diego's definition. Excluded Waters (EW) 1 is a water body intentionally created by human actions in the creation of the golf course, as demonstrated in historic photos in Appendix J to Appendix E. Because these Additionally, WW 3 and WW 4 are isolated, human-influenced (fed by the golf course pondsirrigation), depression features. As these depressional features (WW 3 and WW 4) and golf course pond (EW 1) were intentionally created by human actions within upland areas of the golf course, they are not wetlands subject to City of San Diego ESL regulations.

The San Diego River (South Channel) and its associated riparian habitat (refer to features non-wetland water [NWW] 4 and wetland water [WW] 2 on Figure 3.3-5) exist beyond the southern boundary of the project site, which is separated from the golf course by a tall earthen berm. Willows and other riparian-associated vegetation exist north of the berm within the limits of the golf course in the south-central portion of the project site. (refer to feature WW 2 on Figure 3.3-8). These areas were mapped within the vegetation layer as southern cottonwood–willow riparian forest. These areas are separated from normal overflow of the San Diego River (South Channel) by the tall berm but may be inundated by flooding from Sycamore Canyon Creek or from extreme flow events of the San Diego River (North Channel). The cottonwoods and willows would be able to persist because of the elevated water table

associated with the perennial San Diego River (South Channel). This riparian area is considered a City of San Diego ESL Wetland because of the presence of riparian vegetation communities~~, but it is not considered CDFW jurisdictional because of the presence of the berm and the associated lack of connection to wetland hydrology. This forest is within avoidance areas and will not be removed.~~.

Sycamore Canyon Creek drains the nearly 10,000-acre watershed of Sycamore and West Sycamore Canyons in east Marine Corps Air Station Miramar, northern Santee, and the County of San Diego Sycamore Canyon/Goodan Ranch Preserve. To the north of the project site, Sycamore Canyon Creek parallels the Santee Lakes and enters the project site under the existing Carlton Oaks Drive Bridge~~.~~ (refer to feature NWW 1 on Figure 3.3-5). Sycamore Canyon Creek then merges with the San Diego River (North Channel) and encounters a historical impoundment within the existing golf course. The channel (now called the San Diego River [North Channel]) passes over a spillway and then traverses the existing golf course in a mildly incised earthen channel before meeting the mainstem San Diego River (South Channel) at the southwestern side of the project site. The impoundment along the San Diego River (North Channel) is an intermittent feature and dries out during some summers, as it did in 2021. The City of San Diego municipal boundary intersects with the San Diego River (North Channel) below the impoundment (Figure 3.3-5). The San Diego River (North Channel) travels 1,735 feet within the City of San Diego; all of the San Diego River (North Channel) within the City of San Diego would be considered a City of San Diego ESL Wetland based on the frequent occurrence of native and non-native hydrophytic vegetation.

The riparian habitat (NWW 4 and WW 2) to the north of the berm was observed to contain breeding least Bell's vireo habitat in 2019. Least Bell's vireo is widespread within this section of the San Diego River during the summer breeding season. ~~This~~These ESL ~~Wetland is~~Wetlands are considered occupied least Bell's vireo habitat. Least Bell's vireo were observed along the San Diego River (North Channel) (NWW 1) within the City of San Diego during protocol-level surveys conducted in 2022.

3.3.2.5 City of San Diego Wetland Buffer

The City of San Diego Biology Guidelines (City of San Diego 2018) requires that a wetland buffer be maintained around all City wetlands as appropriate to protect the function and values of the wetland. The wetland buffer width, along with characteristics of the buffer area (vegetation communities present, etc.), provides protection for the functions and values of the City wetlands, according to the City's Biology Guidelines (City of San Diego 2018a) and Section 320.4(b)(2) of the USACE General Regulatory Policies (33 CFR 320–330), including wildlife habitat, food chain productivity (i.e., foraging areas for wildlife), water quality, ground water recharge, and protection from storm and flood waters. Because the golf course is the existing land use occurring within the wetland buffer surrounding the City of San Diego wetlands, there would be no change to the wetland buffer width or characteristics with project implementation.

3.3.2.6 Habitat Connectivity ~~and~~, Wildlife Corridors, and Wildlife Nursery Sites

Wildlife Movement Corridors

Wildlife movement corridors are areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features, such as canyon drainages, ridgelines, or areas with vegetative cover, provide corridors for wildlife movement. Wildlife movement corridors are

important because they provide access to mates, food, and water, allow the dispersal of individuals away from high population–density areas, and facilitate the exchange of genetic traits between populations.

The BSA is immediately north of and adjacent and parallel to an east–west running portion of the mainstem of the San Diego River (South Channel), being situated in the floodplain of the river (Figure 3.3-6, Adjacent Lands). Situated as it is in the river floodplain, the topography is generally flat throughout most of the BSA. Residential housing is found immediately south of the river and SR-52. Most of the San Diego River (South Channel) is within the boundaries of the MHPA. The BSA is bounded by residential housing to the north and Carlton Oaks Drive on the northeast. Situated north across Carlton Oaks Drive is the 190-acre Santee Lakes Recreation Preserve, which consists of several fish-stocked lakes, campgrounds, and semi-natural areas.

The *California Essential Habitat Connectivity Project* (Spencer et al. 2010) was commissioned to encourage a functional network of connected wildlands for the continued support of California's diverse natural communities. The report identifies large, relatively natural habitat blocks that support native biodiversity (Natural Landscape Blocks) and areas essential for connectivity between Natural Landscape Blocks (Essential Connectivity Areas). For the South Coast Region, the report identifies an Essential Connectivity Area from Mission Trails/Santee to the northeast to Central Poway, and County of San Diego Sycamore Canyon/Goodan Ranch Preserve to the large blocks of habitat to the east of SR-67, including City of San Diego Cornerstone Lands at San Vicente Reservoir, CDFW San Vicente Highlands Open Space Preserve, County of San Diego Boulder Oaks Preserve, El Capitan Preserve, and Oak Oasis Preserve, and open space beyond these preserve lands. The BSA is not within this or other Essential Connectivity Areas.

The MSCP Plan includes designated Biological Core and Habitat Linkages, which served as analytical tools to assist in testing preserve design criteria for the MHPA (City of San Diego 1998). The MSCP Plan includes the area from Mission Trails through East Elliott to Sycamore Canyon/Goodan Ranch Preserve as a Habitat Linkage; it does not identify a formal biological linkage to the east along the San Diego River through the City of Santee (see Table 2.2 in City of San Diego 1998). The MSCP Plan does not identify wildlife corridors beyond those described in the MSCP Plan. The ~~wildlife agency draft~~MSCP Plan (City of San Diego 1998) and the City of Santee Subarea Plan (2025) identifies a biological core area or wildlife movement corridor along the San Diego River between Mission Trails, through Santee, east toward the community of Lakeside, as shown in Figure 3.3-6, Adjacent Lands.

Although the *California Essential Habitat Connectivity Project* and the MSCP Plan do not include the San Diego River through Santee as a designated wildlife linkage, this analysis considers the San Diego River as a large and important linear habitat feature consisting primarily of various riparian, wetland, and open water habitat types, in addition to other habitat types, such as upland scrub. This river environment provides nesting and refugia habitat for a large number of native bird species, as well as nursery and refugia sites for many other species, including mammals, reptiles, amphibians, and invertebrates. It also provides the important function of allowing animals, seeds, and nutrients to move throughout the landscape ecosystem for dispersal or to allow for life-cycle completion. The San Diego River is heavily constrained by residential development to the north and south of the project site, by the City of Santee and El Cajon's Fletcher Hills, respectively. To the east of the project site, the San Diego River is heavily constrained by transportation corridors and residential and commercial development in the City of Santee and the communities of Lakeside and Winter Gardens. To the west of the project site, the San Diego River opens into the large open space of Mission Trails Regional Park and the undeveloped East Elliott areas of Marine Corps Air Station Miramar.

The San Diego River (South Channel) contains expansive riparian forest and the main perennial channel of the San Diego River. The San Diego River (South Channel) borders the project site to the south. A berm exists along much of the southern boundary of the project site, which has a dirt trail on or along the base of the berm for most of that boundary. Golf course maintenance staff report seeing wildlife species consistently utilizing the dirt trail for movement at dusk, dawn, and night. This is not surprising, considering the ease of movement along an isolated dirt path adjacent to the shelter of the riparian forest located south of the project site. The continuous riparian forest corridor of the San Diego River (South Channel) is considered to be the primary movement corridor.

The existing Carlton Oaks Golf Course is functionally a savanna, with expansive "lawns" of golf course features, with scattered ornamental trees throughout. The golf course provides for active recreation during the day, but is essentially unoccupied by humans at night, allowing for easy, additional wildlife movement through this savanna-like community. The golf course also includes the San Diego River (North Channel). The San Diego River (North Channel) has intermittent hydrology and lacks shrub and tree cover over much of its length; common vegetation in the channel includes invasive, herbaceous floating water-primrose (*Ludwigia peploides*), which does not provide function cover for mammal movement. The golf course and the San Diego River (North Channel) can serve as a secondary movement corridor for wildlife following the San Diego River (South Channel).

A few examples of wildlife species observed moving through or living in this wildlife corridor are southern mule deer, coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), great blue heron (*Ardea herodias*), snowy egret (*Egretta thula*), red-tailed hawk (*Buteo jamaicensis*), Nuttall's woodpecker (*Dryobates nuttallii*), least ~~Bell's~~Bell's vireo, western bluebird, and yellow-breasted chat.

Wildlife Core Areas

The MSCP (City of San Diego 1998) identifies the connection from Mission Trails northeast though East Elliott to San Vicente Cornerstone Lands as part of a generalized core biological area (Mission Trails/Kearney Mesa/East Elliott/Santee). The City of San Diego's MSCP Subarea Plan also identifies a part of the generalized core biological area extending from Mission Trails to the vicinity of the BSA. The City of San Diego's MSCP Subarea Plan (City of San Diego 1997) refined the generalized core biological area of the MSCP Plan into the specific MHPA, which is a "hard line" preserve, noting that not all of the generalized core biological area would be included in the hardline preserve. The San Diego River (south channel) includes portions of the existing golf course designated as MHPA. Biological resource core areas, such as the riparian corridor along the San Diego River (South Channel) to the south of the BSA, generally have high value.

Sycamore Canyon Creek to the north of Carlton Oaks Drive averages 200-feet wide, constrained by existing residential housing to the west and a 6-foot-tall chain-link fence separating the creek from Santee Lakes. Therefore, the BSA would provide constrained connectivity for species moving between the San Diego River environment and the Santee Lakes Recreation Preserve.

The municipal boundaries of the Cities of San Diego and Santee are intertwined across the golf course and the San Diego River. The habitat connectivity analysis is a landscape-scale analysis and is the same for both jurisdictions.

Wildlife Nurseries

Double-crested cormorant occurs commonly as a non-breeding visitor in both salt- and freshwater bodies in San Diego County. It is widespread and common as a winter visitor ~~but~~. It is very rare as a breeding population. ~~A rookery~~

~~was observed in a eucalyptus along a pond within the San Diego River (North Channel) in the center of the golf course in the City of San Diego.~~ The *San Diego County Bird Atlas* reported that only two rookery locations were known from San Diego County (Unitt 2004~~), with~~); Carlton Oaks ~~representing~~represents a new rookery unreported in the Bird Atlas.

A rookery was observed in a eucalyptus along a pond within San Diego River (North Channel) within the center of the golf course in the City of San Diego (Figure 3.3-4). Based on the August 19, 2025 Dudek assessment conducted by senior wildlife biologist Brock Ortega, the rookery nests occurred in two separate portions of the eucalyptus tree in open-canopied higher branches. The northern opening contained approximately 11 nests and the southeastern opening contained approximately 4 nests. No birds were present during the field visit, but based on the number of nests, it is assumed that up to 15 pairs (30 adults) may use the tree. The rookery is located in the heart of the golf course near the central hub of activity, approximately 500 feet from the clubhouse and 650 feet from residences along Inverness Road. The tree and rookery are situated over a cart path and on the fairway. A large, roughly 1-foot by 2-foot upward-facing high-powered accent light sits at the base of the neighboring tree and currently illuminates this tree at night. It appears that the cormorants are accustomed to constant daytime human activity and nighttime illumination. Rookeries of this species are considered special-status by CDFW and are wildlife nursery sites protected under ~~the California Environmental Quality Act (CEQA).~~CEQA.

~~The municipal boundaries of the Cities of San Diego and Santee are intertwined across the golf course and the San Diego River. The habitat connectivity analysis is a landscape-scale analysis and is the same for both jurisdictions~~

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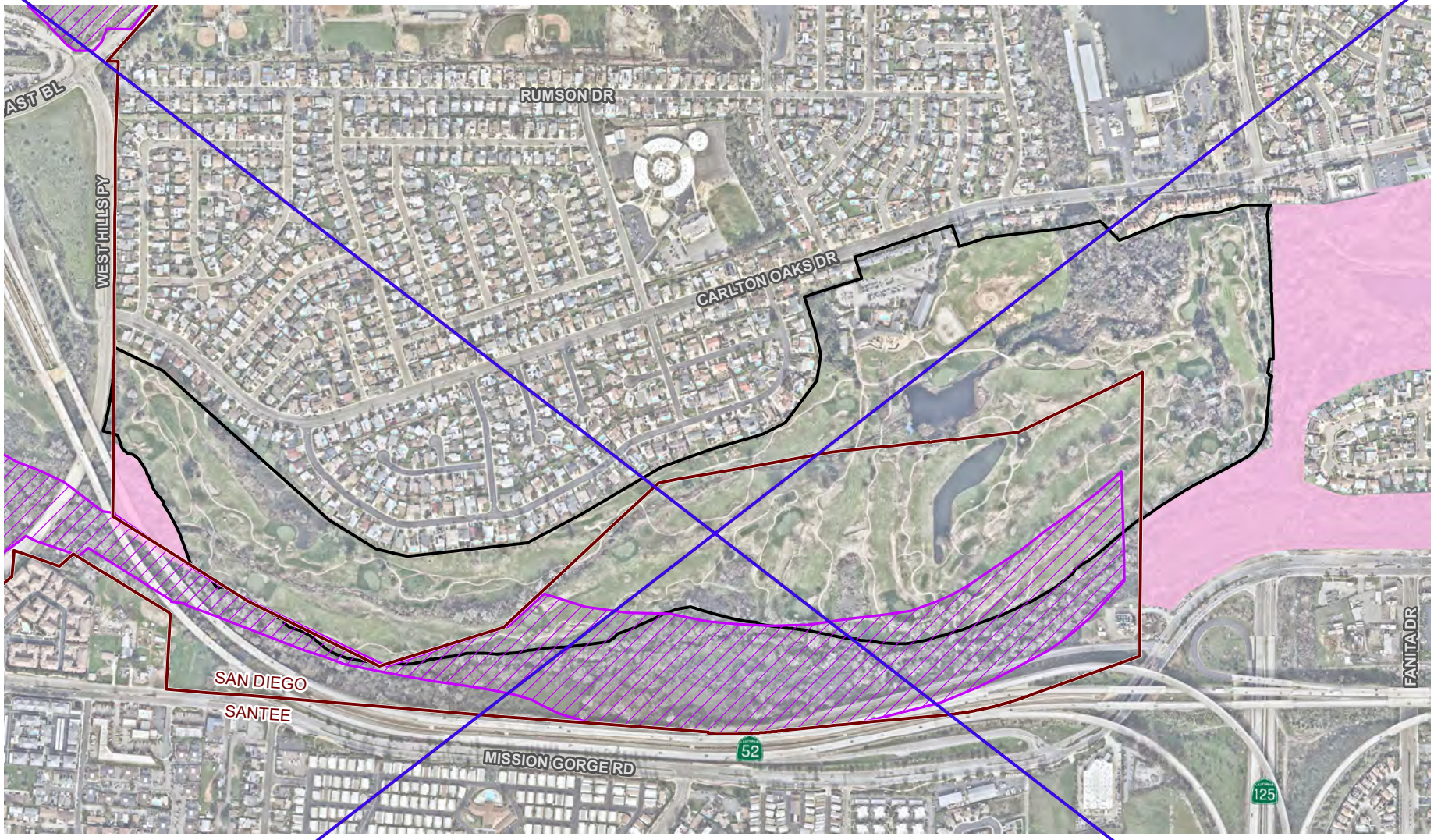

Project Site

City of Santee/San Diego Municipal Boundary

City of San Diego MHPA

Existing Protected Open Space or Conservation Lands

Source: Imagery-SANGIS (2023)

DUDEK

N

0 400 800 Feet

1 in = 800 ft

Figure 3.3-6
Adjacent Lands

\\PDCCITRDSGIS02\Projects_3\Lennar\CarltonOaks_Residential\Figures\Doc\BTR\Bio_Results_Memo\Fig09_AdjacentLands.mxd: User: 10542: Date: 6/12/2024

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SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 237.5 475 Feet

FIGURE 3.3-6

Adjacent Lands

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3.3.2.~~6~~7 Regional Planning

San Diego MSCP

Portions of the project site within the City of San Diego are covered by the City of San Diego's MSCP Subarea Plan. The portion of the project site within the City of Santee is not a part of the Santee Subarea Plan and is therefore not discussed here.

City of San Diego MHPA

The City of San Diego MHPA ~~is present~~ overlaps a portion of the golf course along ~~and within~~ the southern boundary of the BSA~~. Of the 13.19 acres within the MHPA, 12.86 acres of golf course and associated recreational use that existed prior to adoption~~ (Figure 3.3-6). The golf course was established in 1958 and renovated in 1989, long before the original MHPA boundary for the site was established as part of the ~~City of San Diego's~~regional MSCP ~~Subarea Plan and~~mapping efforts, which became effective in March 1997. Of the 13.42 acres of the project site that overlap the MHPA ~~(and is subject to the 2012 Lease for such purposes)~~, there are 6.96 acres of developed-golf course, which would be ~~redesigned, and 0.33~~permanently impacted by the golf course redesign. The remaining project site acreage that overlaps the MHPA would be avoided by the proposed project (i.e., 6.45 acres: 4.66 acres of developed-golf course and 1.80 acres of southern cottonwood–willow riparian forest ~~would be avoided.~~). Although impacts would occur within the MHPA, the existing uses, which predate the MSCP, (i.e., golf course) within the MHPA would not change with project implementation.

City of San Diego MSCP Subarea Plan Species

The City of San Diego's MSCP Subarea Plan covered animal species observed within the BSA were least Bell's vireo, Cooper's hawk, mule deer, and western bluebird. Belding's orange-throated whiptail is MSCP-covered, was determined to have a high potential to occur, and is therefore treated as if it were observed. No other MSCP-covered plant or animal species were observed or determined to have a high potential to occur.

Least Bell's vireo is the only one of these MSCP species which has specific conditions of coverage under the City of San Diego's MSCP Subarea Plan (City of San Diego 1997). The conditions of coverage in the City of San Diego's MSCP Subarea Plan are as follows:

> Jurisdictions will require surveys (using appropriate protocols) during the CEQA review process in suitable habitat proposed to be affected and incorporate mitigation measures consistent with the 404(b)1 guidelines into the project. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. Jurisdictions must require new developments adjacent to preserve areas that create conditions attractive to brown-headed cowbirds to monitor and control cowbirds. Area specific management directives must include measures to provide appropriate successional habitat, upland buffers for all known populations, cowbird control, and specific measures to protect against detrimental edge effects to this species. Any clearing of occupied habitat must occur between September 15 and March 15 (i.e., outside of the nesting period).

The project complies with the conditions of coverage listed above, as discussed below. During the CEQA review process, surveys were conducted using appropriate protocols. Mitigation measures were designed consistent with

the 404(b)1 guidelines. Brown-headed cowbirds (*Molothrus ater*) are a nest parasite for songbirds, including least Bell's vireo. Brown-headed cowbirds prefer habitats with scattered trees among grassland vegetation–woodland edges, including prairies, fields, pastures, and orchards, and is often associated with cows and agriculture (Unitt 2004; Lowther 2020). Brown-headed cowbirds are widespread in San Diego County (Unitt 2004) and were observed during least Bell's vireo surveys in 2019 and 2022 (see Appendix E). The proposed project would not create new development adjacent to preserve areas that are more attractive to brown-headed cowbirds than the existing golf course conditions. No other specific Area-Specific Management Directives are applicable to the proposed project. No clearing of occupied habitat would occur within the City of San Diego or the MHPA.

Mule deer, western bluebird, and Belding's orange-throated whiptail are non-listed animal species covered under the City of San Diego MSCP Subarea Plan. These three species do not have conditions for coverage (City of San Diego 1998).

3.3.3 Applicable Laws and Regulations

3.3.3.1 Federal

Federal Endangered Species Act

FESA was enacted in 1973 to provide protection to threatened and endangered species and their associated ecosystems. Species listed as endangered or threatened by the USFWS are protected under FESA Section 9, which forbids any person to take an endangered or threatened species. *Take* is defined in FESA Section 3 as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The U.S. Supreme Court ruled in 1995 that the term *harm* includes destruction or modification of habitat. FESA Sections 7 and 10 may authorize *incidental take* for an otherwise lawful activity (e.g., a development project), if it is determined that the activity would not jeopardize survival or recovery of the species. FESA Section 7 applies to projects where a federally listed species is present, and there is a federal nexus, such as where a federal CWA Section 404 permit (e.g., impacts on waters of the United States) is required. FESA Section 10 applies when a federally listed species is present, but no federal nexus is present.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was enacted in 1918 to prohibit the killing or transport of native migratory birds, or any part, nest, or egg of any such bird, unless allowed by another regulation adopted in accordance with the MBTA. A list of migratory bird species that are protected by the MBTA is maintained by USFWS, which regulates most aspects of the taking, possession, transportation, sale, purchase, barter, exportation, and importation of migratory birds. Under the MBTA, *take* means to "kill, directly harm, or destroy individuals, eggs, or nests or to otherwise cause failure of an ongoing nesting effort." Permits are available under the MBTA through USFWS, and authorization for potential take under the MBTA is addressed as part of the FESA Section 7 consultation process. The proposed project must be analyzed to ensure consistency with the MBTA, including avoidance of take of nesting birds, their eggs, or activities that may cause nest failure. Any potential take must be either permitted through consultation with USFWS or avoided and minimized through mitigation measures.

Bald and Golden Eagle Protection Act

When first enacted in 1940, the Bald and Golden Eagle Protection Act prohibited the take, transport, or sale of bald eagles (*Haliaeetus leucocephalus*), their eggs, or any part of the eagle. The act was amended in 1962 to extend prohibitions to the golden eagle (*Aquila chrysaetos*). *Take* is defined by the act as being to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb."

Clean Water Act

In 1948, Congress first passed the Federal Water Pollution Control Act. This act was amended in 1972 and became known as the CWA. The CWA regulates the discharge of pollutants into waters of the United States.

Under CWA Section 404, permits need to be obtained from the USACE for discharge of dredge or fill material into waters of the United States. The USACE issues two types of CWA 404 permits: Individual and General; there are two types of General Permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Under CWA Section 401, water quality certification from the RWQCB must be obtained if impacts would occur on waters of the United States. This certification is most frequently required in tandem with a CWA Section 404 permit request.

3.3.3.2 State

California Environmental Quality Act

CEQA requires that biological resources be considered when assessing the environmental impacts resulting from proposed actions. CEQA does not specifically define what constitutes an "adverse effect" on a biological resource. Instead, lead agencies are charged with determining what specifically should be considered an impact. CEQA provides a checklist regarding what types of biological resources should be considered in this process.

California Fish and Game Code

The CFGC contains a variety of environmental regulations including prohibitions against taking sensitive plants and wildlife, descriptions of the Lake and Streambed Alteration Program, and CESA. The CFGC regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles. It also provides additional protections for endangered species and regulations to protect lakes and streams and associated fish and wildlife habitat. Provisions regarding the protections for nesting birds are described in CFGC Section 3500 et seq. and make it unlawful to take, possess, or needlessly destroy the nest or eggs of most wild birds.

Lake and Streambed Alteration Program

The Lake and Streambed Alteration Program is administered by the California Department of Fish and Wildlife (CDFW) and is found in Section 1600 et seq. of the CFGC. The regulations define that an entity shall not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake. CDFW must be notified if a project would affect lake or streambed resources.

California Endangered Species Act

CESA prohibits the "take" of any species that the California Fish and Game Commission determines to be a threatened or endangered species. CESA is found in CFGC Sections 2050–2116. CESA is administered by CDFW, and incidental take of listed species can be approved by the CDFW. *Take* is defined by CESA as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill. Notably, this differs from the FESA definition.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the California Fish and Game Commission to designate plants as "rare" or "endangered." There are 64 species of plants designated and protected as rare under the NPPA. Species designated as endangered are regulated under the provisions of CESA. The NPPA prohibits take of endangered or rare native plants, but it includes some exceptions for agricultural and nursery operations, emergencies, and—after properly notifying CDFW—certain types of vegetation removal. It is primarily codified in CFGC Section 1900 et seq.

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act is the California equivalent of the CWA. It provides for statewide coordination of water quality regulations through the establishment of the California State Water Resources Control Board and nine separate RWQCBs that oversee water quality on a day-to-day basis at the regional/local level.

Natural Community Conservation Planning Act of 1991

The Natural Community Conservation Planning (NCCP) Act is designed to conserve natural communities at the ecosystem scale, while accommodating compatible land use. The CDFW is the principal state agency implementing the NCCP Program. NCCP plans developed in accordance with this act provide for comprehensive management and conservation of multiple wildlife species and identify and provide for the regional or areawide protection and perpetuation of natural wildlife diversity, while allowing compatible and appropriate development and growth. The San Diego MSCP is an NCCP and is discussed in Section 3.3.3.3, Local.

California Coastal Act

The California Coastal Act of 1976 established the California Coastal Commission, which regulates the use of land and water in the coastal zone. The coastal zone extends up to 5 miles inland from the coast. The BSA is outside of the coastal zone and is therefore not subject to the jurisdiction of the California Coastal Commission.

3.3.3.3 Local

San Diego Multiple Species Conservation Program

The San Diego MSCP is a long-term regional conservation plan designed to establish a connected preserve system that protects the sensitive species and habitats within its boundaries. The MSCP covers 582,243 acres over 12 jurisdictions. The Final MSCP Subregional Plan was approved in August 1998 (MSCP Plan; City of San Diego 1998). The combination of the MSCP Plan and the local jurisdiction's subarea plans serve as a multiple species Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the FESA and a NCCP pursuant to the California NCCP Act of 1991 and CESA. The participating jurisdictions and special districts are submitting plans to the USFWS and

CDFW in support of applications of permits and management authorizations to impact listed species and other species of concern. The conservation and management responsibilities, guarantees of implementation, and corresponding authorizations for all parties are contained in Implementing Agreements between the local jurisdictions and the Wildlife Agencies (i.e., USFWS and CDFW).

Local jurisdictions implement their respective portions of the San Diego MSCP Plan through subarea plans, which describe specific implementing mechanisms for the City of San Diego's MSCP Subarea Plan. The City of San Diego has an approved subarea plan under the MSCP (City of San Diego 1997). The City of Santee is in the process of ~~preparing~~finalizing a subarea plan and ~~provided a~~the public review draft ~~to the Wildlife Agencies (i.e., USFWS and CDFW)~~was published in ~~2018~~August 2025 (City of Santee ~~2018~~2025).

City of Santee

General Plan

The Conservation Element of the City of Santee's *General Plan* contains policies related to protection and preservation of sensitive biological resources (City of Santee 2003). The Conservation Element of the City of Santee's General Plan states that "all development proposals impacting biological resources should be consistent with the provisions of the City's future Multiple Species Conservation Program Subarea Plan and Implementing Agreement, and applicable State and Federal Regulations." The following objectives and policies are relevant to the proposed project:

Objective 1.0: Protect areas of unique topography or environmental significance to the greatest extent possible.

Objective 2.0: Protect floodways to reduce flood hazards, protect biological resources and preserve the aesthetic quality along water corridors.

Policy 2.1: The City shall encourage the protection of the San Diego River Corridor and all other City water corridors to reduce flood hazards, protect significant biological resources and scenic values, and to provide for appropriate recreational uses.

Policy 2.3: The City should participate in regional planning efforts aimed at habitat protection and recreational enjoyment of the San Diego River.

Policy 2.4: The City should promote the design and use of floodways and adjacent land for recreation whenever appropriate as part of flood control and habitat improvements.

Policy 2.6: The City encourages the development of appropriate flood control measures to assure public safety, which also prioritize maintenance of natural habitats and vegetation, and provision of community recreational opportunities as feasible and appropriate.

Objective 7.0: Preserve significant biological resources.

Policy 7.1: The City shall encourage the preservation and enhancement of significant biological resources in areas designated as permanent open space.

Policy 7.2: The City shall require that all development proposals provide appropriate mitigation for identified significant biological resources including selective preservation, sensitive site planning techniques and in-kind mitigation for identified impacts.

Policy 7.3: The City shall require that, for all development proposals involving the setting aside of land for permanent open space either on-site or off-site, provisions are in place to ensure the long term management of the open space and biological resources.

Policy 7.4: The City shall complete a Multiple Species Conservation Program Subarea plan that conserves a minimum of 2,600 acres in the City as permanent open space for preservation of habitats and species.

Objective 10.0: Preserve significant natural resources, such as mineral deposits, biological resources, watercourses, groundwater, hills, canyons, and major rock outcroppings, as part of a Citywide open space system.

Policy 10.1: The City should encourage the conservation of rare or unique plants and wildlife by identifying such resources through the environmental review process and by using open space preservation, where appropriate, to preserve the resources as a condition of a project approval, consistent with the City's future Multiple Species Conservation Program Subarea Plan.

In addition to the Conservation Element of the City of Santee's General Plan, the City of Santee's Land Use Element includes guiding principles that would apply to the proposed project as they relate to the protection of the San Diego River:

- Guiding Principle #5: Development should respect the river environment, including protection of the riparian habitat and protected species.
- Guiding Principle #6: Development should protect natural drainage, and ensure protection of water quality.

Municipal Code

The City of Santee Municipal Code includes the following provisions that are relevant to the proposed project:

Title 8 – Streets, Sidewalks and Public Property

Chapter 8.06 – Urban Forestry establishes a reasonable amount of tree cover on public and private lands in the City resulting in trees that contribute to a quality environment. Specific standards for planting, maintenance, and removal are outlined under this chapter.

Title 11 – Buildings and Construction

Chapter 11.38 – Drainage and Watercourses establishes that no obstruction or interference with watercourses or floodways unless a permit is obtained prior to such fill or alteration.

MSCP Subarea Plan (Draft)

The City of Santee's *General Plan* (City of Santee 2003) requires that all development proposals that could affect biological resources be consistent with the provisions of the City's future MSCP Subarea Plan and Implementing Agreement, and applicable federal and state regulations. Although the ~~*Wildlife Agency Review Draft Santee MSCP Subarea Plan)* (City of Santee 2018~~2025) has not yet been approved, it is used as the guidance document for projects occurring within the City of Santee.

The proposed project has been identified as Not a Part (NAP) of the Draft Santee MSCP Subarea Plan Area. ~~The~~Therefore, take authorization under the Subarea Plan is not available for projects occurring in the NAP areas. The applicant would seek take authorization through FESA Section 7 or an individual FESA Section 10 permit. The applicant would process all required permits and adhere to all relevant regulatory requirements. Impacts on listed species would utilize standard federal and state incidental take permit processes, as applicable.

Preserve Adjacency Guidelines

The Draft Santee MSCP Subarea Plan includes guidelines to reduce potential for impacts from development on adjacent preserves. Because the proposed project is adjacent to City-owned Preserve Lands (Mast Park West), the City of Santee will ensure that new developments adjacent to the boundaries of the Subarea Plan Managed Preserve adhere to the following adjacency guidelines:

- **Drainage:** All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, excess water, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystem processes within the preserves. This may be accomplished using a variety of methods, including natural detention basins, grass swales, or mechanical trapping devices.
- **Lighting:** Of all developed areas adjacent to the preserve should be directed away from the preserve wherever feasible and consistent with public safety. Low-pressure sodium lighting should be used whenever possible.
- **Noise:** Uses adjacent to the preserve should be designed to minimize noise impacts. New development adjacent to the San Diego River will incorporate noise reduction strategies in site design, landscaping, and buffer separation.
- **Invasive Species:** No invasive non-native plant or animal species can be introduced into areas immediately adjacent to the preserve. All open space slopes immediately adjacent to the preserve should be planted with native species that reflect the adjacent native habitat.
- **Fuel-Modification Zones:** Fuel-Modification Zones (FMZs) must be fully contained within the project site. Prior to implementing new developments adjacent to the Subarea Plan Preserve System, the local fire authority should review and approve proposed fuel-modification treatments to ensure that no new fuel modification will be required within the preserve properties.

City of San Diego

General Plan

The City of San Diego's *General Plan* presents goals and policies for biological resources in its *Conservation Element*, which generally aims to: (1) protect and conserve the landforms, canyon lands, and open spaces; (2) limit development of floodplains and sensitive biological areas, including wetlands, steep hillsides, canyons, and coastal

lands; (3) manage and/or minimize runoff, sedimentation, and erosion due to construction activity in order to improve watershed management and water quality; (4) manage wetland areas for natural flood control and preserve wetland areas; (5) preserve areas within the MSCP and implement the goals and policies of the City of San Diego's MSCP Subarea Plan; (6) support the long-term monitoring of restoration and mitigation efforts to track and evaluate changes in wetland acreage, functions, and values; and (7) work with federal, state, and private organizations or people in order to implement an effective wetland management system (City of San Diego 2008).

The *Conservation Element* of the City of San Diego's *General Plan* contains the following policies that are relevant to the proposed project:

Policy CE-B.1: Protect and conserve the landforms, canyon lands, and open spaces that: define the City's urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetlands habitats; provide buffers within and between communities; or provide outdoor recreational opportunities.

Policy CE-B.2: Apply the appropriate zoning and ESL regulations to limit development of floodplains, sensitive biological areas including wetlands, steep hillsides, canyons, and coastal lands.

Policy CE-E.2: Apply water quality protection measures to land development projects early in the process—during project design, permitting, construction, and operations—in order to minimize the quantity of runoff generated on site, the disruption of natural water flows, and the contamination of storm water runoff.

- Increase on-site infiltration, and preserve, restore, or incorporate natural drainage systems into site design.
- Direct concentrated drainage flows away from the MHPA and open space areas. If not possible, drainage should be directed into sedimentation basins, grassy swales, or mechanical trapping devices prior to draining into the MHPA or open space areas.
- Reduce the amount of impervious surfaces through selection of materials, site planning, and street design where possible. o Increase the use of vegetation in drainage design.
- Maintain landscape design standards that minimize the use of pesticides and herbicides. o Avoid development of areas particularly susceptible to erosion and sediment loss (e.g., steep slopes) and, where impacts are unavoidable, enforce regulations that minimize their impacts.
- Apply land use, site development, and zoning regulation that limit impacts on and protect the natural integrity of topography, drainage systems, and water bodies.
- Enforce maintenance requirements in development permit conditions

Policy CE-G.1: Preserve natural habitats pursuant to the MSCP, preserve rare plants and animals to the maximum extent practicable, and manage all City-owned native habitats to ensure their long-term biological viability.

Policy CE-G.3: Implement the conservation goals/policies of the City's MSCP SAP, such as providing connectivity between habitats and limiting recreational access and use to appropriate areas.

Policy CE-G.5: Promote aquatic biodiversity and habitat recovery by reducing hydrological alterations, such as grading a stream channel.

Policy CE-H.4: Support the long-term monitoring of restoration and mitigation efforts to trach and evaluate changes in wetland acreage, functions and values.

Municipal Code

Specific development regulations pertaining to sensitive biological resources exist in the City of San Diego's Municipal Code in the ESL) Regulations (Chapter 14, Division 1, Section 143.0141). The ESL defines sensitive biological resources as those lands included within the MHPA as identified in the City of San Diego's MSCP Subarea Plan (City of San Diego 1997), the *City of San Diego Vernal Pool Habitat Conservation Plan* (VPHCP~~)~~) (City of San Diego ~~2017~~2019), and other lands outside of the MHPA that contain: wetlands; vegetation communities classifiable as Tier I, II, IIIA, or IIIB; habitat for rare, endangered or threatened species; or narrow endemic species. The Biology Guidelines (City of San Diego 2018) provide guidelines to supplement the development regulation requirements. The study area is not within the City of San Diego's coastal overlay zone and therefore not subject to coastal overlay zone requirements.

MSCP Subarea Plan

The City of San Diego MSCP Subarea Plan describes how the City of San Diego implements its portion of the MSCP Plan. The City of San Diego subarea encompasses 206,124 acres within the MSCP study area.

The proposed project consists of approximately 64.2 acres within the City of San Diego, all of which are within the subarea plan area. The documents used to implement the MSCP within the City of San Diego include the *City of San Diego Subarea Plan* (City of San Diego 1997), the Final MSCP Plan, and the Implementing Agreement between the City of San Diego and the Wildlife Agencies (signed July 1997). The implementing agreement is the contract between the City of San Diego and the Wildlife Agencies that ensures implementation of the subarea plan and thereby allows the City of San Diego to issue Take Permits for covered species within covered projects within its jurisdiction. The *City of San Diego Subarea Plan* is consistent with the MSCP Plan and qualifies as a standalone document to implement the City of San Diego's portion of the MSCP preserve.

The City of San Diego MHPA was developed by the City of San Diego in cooperation with the Wildlife Agencies, property owners, developers, and environmental groups. The City of San ~~Diego's~~Diego's MHPA comprises approximately 56,831 acres and includes approximately 47,910 acres within City jurisdiction, and additional City of San Diego–owned lands (8,921 acres) in the unincorporated areas around San Vicente Reservoir, Otay Lakes, and Marron Valley. The Preserve Design Criteria contained in the MSCP Plan and the City Council–adopted criteria for the creation of the MHPA were used as guides in the development of the City of San Diego's MHPA. The MHPA delineates core biological-resource areas and corridors targeted for conservation. Within the MHPA, limited development may occur. The MHPA represents a "hard line" preserve, in which boundaries have been specifically determined. The San Diego River on the southern side of the project site is located within the City of San Diego's MHPA. Portions of the existing golf course within the City of San Diego were designated as MHPA.

The majority of the covered species are considered adequately conserved provided that the conditions described in *Species Evaluated For Coverage Under the MSCP* (City of San Diego 1997, Appendix A) are implemented. Appendix A of the City of San Diego MSCP Subarea Plan provides a full description of the conditions for coverage.

Implementation of the conditions have been assured by incorporation of policies and/or guidelines into the appropriate section(s) of the Subarea Plan, associated land development regulations and/or biology guidelines.

~~MHPA Adjacency Guidelines~~

~~The MSCP City of San Diego Subarea plans addresses potential direct and indirect impacts on preserve areas from adjacent development in Section 1.4.3, Land Use Adjacency Guidelines of the MSCP (City of San Diego 1997). The Land Use Adjacency Guidelines provide requirements for land uses adjacent to the habitat preserve in order to minimize indirect impacts on sensitive resources. City of San Diego MHPA exists along the southern boundary of the site. The redesign of the existing golf course within and adjacent to MHPA considers the guidelines to ensure consistency with them. The guidelines are summarized below:~~

- ~~**Drainage/Toxics:** All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA.~~
- ~~**Lighting:** Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA.~~
- ~~**Noise:** Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise-reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise-reduction measures should also be incorporated for the remainder of the year.~~
- ~~**Barriers:** New development adjacent to the MHPA may be required to provide barriers (e.g., noninvasive vegetation, rocks/boulders, fences, walls, signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.~~
- ~~**Invasives:** No invasive nonnative plant species will be introduced into areas adjacent to the MHPA.~~
- ~~**Brush Management:** New residential development adjacent to the MHPA must include brush management areas.~~
- ~~**Grading/Land Development:** Manufactured slopes associated with site development must be included within the development footprint for projects within or adjacent to the MHPA.~~

~~3.3.4~~ 3.3.4 Project Impact Analysis

3.3.4.1 Methodology

This section evaluates the potential impacts on biological resources from construction and operation of the proposed project. The area evaluated for biological resources includes the BSA. The 100-foot survey buffer included in the BSA is suitable for capturing potential indirect impacts from a project on biological resources. It is anticipated that indirect impacts beyond 100 feet in an urban environment would be diffused and would not significantly affect biological resources.

The following analysis of biological resources is based on the results of the Revised Biological ~~Study~~Survey Report (Appendix E) prepared for the proposed project. The methods for the proposed project's evaluation of biological

resources consisted of a literature and database review, general biological survey and vegetation mapping, special-status plant and animal surveys, and a jurisdictional delineation.

Impact Analysis Approach

The results of the literature review and field surveys are intended to evaluate on-site habitat types and assess the potential for the occurrence of special-status plant and wildlife species. The results were evaluated to determine potential impacts of the proposed project on biological resources during construction and operation. The proposed project was analyzed for compliance with applicable regulations that function to conserve and protect biological resources. If the proposed project could potentially impact biological resources through impacts on species or habitat, then a potential for significant impacts could exist. Biological resources may be either directly or indirectly affected by a project. Direct and indirect impacts may be either permanent or temporary in nature, as defined below:

- **Direct:** Any alteration, physical disturbance, or destruction of biological resources that would result from project-related activities is considered a direct impact. Examples include clearing vegetation, loss of individual species and/or their habitats, and encroaching into wetlands or a river.
- **Indirect:** As a result of project-related activities, biological resources may also be affected in a manner that is ancillary to physical impacts. Examples include elevated noise and dust levels, soil compaction, increased human activity, decreased water quality, and the introduction of invasive wildlife (i.e., domestic cats and dogs) and non-native and/or invasive plants.
- **Permanent:** All impacts that result in the long-term or irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources.
  - **Residential/Clubhouse/Hotel**. These permanent impacts would result from the hardscape development of the residential, hotel and hotel cottages, restaurant, event space, golf clubhouse, learning center, associated infrastructure, and parking lot portions of the proposed project. This also includes an outdoor swimming pool and deck area, a patio, and a courtyard.
  - **Golf Course Redesign**. These permanent impacts would result from the redesign of the golf course.
  - **Fuel Modification Zone**. Areas outside of permanent impacts from grading that are subject to fuel modification zone requirements for vegetation thinning and removal. Fuel modification zones are considered a permanent impact unless the community would either not be considered impacted by fuel modification (non-native grassland) or would not be subject to fuel modification because of the wetness of the community (e.g., open water, non-native riparian).
  - **Spillway/Dam Along San Diego River (North Channel)**. During the dewatering activities the existing concrete spillway and earthen dam for the large, ponded area along the San Diego River (North Channel) would be repaired. The permanent impacts for the concrete spillway/earthen dam repair are based on the site's topographic contours and high-resolution aerial imagery and therefore represent an approximate impact footprint (i.e., not based on a field survey or spillway design). These impacts may vary slightly during final design and discussions with the aquatic resource agencies; however, the impact footprint provided in this analysis represents the greatest extent (i.e., impacts may be refined to reduce the impact footprint once design is finalized).
  - **Proposed Resort Bridge and Proposed Golf Cart Bridge**. Footings and FMZ for the Proposed Resort Bridge and the footings for the Proposed Golf Cart Bridge across the San Diego River (North Channel) are included in the permanent impact footprint to avoid impacts to jurisdictional aquatic resources

associated with the San Diego River (North Channel) to the greatest extent feasible. No temporary impacts from shading are anticipated due to the Proposed Resort Bridge and the Proposed Golf Cart Bridge occurring over fresh water.

- **Temporary:** Any impacts considered to have reversible impacts on biological resources can be viewed as temporary. Examples include the generation of fugitive dust during construction, or removing vegetation for the preparation of construction activities, and either allowing the natural vegetation to recolonize, or actively revegetating affected areas. Surface disturbance that removes vegetation and disturbs the soil is considered a long-term temporary impact because of slow natural recovery in arid ecosystems.
  - **San Diego River (North Channel).** These impacts include all of the natural habitat along San Diego River (North Channel) that could be temporarily impacted during construction but will be restored in the same location along San Diego River (North Channel). The majority of this area will only be subject to dewatering; the pond is currently an intermittent feature, drying up when water is not coming from Sycamore Canyon or high-water flows from the San Diego River, so effects of dewatering will be similar to existing variation in hydrology. These areas may also be subject to sediment removal from unvegetated areas; no sediment will be removed from freshwater marsh areas. In addition, temporary impacts may also occur from a work area to repair the spillway within the ponded area of the San Diego River (North Channel) these impacts are considered temporary because the work area would be restored to pre-project conditions after the spillway repair is complete.
  - **Temporary Railcar Crossing.** While the Proposed Resort Bridge is under construction, the Temporary Railcar Crossing would be placed at an existing golf cart bridge located west of the Proposed Resort Bridge to provide vehicular access to the golf course. Temporary steel beams and plates would be placed on top of the existing golf cart bridge to allow for a road wide enough to provide access for construction equipment. Once construction is complete the natural habitat areas would be restored in-place. To be conservative the entire area for the Temporary Railcar Crossing was analyzed as a temporary impact; however, impacts to sensitive habitat communities may not occur within the entire area based on the actual placement of the steel beams and plates on top of the existing golf cart bridge.
- **Avoidance.** These are natural habitat areas associated with the major drainage feature bisecting the project site (i.e., Sycamore Canyon Creek and the San Diego River (North Channel)) and riparian habitat areas along the southern boundary of the project site associated with the San Diego River (South Channel). The golf course was designed to avoid these areas to the maximum extent feasible because these avoidance areas are highly valuable biological resources that are occupied by special-status species. Additionally, the project's grading and golf course layout were specifically designed to maintain river capacity and avoid adverse changes to the portion of Sycamore Canyon Creek and the San Diego River within the project site as well as the upstream or downstream reaches of Sycamore Canyon Creek and the San Diego River and their associated riparian vegetation communities. Therefore, the overall function and value of these areas will be maintained after project implementation.

Where a potentially significant impact would be anticipated, proposed mitigation measures to address these potential impacts were developed.

3.3.4.2 Thresholds of Significance

The following significance criteria are based on State CEQA Guidelines Appendix G and provide the basis for determining the significance of impacts associated with biological resources that could result from implementation

of the proposed project. These CEQA Appendix G thresholds apply to both the City of ~~San~~ Santee and the City of San Diego, unless otherwise noted.

The proposed project would have a significant impact on biological resources if it would result in the following:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS.
3. Have a substantial adverse effect on state- or federally protected wetlands (e.g., marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means.
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance or with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

Supplemental Thresholds for Biological Resources Located Within the City of San Diego

To determine the level of significance related to the proposed project's impacts on biological resources within the City of San Diego, the City of San Diego's CEQA Significance Determination Thresholds were utilized for determining significance. An answer in the affirmative to either of the following questions would indicate that a significant impact on biological resource would occur, and mitigation would be required. It should be noted that the following thresholds for biological resource sensitivity would apply only to the construction areas within the City of San Diego (e.g., a portion of the golf course and certain off-site improvements). These thresholds are included in the analysis below along with the CEQA thresholds and are labeled accordingly.

~~3.3.5 Project Impacts and Mitigation Measures~~

~~Threshold 1: Would implementation of the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW and USFWS?~~

~~Threshold 2 (~~Within the City of San Diego~~): Would,~~ the ~~project~~proposed project would have a significant impact on biological resources if it would result in ~~a~~the following:

1. A substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS)
2. A substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the ~~CDFW~~CDFG or USFWS~~?~~

~~6.~~ A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means~~Impact Thresholds~~

3.

4. Interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites

5. A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region

6. Introducing land use within an area adjacent to the MHPA that would result in adverse edge effects

7. A conflict with any local policies or ordinances protecting biological resources

8. An introduction of invasive species of plants into a natural open space area

According to the City of San Diego's Significance Determination Thresholds, potential impacts to biological resources are assessed through review of the project's consistency with the City's ESL regulations, Biology Guidelines, and MSCP Subarea Plan. Before a determination of the significance of an impact can be made, the presence and nature of the biological resources must be established. Thus, significance determination, pursuant to the City of San Diego's Significance Determination Thresholds, proceeds in two steps: (1) determine if significant biological resources are present and (2) determine the sensitivity of identified biological resources in terms of direct, indirect, and cumulative impacts that would result from project implementation.

1. Sensitive biological resources are defined by the City of San Diego Municipal Code as:

   a. A. Lands that have been included in the MHPA as identified in the City of San Diego MSCP Subarea Plan (City of San Diego 1997);

   b. B. Wetlands (as defined by the Municipal Code, Section 113.0103);

   c. C. Lands outside the MHPA that contain Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines (July 2002 or current edition) of the Land Development manual;

   d. D. Lands supporting species or subspecies listed as rare, endangered, or threatened;

   e. **E.** Lands containing habitats with narrow endemic species as listed in the Biology Guidelines of the Land Development manual; and

   f. **F.** Lands containing habitats of covered species as listed in the Biology Guidelines of the Land Development manual.

2. Occurrence of any of the following situations associated with identified biological resources may indicate significant direct and indirect biological impacts. :

A Direct Impacts

- a. Any encroachment in the MHPA is considered a significant impact to the preservation goals of the MSCP. Any encroachment into the MHPA (in excess of the allowable encroachment by a project) would require a boundary adjustment, which would include a habitat equivalency assessment to ensure that what would be added to the MHPA is at least equivalent to what would be removed.

a. b. Lands containing Tier I, II, IIIA, and IIIB habitats and all wetlands are considered sensitive and declining habitats. Impacts to these resources may be considered significant.

~~b.~~c. Impacts to individual sensitive species, outside of any impacts to habitat, may also be considered significant based upon the rarity and extent of impacts. Impacts to State or Federally listed species and all narrow endemics should be considered significant.

~~c.~~d. Certain species covered by the MSCP and other species not covered by the MSCP may be considered significant on a case-by-case basis taking into consideration all pertinent information regarding distribution, rarity, and the level of habitat conservation afforded by the MSCP.

B Indirect Impacts

The Significance Determination Thresholds indicate that depending on the circumstances, indirect effects of a project may be as significant as the direct effects of the project. Indirect effects include, but are not limited to, the following impacts:

A. Introduction of urban meso-predators into a biological system
B. Introduction of urban runoff into a biological system
C. Introduction of invasive exotic plant species into a biological system
D. Noise and lighting impacts
E. Alteration of a dynamic portion of a system, such as stream flow characteristics or fire cycles
F. Loss of a wetland buffer that includes no environmentally sensitive lands

3.3.5 Project Impacts and Mitigation Measures

Threshold 1: Would implementation of the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW and USFWS?

Threshold 1 (City of San Diego): A substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS)?

Impact Discussion

~~Construction of the proposed project would require demolition or grading equipment for site preparation, as well as the use of standard off-road construction equipment, including, but not limited to, dozers, excavators, loaders, backhoes, rollers, compactors, and scrapers. Additional equipment would include trucks for delivery of construction materials, disposal of demolished and excavated materials, and transport of water for dust control. Construction would temporarily disrupt the area because of increases in noise levels, truck traffic, and ground-disturbing activities.~~

~~Operation of the proposed project would result in a new country club and resort for tourist/visitor-serving commercial development, new residential development, a redesigned golf course, new and reconfigured roadways, and a multipurpose public trail.~~

~~Special-Status Plant Species~~

Direct Impacts to Special-Status Plant Species

City of San Diego

As discussed in Section 3.3.2~~, Environmental Setting~~.2, Biological Resources, no City of San Diego MSCP- or VPHCP-covered plant species were observed within the BSA, nor were CESA- or FESA-listed plant species were observed within the BSA. Four special-status plant species listed under the CRPR were observed within the BSA within the City of San Diego: Palmer's sagewort, San Diego marsh-elder, southern California black walnut, and southwestern spiny rush (Figure 3.3-2, Sensitive Plant Species). California black walnut and southwestern spiny rush were observed within avoidance areas within the proposed project site in the City of San Diego and would not be impacted. Palmer's sagewort and San Diego marsh-elder were present within the BSA buffer but were not detected in the proposed project site.

San Diego marsh-elder is a CRPR 2B.2 species and is therefore considered rare or endangered under State CEQA Guidelines Section 15380. Palmer's sagewort, Southern California black walnut, and southwestern spiny rush are CRPR 4.2 species, meaning they are plants of limited distribution but are locally common. These CRPR 4.2 species do not ~~clearly~~ meet CEQA standards and thresholds for significant impact considerations because they do not have local rarity, they are not peripheral to the taxa's distribution, and they do not occur in unusual substrates or habitat. Palmer's sagewort, Southern California black walnut, and southwestern spiny rush are therefore not considered endangered, rare, or threatened under CEQA.

City of Santee

Southwestern spiny rush was the only special-status plant species observed within City of Santee and was only present outside of the proposed project site (near the San Diego River).

Focused surveys were conducted in the BSA for the federally listed endangered San Diego ambrosia, but none were observed during times of year when the species would be most readily detectable. As such, San Diego ambrosia is considered absent from the BSA.

No special-status plant species would be directly affected by project construction or operation. As a result, implementation of the proposed project would not have a substantial adverse effect on special-status plant species, and no ~~impact~~impacts would occur within the City of Santee.

Direct Impacts to Special-Status Wildlife Species

The proposed project has potential to directly affect 12 special-status and/or MSCP covered animal species, including six special-status and/or MSCP ~~-~~covered bird species observed within the BSA~~:~~ (Figure 3.3-9): Cooper's hawk, least Bell's vireo, vermilion flycatcher, western bluebird, yellow warbler, and yellow-breasted chat; MSCP-covered southern mule deer observed in the BSA; as well as three species determined to have a high potential to occur: Belding's orange-throated whiptail, two-striped garter snake, and white-tailed kite. Focused surveys were conducted for southwestern pond turtle, California gnatcatcher, southwestern willow flycatcher, and Crotch's bumble bee were negative and the species were therefore considered absent from the BSA. The federal candidate insect species monarch butterfly was observed nectaring on flowers within the project area; no suitable milkweed breeding habitat was observed. ~~Southern mule deer is not considered special status but has aesthetic and~~

~~intrinsic values, thereby being an important species to protect (City of San Diego 1998).~~ Mule deer is a covered species under the MSCP and is known to use the project site. Although western spadefoot and western burrowing owl were determined to have a low potential to occur, these species are addressed below due to their possible future listing at the federal level and future presence. Double-crested cormorant is not a special-status or MSCP-covered species, but the on-site rookery is a CDFW-protected wildlife nursery site and is therefore discussed in the Wildlife Nursery Sites section under Threshold 4. ~~Avoidance and minimization measures are proposed to ensure no direct or indirect impacts occur to breeding individuals. Loss of occupied habitat would be fully compensated in kind through on- and off-site preservation, as detailed in Appendix E, Section 3.3.5, Avoidance and Mitigation Measures.~~

Least Bell's Vireo

~~City of Santee~~

The proposed project would have permanent direct impacts of up to ~~0.77~~1.96 acres of occupied least Bell's vireo breeding habitat within designated critical habitat within the City of Santee, within the clubhouse/hotel, golf course redesign, and fuel modification areas (~~riparian habitat in Residential North was unoccupied).~~Figure 3.3-9). The ~~0.77~~1.96 acres includes ~~0.43~~1.50 acres of southern cottonwood~~–~~-willow riparian forest (including disturbed~~)~~), 0.17 acres of southern willow scrub, and 0.~~34~~29 acres of mule fat scrub~~–~~–disturbed~~.~~ (Table 3.3-12). The loss of ~~0.77~~1.96 acres of occupied breeding habitat for least Bell's vireo species would be a potentially significant impact ~~(**Impact BIO-5**). The proposed project would have temporary direct impacts of up to 0.09 acres of occupied least Bell's vireo breeding habitat within designated critical habitat within the City of Santee, including 0.07 acres of southern cottonwood- willow riparian forest (including disturbed) and 0.02 acres of mule fat scrub – disturbed~~prior to implementation of mitigation measures. This impact would be reduced to less than significant through implementation of mitigation measure **MM-BIO-3**, which requires habitat mitigation, and inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

~~City of San Diego~~

The proposed project would have temporary direct impacts of up to 0.13 acres of occupied least Bell's vireo breeding habitat (i.e., southern cottonwood-willow riparian forest) as a result of dewatering activities (0.12 acres) and spillway repair work area (0.01 acres) (Table 3.3-12). Temporary impacts associated with the impounded portion of the San Diego River (North Channel) from dewatering activities during construction would not require habitat mitigation as the vegetation communities would not be significantly impacted. However, these areas would be passively restored as directed by **MM-BIO-4** and included in the project's HMMP as directed by **MM-BIO-5**. Impacts from the spillway repair work area would be reduced to less than significant with implementation of **MM-BIO-3** and inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

No direct permanent impacts on potentially suitable or occupied least Bell's vireo habitat would occur within the preserve areas of the San Diego MHPA or any other areas within the City of San Diego. Various state and federal laws protect breeding birds, including least Bell's vireo, and their nests and eggs, from destruction. This project includes avoidance measures to ensure that breeding success of Least Bell's Vireo are not adversely affected as directed by **MM-BIO-14**.

MSCP conditions of coverage in the MSCP Plan (City of San Diego 1998) require that surveys using appropriate protocols be conducted in suitable habitat proposed to be affected. Although noimpacted. No suitable habitat for least Bell's vireo would be affectedpermanently impacted within the City of San Diego, but surveys were conducted in all suitable habitat in the BSA in 2019. The San Diego River was considered occupied and was not resurveyed in 2022. Surveys were conducted for least Bell's vireo in 2022 in potential habitat within City of San Diego thatwhich are outside of the San Diego River (South Channel); South Channelsouth channel is known to be occupied and was therefore not resurveyed. The proposed project would incorporate mitigation measures consistent with CWA 404(b)1 guidelines. The proposed project would not create conditions attractive to brown-headed cowbirds. As such, so the proposed project does not need to monitor and control cowbirds.

Other Special-Status Animal Species

The proposed project would also have direct permanent direct and temporary impacts on approximately 0.80 acres of southern cottonwood–willow riparian forest (including disturbed), which is to potentially suitable as breeding habitat for yellow warbler, yellow-breasted chat, western bluebird, vermilion flycatcher, western bluebird, Cooper's hawk, and white-tailed kite; suitable as habitat for two-striped garter snake and orange-throated whiptail; and suitable as habitat for mule deer. The loss of 0.80 acres of (Table 3.3-12; Figure 3.3-9). Impacts to potentially suitable breeding habitat for these species would constitutebe a potentially significant impact on special-status species (**Impact** . These impacts would be reduced to less than significant through implementation of **MM-BIO-1** through **MM-BIO-4,** which requires mitigation for impacts to sensitive vegetation communities at the ratios presented in Tables 3.3-10 through 3.3-13 and inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**). .

No Cooper's hawk or white-tailed kite nests or nesting activities were observed within the BSA during project surveys. Conditions of MSCP coverage for Cooper's hawk include a 300-foot impact- avoidance buffer around active nests and minimization of disturbance to oak riparian forests (City of San Diego 1998). **MM-BIO-12** would be implemented to avoid impacts to Cooper's hawk nests. No Cooper's hawk nests, or nesting activities were observed within the BSA during project surveys.). In addition, the proposedThe project has been redesigned to minimize disturbance to riparian forests within City of Santee and would completely avoid impacts on riparian forests within the City of San Diego.

The proposed project would have no effect on monarch butterfly breeding or overwintering habitat. The BSA has little in the way of nectaring resources for monarch, being an active golf course with limited flowering ornamental vegetation. The proposed project would not significantly alter the distribution or abundance of the limited nectar resources present within BSA.

Impacts on native or naturalized vegetation during the breeding season would have the potential to kill nesting birds or their eggs or young, including special-status birds, such as least Bell's vireo, yellow warbler, yellow-breasted chat, vermilion flycatcher, western bluebird, Cooper's hawk, and white-tailed kite. These potential impacts would be significant (**Impact BIO-7**). In addition, although Crotch's bumble bee is not known from the BSA, and the project site has low potential to support nesting or foraging Crotch's bumble bee. If the species were present underground during ground disturbance, then impacts on Crotch's bumble bee nests would be potentially significant (**Impact BIO-8**).Any project related activities that result in the death of nesting birds could be a violation of state and federal laws and would be a potentially significant impact prior to implementation of mitigation measures. To comply with state and federal protections on nesting birds, clearing, trimming, and grubbing of vegetation shall occur outside of the general bird breeding season as directed by **MM-BIO-13**.

Crotch's Bumble Bee

Although the project site has low potential with respect to supporting nesting or foraging Crotch's bumble bee, and Crotch's bumble bee was not observed during focused surveys in 2024, if the species is present underground during ground disturbance, impacts on a Crotch's bumble bee nest would be potentially significant. Therefore, the project would implement **MM-BIO-15** to avoid impacts to Crotch's bumble bee. Coastal sage scrub and non-native grassland impacted by the proposed project would be mitigated as directed by **MM-BIO-1**, **MM-BIO-2,** and **MM-BIO-3**, regardless of whether the site is occupied by Crotch's bumble bee.

Western Spadefoot

~~The~~Although the project site has only low potential with respect to western spadefoot occurrence~~. The western spadefoot is not known from the BSA~~ and ~~the project site has low potential to support breeding or estivating western spadefoot. Minimal~~minimal potential breeding habitat exists within the impact area~~, and a survey in 2025 was negative. However, as a conservative measure~~, if this primarily subterranean species is present during ground disturbance, impacts on upland western spadefoot would be potentially significant ~~(**Impact BIO-9**).~~prior to implementation of mitigation measures. Therefore, the project would implement **MM-BIO-16** to avoid impacts to western spadefoot. Coastal sage scrub and non-native grassland impacted by the proposed project would be mitigated as directed by **MM-BIO-1, MM-BIO-2,** and **MM-BIO-3**, regardless of whether the site is occupied by western spadefoot.

Western Burrowing Owl

Western burrowing owl is not known from the BSA, and suitable habitat (i.e., open habitat that is flat to slightly rolling AND includes potential burrow resources such as minimum 11 cm diameter burrows or rock crevices) was not found within the BSA, ~~and~~therefore the project site has low potential to support wintering or breeding western burrowing owl. ~~If~~However, because burrowing owls can move into new areas, if suitable burrows become present within the open habitats on site, then there is potential for them to colonize the BSA. Burrowing owl may colonize during any time of the year~~. If~~, so if the species were present, then impacts to western burrowing owl would be potentially significant ~~(**Impact**~~ prior to implementation of mitigation measures. Therefore, the project would implement **MM-BIO-~~10~~17** to avoid impacts to western burrowing owl. Coastal sage scrub and non-native grassland impacted by the proposed project would be mitigated as directed by **MM-BIO-1, MM-BIO-2,** and **MM-BIO-3** in accordance with the mitigation ratios presented in Table 3.3-7 and Table 3.3-9, regardless of whether the site is occupied by western burrowing owl.

Cormorant Rookery

The eucalyptus tree located adjacent to the pond on San Diego River (North Channel) serves as a rookery (i.e., breeding colony) for the native seabird double-crested cormorant (Figure 3.3-9). This site is one of the only known double-crested cormorant rookeries in San Diego County (Unitt 2004). Double-crested cormorant returns to this site annually to raise their young; therefore, this site is considered a native wildlife nursery site. This pond-side tree would not be removed during golf course redesign grading as shown on Figure 3.3-9. Therefore, no direct permanent impacts to the rookery are anticipated. However, construction noise and activity associated with the regrading and redesign of the golf course and construction of the golf resort, if they were to occur during the breeding season, have the potential to disrupt the breeding activities of double-crested cormorants. Disruption or loss of breeding at this rookery would result in a potentially significant impact on a wildlife nursery site prior to implementation of

mitigation measures. Therefore, the project would implement **MM-BIO-12,** which would minimize indirect construction noise impacts to the double-crested cormorant rookery.

Coastal California Gnatcatcher

A total of 0.19 acres of Diegan coastal sage scrub (disturbed) would be permanently impacted in the western residential area by the proposed project within the limits of the City of San Diego, outside of the MHPA. This patch of coastal sage scrub is connected to 0.41 acres of Diegan coastal sage scrub (disturbed) within Santee, for a total patch size of 0.59 acres. This patch is located on the eastern shoulder of West Hills Parkway embankment and is vegetated primarily with disturbance-adapted broom baccharis (*Baccharis sarothroides*) and does not have a structural or species diversity of shrubs. This habitat is isolated between the existing golf course and West Hills Parkway. ~~Because double-crested cormorants are only considered CDFW sensitive at nesting sites, potential indirect effects are discussed under **Impact BIO-11**, Cormorant Rookery, in the Wildlife Nursery Sites section under Threshold 4.~~

~~Construction Noise~~

~~The proposed project also has the potential to result in various~~Focused surveys were conducted within this habitat for coastal California gnatcatcher in 2019 and 2022 and did not detect occupancy by coastal California gnatcatcher. Although coastal California gnatcatcher is not expected to occur within the project site, the project would implement a pre-construction survey as directed by **MM-BIO-18** to confirm presence or absence. If coastal California gnatcatcher are detected during pre-construction surveys, then consultation with the USFWS and necessary permitting (Section 7 or 10) would occur as directed. Any measures within that incidental take permit would also be required in addition to the CEQA measures within this document. Permanent removal of occupied coastal sage scrub habitat would be considered a significant impact to coastal California gnatcatcher. Thus, coastal sage scrub habitat impacted by the proposed project would be mitigated as directed by **MM-BIO-1** and **MM-BIO-2**, and impacts would be less than significant with mitigation.

Indirect Impacts to Special-Status Species

Various temporary indirect impacts ~~that~~ to special-status species may result from project construction activities~~, and~~. Development of the project would result in a variety of permanent indirect impacts on surrounding sensitive biological resources~~.~~ that may affect special-status species. Residential development can promote habitat loss and fragmentation~~,~~; degrade soil, air, water, and visual quality~~,~~; promote brood parasitism, by increasing cowbird populations~~,~~; introduce non-native species~~,~~; alter the composition of wildlife communities~~,~~; and increase predation by domestic animals. Commercial development may have fewer indirect impacts, although lighting impacts ~~may~~can be greater (City of San Diego 1998~~).~~). Indirect impacts resulting from human access, domestic animals, exotic species, and lighting would be avoided through the following mitigation measures: (1) permanent safety fencing approximately 10 feet tall will be installed along the Project Trail Segment adjacent to the golf course to protect hikers from errant golf balls, and signs precluding access will be posted (**MM-BIO-21**); (2) only non-invasive plant species would be included in the landscape plan for the site (species not listed on the California Invasive Plant Inventory prepared by the California Invasive Plant Council (Cal-IPC; 2006) (**MM-BIO-20**); and (3) all project-related lighting would be required to adhere to Santee Municipal Code (**MM-BIO-20**). Lighting within the proposed project footprint adjacent to undeveloped habitat would be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from these areas.

Nesting special-status bird species can be adversely affected by construction noise levels that exceed a 60 dBA L_{eq} hourly average or ambient conditions (whichever is greater). These indirect, temporary impacts from noise could be potentially significant, particularly if they occur during the breeding season of special-status avian species. Additionally, animals associated with residential development can have a negative effect on wildlife. Free-range cats and off-leash dogs can prey on wildlife and have potential to spread zoonotic diseases to wildlife and other domestic animals. Because least Bell's vireo normally constructs nests at the low height of approximately 3 feet, there is the potential for increased predation of adult and nestling least Bell's vireo by an increased abundance of free-range cats. Increased predation of special-status bird species would represent a potentially significant impact~~Indirect, temporary impacts on special-status animal species could occur during project construction due to construction-related noise from such sources as clearing, grubbing, and grading.~~ prior to implementation of mitigation measures. Specific details are discussed below.

Construction Noise (Temporary Indirect Impact)

Construction activities would comply with local agency construction noise requirements of the Cities of Santee and San Diego, as contained in Section 5.04 of the ~~City of Santee's~~Santee Municipal Code and Section ~~5.04.090~~59.0404 of the City of San Diego Municipal Code. These restrictions prohibit construction activities between the hours of 7:00 p.m. and 7:00 a.m. and on Sundays and legal holidays, and limit construction noise levels to not exceed an average of 75 A-weighted decibels (dBA~~)~~) at the property line of a residential use over an 8- or 12-hour period.

Indirect, temporary impacts on special-status animal species could occur during project construction due to construction-related noise from such sources as clearing, grubbing, and grading. Nesting special-status bird species can be adversely affected by construction noise levels that exceed a 60 dBA ~~Nesting special-status bird species can be adversely affected by construction noise levels that exceed a 60 dBA~~ equivalent sound level ~~(L_{eq})~~ hourly average~~.~~ (leq) or ambient conditions (whichever is greater). Construction noise could cause an indirect, temporary impact on special-status animal species even ~~when in~~with compliance with the noise requirements of the Cities of ~~Santee's~~Santee and San ~~Diego's noise requirements.~~

~~Indirect~~Diego. These indirect, temporary impacts from ~~construction~~ noise could ~~also~~ be potentially significant, particularly if they occur during the breeding season of special-status avian species ~~(**Impact .**~~ Therefore, the project would implement measures **MM-BIO-12**~~).~~**, MM-BIO-13, MM-BIO-14,** and **MM-BIO-18** to reduce impacts from construction noise to special-status avian species to less than significant.

Invasive Plants (Temporary and Permanent Indirect ~~Human Activity~~Impact)

~~Land uses planned or existing~~Invasive exotic (non-native) plant species can be introduced into adjacent habitat by several means. Invasive exotic plant species can be planted as part of the ornamental landscaping of development or plantings of new residences. Weeds can be introduced by increased movement of people or domestic animals along native areas. Weeds can also be introduced from construction vehicles brought onto the site, tracking in soil containing weed seeds.

The proposed project would not indirectly affect special-status species with invasive plants. The vegetation palette of the proposed project would not include invasive plant species, and no invasive plant species would be planted in or adjacent to the MHPA as directed by **MM-BIO-20**. All stream courses within the redeveloped golf course will include a 10-foot-wide strip of planted native vegetation in the Landscape Plans as directed by **MM-BIO-20**. This

strip will have an emphasis on saltgrass (*Distichlis spicata*), a native, wetland tolerant grass species. **MM-BIO-20** would ensure that there would be no potentially significant indirect impacts from invasive plants.

Water Quality (Temporary Indirect Impact)

Water and sediment runoff from the construction area has the potential to temporarily impact local water quality, and sediment deposition can negatively affect wetland vegetation communities. Erosion of sediments during rain events during construction could deposit into waterways or wetlands and negatively affect the hydrology and associated ecology of the system. Temporary indirect impacts on sensitive wetland vegetation communities would be ~~include single and multiple family residential,~~a potentially significant impact. Therefore, the project would implement measures **MM-BIO-7,** which requires construction monitoring, **MM-BIO-8,** which requires delineation of environmentally sensitive areas, and **MM-BIO-9,** which requires a stormwater pollution prevention plan, to reduce impacts to water quality during construction to less than significant.

Fugitive Dust (Temporary Indirect Impact)

Dust resulting from heavy equipment grading the project could settle on nearby vegetation and interfere with the photosynthetic process of native vegetation, which could be a potentially significant impact on sensitive vegetation communities. Therefore, the project would implement measures **MM-BIO-7,** which requires construction monitoring, **MM-BIO-9,** which requires a stormwater pollution prevention plan, and **MM-BIO-10**, which requires speed limits, to reduce impacts from dust during construction to less than significant.

Human Activity (Permanent Indirect Impact)

A goal of site development is to increase the active recreational use of the golf course. Active recreation~~, commercial, industrial, agricultural, landfills, and extractive uses. Land uses~~ may be an acceptable use adjacent to the MHPA ~~would be managed to ensure minimal impacts on the MHPA~~ (City of San Diego 1998~~).~~). The MHPA was mapped over the existing golf course, which was established in 1958. There are other places within the City of San Diego where the MHPA overlaps with golf courses. ~~As such, active recreation may be an acceptable use adjacent to the MHPA. One of the goals of the proposed project is to increase the active recreational use of the golf course.~~ Golf course users are expected to remain on the golf course and not enter undeveloped areas of the adjacent MHPA~~;~~ because of the presence of ~~an~~ a physical existing berm up to 12 ~~foot~~ feet tall, fencing ~~existing physical berm~~ , and the density of adjacent riparian forest ~~would help prevent trespass~~. Therefore, there would be no potentially significant indirect impacts from active recreation.

The existing path along the berm between the golf course and the San Diego River (South Channel) currently allows for recreational use along the riparian boundary. Improvements of this path to the multi-use San Diego River Trail have been planned by SANDAG (SANDAG 2017). To prevent exclusion of the wildlife usage of the secondary movement corridor (golf course area), the project would include a wildlife-friendly fence design so that it is wildlife-permeable friendly while still performing hiker protection goals. This fencing design is outlined in measure **MM-BIO-21**, which would allow wildlife through the fence and through the secondary wildlife corridor, including deer with antlers that could crawl under the fence.

The proposed project would increase human activity in the vicinity of sensitive habitat, including occupied vireo habitat, on the western and northeastern sides of the project as the existing golf course land use adjacent to the San Diego River habitat is converted to residential and commercial land uses. ~~SANDAG~~Project features such as

fences and retaining walls would ~~make improvements to this path as part of its planned multi-use San Diego River Trail (SANDAG 2017).~~

~~However, the proposed project would increase~~help reduce potential indirect impacts from human activity ~~in the vicinity of sensitive habitat, and~~ . However, additional measures, such as signage, are required to reduce indirect ~~impacts from~~ human activity impacts to a less- than- significant level ~~(**Impact** ~~, and impacts would be potentially significant prior to mitigation. Thus, the project would implement **MM-**BIO-~~13~~).~~19,~~ which requires homeowner education program and signage to minimize impacts from human activity within the MHPA and adjacent open space areas, which would reduce impacts to less than significant.

Nuisance/Domestic Animals (Permanent Indirect Impact)

Argentine ants (*Linepithema humile*) are a non-native species of ant whose habitat is promoted by irrigation and urbanization (USFWS 2006). Argentine ants may pose a problem to the least Bell's vireo in the riparian–urban interface of the San Diego River. The current conditions of irrigation needed to sustain a golf course may contribute to Argentine ant populations; however, conversion of a portion of the golf course to residential and commercial development is not expected to significantly increase water use, and thus Argentine ant populations, compared to existing conditions. Therefore, because the project's irrigation would be similar to or reduced as compared to the existing conditions, and the proposed project would include a series of catch basins and biofiltration basins to manage stormwater runoff, an increase in the potential indirect impacts to special-status species from Argentine ants is not anticipated.

Brown-headed cowbirds are nest parasites of native songbirds, including special-status species such as least Bell's vireo. Brown-headed cowbirds were observed in low numbers during the surveys for least Bell's vireo and southwestern willow flycatcher in 2019. Brown-headed cowbird populations can be augmented by golf courses that serve as foraging habitat. Implementation of the proposed project would reduce the total area of golf course. As such, the proposed project is not expected to promote the increase of brown-headed cowbird populations.

Animals associated with residential development can have a negative impact on wildlife**.** Free-ranging cats and off-leash dogs can prey on wildlife and have potential to spread zoonotic diseases to wildlife and other domestic animals. Because least Bell's vireos normally construct nests at the low height of approximately 3 feet, there is the potential for increased predation of adult and nestling least Bell's vireo that could result from an increased abundance of free-range cats. Increased predation of special-status bird species would represent a potentially significant impact ~~(**Impact BIO-14**).~~ Homeowner education would be required to reduce the potential increase of domestic pets generated from the due to the proposed residential homes adjacent to existing open space ~~on the project site~~as directed by **MM-BIO-19.**

Nighttime Lighting (Permanent Indirect Impact)

Artificial nighttime lighting can cause negative effects on wildlife, including disrupting foraging and dispersal patterns, increasing predation risk, disrupting biological clocks, and increasing mortality risks along roads (Beier 2006). Absent mitigation, nighttime lighting associated with the proposed project would potentially result in a significant indirect impact to sensitive biological resources. Nighttime lighting within the golf course would be compliant with City of San Diego Outdoor Lighting Regulations Section 142.0740(f) and MHPA Land Use Adjacency Requirements, so that any exterior lighting would be limited to low-level lights and shielded to minimize the amount of light entering the adjacent MHPA and sensitive biological resource areas~~.~~ as directed by **MM-BIO-20.** All

development within the City of Santee is required to conform with the City of Santee's Municipal Code 13.30.030 performance standards, which state, in part, "All lighting will be designed and adjusted to reflect light away from any road or street, and away from any adjoining premises. All lights and illuminated signs will be shielded or directed so as to not cause glare on adjacent properties or to motorists." Development within the City of Santee would be designed so that project lighting does not cast light into natural or revegetation areas. Conformance with the City of Santee's Municipal Code and implementation of ~~project design features~~MM-BIO-20 would prevent significant indirect impacts of nighttime lighting on adjacent sensitive habitat.

~~In addition to mitigation, project design features would be implemented to minimize indirect impacts resulting from human activity, nuisance animals, invasive plants, and nighttime lighting. Permanent fencing would be installed around biological open space, which is currently unprotected, and signs precluding access would be posted. Only noninvasive plant species (i.e., species not listed on the California Invasive Plant Inventory prepared by the California Invasive Plant Council (Cal-IPC 2006) would be included in the landscape plan for the site. Because the golf course would be planted with a hybrid Bermuda grass species per industry standards, a 10-foot-wide buffer would be established to separate all golf turf from riparian areas. The buffer zone would be planted with native bunch grasses, which would contain the Bermuda grass within the playable golf boundary. The buffer zones are noted on the Grassing Plan for the golf course. Project-related lighting would be required to adhere to the City of Santee Municipal Code. Lighting within the proposed project footprint adjacent to undeveloped habitat would be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from these areas.~~

~~City of San Diego – Summary~~

~~The following project specific analysis is based on the City of San Diego's Significance Determination Thresholds, which are outlined above under Threshold 2:~~

1. ~~Sensitive biological resources are defined by the City of San Diego Municipal Code as:~~
    a. ~~Within the project site, the MHPA covers 12.86 acres of golf course and 0.33 acres of avoided riparian habitat. No sensitive vegetation communities within the MHPA would be impacted as a result of the proposed project, and the use would remain a golf course.~~
    b. ~~The proposed project would not result in impacts to City of San Diego designated wetlands.~~

~~The proposed project would result in the permanent loss of 0.19 acres of coastal sage scrub (Tier II sensitive upland) outside of the MHPA (~~Operational Noise (Permanent Indirect Impact)

Overall, the operational noise would not substantially change with project implementation. Golf is generally considered a low-intensity activity with minimal disruption to wildlife, especially during the breeding season. Golf operations typically involve quiet, dispersed human presence and do not generate the kind of sustained noise or disturbance associated with more intensive recreational and residential uses. Because the project site is surrounded by development, there are existing ambient noise levels resulting from surrounding activities (e.g., traffic on State Route 52, aircraft overflights from/to Gillespie Field, general neighborhood sources [e.g., air conditioners, landscaping activities], and various ground-maintenance activities). As detailed in Table 3.12-2 of the Draft EIR for the Carlton Oaks Country Club and Resort Project, existing ambient noise at the Project site ranges from 50.6 to 61.4 hourly A-weighted decibels (dBA) equivalent sound level (L_{eq}).

Project-related operational noise levels would be associated with golf tournaments and exterior activities at the pool and patio. All operational noise from the Residential North and Hotel/Clubhouse is predicted to be less than

60 dBA L_{eq} along the interface between the development and riparian habitat areas (Ldn Consulting, Inc. 2025), which is typically used by the Wildlife Agencies (i.e., USFWS and CDFW) as the noise threshold for wildlife species. Predicted noise levels at the Residential West development are anticipated to result in noise levels slightly exceeding the 60 dBA L_{eq} threshold (Ldn Consulting, Inc. 2025). However, this is due to the existing ambient noise levels from traffic along State Route 52 and not a result of the operational noise from the project. Therefore, special-status wildlife species, including least Bell's vireo, are already being subjected to ambient noise that is slightly higher than the 60 dBA L_{eq} threshold at the interface between Residential West and the adjacent riparian habitat due to the existing conditions. Therefore, long-term operational noise impacts from the project would be less than significant to special-status wildlife species, including Least Bell's Vireo.

Impact Determination

~~c. —~~Impact BIO-1~~).~~

~~d. No City of San Diego MSCP- or VPHCP-covered plant species were observed within the BSA.~~

~~e. No lands containing habitats with narrow endemic species, as listed in the Biology Guidelines of the Land Development manual, would be impacted by the proposed project.~~

~~f. The proposed project would not have impacts to lands containing habitats of covered species as listed in the Biology Guidelines of the Land Development manual.~~

~~3. Occurrence of any of the following situations associated with identified biological resources may indicate significant direct and indirect biological impacts:~~

~~A. Direct~~: **Potential Impacts**

~~a. Within the project site, the MHPA covers 12.86 acres of golf course and 0.33 acres of avoided riparian habitat. No sensitive vegetation communities within the MHPA would be impacted as a result of the proposed project, and the use would remain a golf course.~~

~~b. The proposed project would result in the permanent loss of 0.19 acres of coastal sage scrub (Tier II sensitive upland) outside of the MHPA (**Impact BIO-1**).~~

~~c. No sensitive species would be directly impacted by the proposed project.~~

~~d. No sensitive species would be directly impacted by the proposed project.~~

~~B. Indirect Impacts~~

~~The Significance Determination Thresholds indicate that depending on the circumstances, indirect effects of a project may be as significant as the direct effects of the project. Indirect effects include, but are not limited to, the following impacts:~~

~~a. See Impact BIO-14.~~

~~b. See Impact BIO-13.~~

~~c. See Impact BIO-13.~~

~~d. See Impact BIO-12.~~

~~e. The proposed project would not impact any stream channels, nor would it change fire cycles.~~

~~f. The proposed project would not result in impacts~~ to ~~wetland buffers.~~ Special-Status Species

~~**Impact Determination**~~

Implementation of the proposed project would have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW and USFWS. Potentially significant ~~impact(s) include the following:~~impacts to special-status species would occur with project implementation prior to implementation of mitigation measures.

Mitigation Measures

~~**Impact BIO-5. Least Bell's Vireo Breeding Habitat (City of Santee).**~~

Proposed habitat mitigation ratios and corresponding acreages for permanent impacts on sensitive upland vegetation communities within the City of San Diego and City of Santee are presented in Table 3.3-7, Proposed Mitigation for Permanent Impacts on Sensitive Upland Vegetation Communities.

Table 3.3-7. Proposed Mitigation for Permanent Impacts on Sensitive Upland Vegetation Communities

Vegetation Community	Total Impact (Acres)[1]	Mitigation Ratio	Total Mitigation Required (Acres)
City of San Diego			
Diegan Coastal Sage Scrub – disturbed[2] (on-site impacts)	0.08	1:1	0.08
Diegan Coastal Sage Scrub – disturbed[2] (off-site impacts)	0.11	1:1	0.11
City of San Diego Total	**0.19**	**N/A**	**0.19**
City of Santee			
Diegan Coastal Sage Scrub – disturbed	**0.41**	**1:1**	**0.41**
City of Santee Total	**0.41**	**N/A**	**0.41**
Project Total	**0.61**	**N/A**	**0.61**

Notes: N/A = not applicable

[1] If the coastal sage scrub habitat is determined to be occupies by coastal California gnatcatcher the project will ensure consistency with the Section 7 or Section 10 permitting process through implementation of MM-BIO-18.

[2] MSCP Tier II; impacts outside MHPA, mitigation within MHPA through City of San Diego Habitat Acquisition Fund.

Permanent impacts within the City of Santee on wetland and riparian vegetation communities are presented in Table 3.3-8, Proposed Mitigation for Permanent Impacts on Wetlands/Riparian Vegetation Communities – City of Santee.

Table 3.3-8. Proposed Mitigation for Permanent Impacts on Wetland/Riparian Vegetation Communities – City of Santee

Vegetation Community/ Land Cover Type	Total Permanent Impact (Acres)	Mitigation Ratio[1]	Total Mitigation Required (Acres)[2]
Coastal and Valley Freshwater Marsh	0.55	1:1	0.55
Disturbed Wetland	0.29	1:1	0.29
Fresh Water	0.02	1:1	0.02
Mule Fat Scrub – disturbed	0.29	2:1	0.59
Southern Cottonwood–Willow Riparian Forest	1.19	3:1	3.58
Southern Cottonwood–Willow Riparian Forest – disturbed	0.34	3:1	1.03
Southern Willow Scrub	0.17	3:1	0.50
Project Totals	**2.86**	**N/A**	**6.56**

Notes: Totals may not sum due to rounding. N/A = not applicable

1 The ~~loss of 0.77 acres of occupied breeding habitat for least Bell's vireo species~~ mitigation ratios provided are based on the standard aquatic resource regulatory agency (i.e., USACE, RWQCB, and CDFW) ratios; however, the manner in which the mitigation ratio will be met will be determined during the permitting process pursuant to the aquatic resource regulatory agencies' requirements and with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e., USFWS and CDFW) through the consultation process.

2 Mitigation to be accomplished through a combination of on-site restoration (i.e., creation), enhancement, and/or preservation of habitat as determined during the permitting process (as outlined in Appendix K, Proposed On-Site Mitigation Overview, to Appendix E, the Biological Survey Report).

Permanent impacts within the City of Santee to vegetation communities and land cover types occurring within jurisdictional aquatic resources are presented in Table 3.3-9, Proposed Mitigation for Permanent Impacts to Vegetation Communities/Land Cover Types Occurring within Jurisdictional Aquatic Resources – City of Santee.

Table 3.3-9. Proposed Mitigation for Permanent Impacts to Vegetation Communities/Land Cover Types Occurring within Jurisdictional Aquatic Resources – City of Santee

Jurisdiction	Vegetation Community/ Aquatic Resource Feature	Permanent Impact (acres)	Mitigation Ratio[1]	Mitigation Required (acres)[2]
City of Santee	Developed-Golf Course (NWW6, WW3, WW4)	0.03	0.5:1	0.02
	Developed – Culvert (NWW5)	<0.01	N/A	N/A
	Disturbed Habitat (NWW6)	<0.01	0.5:1	<0.01
	Eucalyptus Woodland (NWW6)	0.01	0.5:1	<0.01
	Non-Native Grassland (NWW1)	0.13	0.5:1	0.07
	Non-Native Woodland (NWW2, NWW3, NWW6, RIP1)	0.73	0.5:1	0.37
	Developed – Spillway (NWW1)	0.03	N/A	N/A
	Project Totals	**0.94**	**N/A**	**0.45**

Notes: Totals may not sum due to rounding. N/A = not applicable.

[1] The mitigation ratios provided are based on the standard aquatic resource regulatory agency (i.e., USACE, RWQCB, and CDFW) ratios; however, the manner in which the mitigation ratio will be met will be determined during the permitting process pursuant to the aquatic resource regulatory agencies' requirements and with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e., USFWS and CDFW) through the consultation process (as outlined in Appendix K, Proposed On-Site Mitigation Overview, to Appendix E, the Revised Biological Survey Report). Ratios for the developed – culvert and developed – spillway are not provided as these two features would be ~~a potentially significant impact. The~~replaced at their current location by the proposed project.

[2] Mitigation to be accomplished through on-site enhancement of mulefat scrub as determined during the permitting process (as outlined in Appendix K, Proposed On-Site Mitigation Overview, to Appendix E, the Revised Biological Survey Report).

Temporary impacts along San Diego River (North Channel) would occur as a result of dewatering the golf course pond within the mainstem of Sycamore Canyon Creek and are presented in Table 3.3-10, Passive Restoration for Temporary Dewatering Impacts Along San Diego River (North Channel) Impoundment. All 1:1 mitigation will occur in situ through passive recovery of the open water, riparian and marsh habitat after removal of the dewatering weirs and pond rehydration.

Table 3.3-10. Passive Restoration for Temporary Dewatering Impacts Along San Diego River (North Channel) Impoundment

Jurisdiction	Vegetation Community/ Land Cover Type	Total Temporary Impact (acres)	Ratio‡	Total Restoration Required (acres)
City of San Diego	Coastal and Valley Freshwater Marsh	<0.01	1:1	<0.01 in situ
	Southern Cottonwood-Willow Riparian Forest	0.01	1:1	0.01 in situ
	City of San Diego Subtotal	*0.02*	*N/A*	*0.02 in situ*
City of Santee	Coastal and Valley Freshwater Marsh	0.47	1:1	0.47 in situ
	Fresh Water (Open Water)	2.36	1:1	2.36 in situ
	Non-Native Riparian	0.05	1:1	0.05 in situ
	Southern Cottonwood-Willow Riparian Forest	0.11	1:1	0.11 in situ
	City of Santee Subtotal	*2.98*	*N/A*	*2.98 in situ*
	Project Totals	**3.00**	**N/A**	**3.00 in situ**

Notes: ‡ = 1:1 mitigation for temporary impacts through re-watering of dewatered habitat at original location. N/A = not applicable.

Temporary impacts within the Temporary Railcar Crossing and the spillway repair, and mitigation ratios and corresponding acreages for temporary impacts on vegetation communities are presented in Table 3.3-11, Proposed Restoration for Temporary Impacts within the Temporary Railcar Crossing and Spillway Repair Area – City of Santee.

Table 3.3-11. Proposed Restoration for Temporary Impacts within the Temporary Railcar Crossing and Spillway Repair Area – City of Santee

Jurisdiction	Vegetation Community/ Land Cover Type	Total Temporary Impact (acres)	Mitigation Ratio‡	Total Mitigation Required (acres)
City of Santee	Coastal and Valley Freshwater Marsh	0.07	1:1	0.07 in situ
	Fresh Water	0.05	1:1	0.05 in situ
	Southern Cottonwood-Willow Riparian Forest	<0.01	1:1	0.01 in situ
	Project Totals	**0.13**	**N/A**	**0.13 in situ**

Notes: ‡ = 1:1 mitigation for temporary impacts at original location. N/A = not applicable.

Proposed Mitigation Measures

The following mitigation measures are necessary to reduce impacts to Impact BIO-1:

MM-BIO-1 Permanent Impacts within City of San Diego on Sensitive Upland Vegetation Communities. Within the City of San Diego, direct permanent impacts to disturbed Diegan coastal sage scrub (outside of Multi-Habitat Planning Area [MHPA]) within the City of San Diego, shall be mitigated at a 1:1 ratio in accordance with the Upland Mitigation Ratios in the City of San Diego Biological Guidelines (as specified in Table 3 of City of San Diego 2018) as summarized in Table 3.3-7, Proposed Mitigation for Permanent Impacts on Sensitive Upland Vegetation Communities.

Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities, the applicant shall ensure that:

- A qualified biologist shall perform relevant preconstruction surveys as required by MM-BIO-13 through MM-BIO-18.
- Sensitive upland vegetation communities shall be mitigated through either Option 1 or Option 2 as described below.

Option 1: The applicant shall provide a contribution into the City of San Diego Habitat Acquisition Fund (HAF). The HAF fee calculated shall be based on the current market rate amount per acre set by Real Estate Assets Department (READ) each year at the trigger time. Per the City of San Diego Municipal Code, an additional 10% administration fee is required to paid for HAF City staff administration and maintenance costs. The 10% fee is calculated and applied after the mitigation HAF amount is determined based upon the required mitigation acreage/ratio. Documentation of this contribution shall be provided to the City of San Diego by the applicant prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities.

Option 2: If habitat credit cannot be purchased at the HAF, then the applicant shall provide for the on-site creation, preservation, or restoration of Diegan coastal sage scrub at a 1:1 ratio that complies with the mitigation strategy outlined in Appendix K, Proposed On-Site Mitigation Overview, of Appendix E, Revised Biological Survey Report. Prior to issuance of the permit for any ground disturbance activities impacting sensitive upland vegetation communities the following shall occur:

a. **Conservation easement.** A conservation easement shall be recorded on site at a location approved by the City of San Diego for the on-site creation, preservation, or restoration of Diegan coastal sage scrub at a 1:1 ratio. The Conservation Easement shall be owned by a conservancy or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary.

b. **Upland Restoration Plan**. An Upland Restoration Plan shall be approved by the City of San Diego. The Upland Restoration Plan shall include the following:

   1. Monitoring of the restoration areas shall occur for a minimum of 5 years, or until the 5th year performance/success criteria are met, to determine the successful completion of the 5-year mitigation and monitoring program.
   2. The performance standards and success criteria to determine the successful completion of the 5-year mitigation and monitoring program. The criteria must be approved by the City of San Diego, and shall include requirements for 100% survival of native shrub container stock plantings at the first annual monitoring (or sufficient number of shrubs emerging from seed to replace the container stock), as well as Year 5 standards of native vegetation cover of at least 90% of that of a nearby Diegan coastal sage scrub reference site. Methods used to measure these performance standards shall be described, and if the restored areas fail to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed and implemented, and the monitoring and maintenance period shall be extended until all Year 5 standards are met or as otherwise provided in this document. The Upland Restoration Plan must be approved City of Santee prior to implementation.
   3. The City of San Diego's General Outline for Conceptual Revegetation/Restoration Plans shall be used for guidance.
   4. The Upland Restoration Plan shall detail the installation, maintenance, and monitoring that would occur as part of the restoration effort.
   5. The Upland Restoration Plan shall include an evaluation of restoration suitability specific to proposed vegetation types, soil preparation, plant palettes, irrigation, erosion control, maintenance and monitoring program, and success criteria.

c. **Resource Management Plan (RMP)**. An RMP shall be prepared as described in MM-BIO-6 and approved by the City of San Diego and CDFW. The RMP shall establish long-term monitoring, maintenance, management, and reporting directives and provide for long-term management funding through a non-wasting endowment (or equivalent acceptable funding mechanism) in an amount determined through the preparation of a Property Assessment Record or similar method. The RMP cannot be approved by the City of San Diego or CDFW until the following items have been completed: a qualified Resource Manager has been selected and approved by the City of San Diego and CDFW, and the RMP funding mechanism has been established.

d. **Bonding**. The applicant shall secure performance bonds (if Option 2 is selected) for the restoration work under the plan, to secure the issuance of grading permits by the City of San Diego that would be released after the City of San Diego approves the final success of the restoration site.

MM-BIO-2 Permanent Impacts within City of Santee on Sensitive Upland Vegetation Communities. Within the City of Santee, direct permanent impacts to disturbed Diegan coastal sage scrub shall be mitigated at a 1:1 ratio as summarized in Table 3.3-7, Proposed Mitigation for Permanent Impacts on Sensitive Upland Vegetation Communities.

Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities (i.e., disturbed Diegan coastal sage scrub) within the City of Santee, the applicant shall ensure that:

1. A qualified biologist shall perform relevant preconstruction surveys as required by MM-BIO-13 through MM-BIO-18.
2. Sensitive upland vegetation communities shall be mitigated through either Option 1, Option 2, or Option 3, as described below.

Option 1. On-Site Restoration. If on-site restoration is proposed, the applicant shall provide for the on-site restoration of land that meets the criteria for sensitive upland vegetation based on a 1:1 ratio and as outlined in mitigation strategy in Appendix K, Proposed On-Site Mitigation Overview. Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities (disturbed Diegan coastal sage scrub) within the City of Santee the applicant shall provide the following:

A **Recordation of conservation easement.** A conservation easement shall be recorded over the site to be restored. The conservation easement shall be owned by a conservancy or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary.

B **Upland Restoration Plan approved.** An Upland Restoration Plan shall be approved by the City of Santee. The Upland Restoration Plan shall include the following:

- ~~temporary direct impacts on up to~~ Monitoring of the restoration areas shall be required for a minimum of 5 years, or until the 5th year performance/success criteria are met, to determine the successful completion of the 5-year mitigation and monitoring program.
- The performance standards and success criteria to determine the successful completion of the 5-year mitigation and monitoring program. The criteria shall include requirements for 100% survival of native shrub container stock plantings at the first annual monitoring (or sufficient number of shrubs emerging from seed to replace the container stock), as well as Year 5 standards of native vegetation cover of at~~0.09 acres of occupied~~ least 90% of a nearby Diegan coastal sage scrub reference site. Methods used to measure these performance standards shall be described, and if the restored area fails to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed and implemented, and the monitoring and maintenance period shall be extended until all final performance standards are met or as otherwise provided in this document. In the absence of any restoration plan guidance from the City of Santee, the City of San Diego's General Outline for Conceptual Revegetation/Restoration Plans shall be used for guidance.
- The Upland Restoration Plan shall detail the installation, maintenance, and monitoring that would occur as part of the restoration effort.

- The Upland Restoration Plan shall include an evaluation of restoration suitability specific to proposed vegetation types, soil preparation, plant palettes, irrigation, erosion control, maintenance and monitoring program, and performance standards.

C **Resource Management Plan approved.** An RMP shall also be prepared as described in MM-BIO-6 and approved by the City of Santee or CDFW. The specifics regarding long-term management and management funding shall be included in the RMP that establishes long-term monitoring, management, and reporting directives. The RMP cannot be approved by the City of Santee or CDFW until the following items have been completed: a qualified Resource Manager has been selected and approved by the City of Santee and CDFW, and the RMP funding mechanism has been established.

D **Bonding**. The applicant shall secure performance bonds (if Option 1 is selected) for the restoration work under the plan, prior to issuance of grading permits by the City of Santee that would be released after the City of Santee approves the final success of the restoration site.

Option 2. Off-Site Preservation. Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities (disturbed Diegan coastal sage scrub) within the City of Santee the applicant shall provide for the off-site preservation of land that meets the criteria for sensitive upland vegetation based on the ratios described in Table 3.3-7 by providing the following:

A **Recordation of Conservation Easement**. The recordation of a conservation easement for the off-site preservation of land, at a location approved by the City of Santee and the Wildlife Agencies and must be within one of the following areas: (1) preserve areas in the City of Santee, (2) City of San Diego Multi-Habitat Planning Area, or (3) County of San Diego Pre-Approved Mitigation Areas. The Conservation Easement shall be owned by a conservancy, or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary.

B **Approval of a Resource Management Plan (RMP).** An RMP shall also be prepared as described in MM-BIO-6. The RMP shall establish long-term monitoring, maintenance, management, and reporting directives and provide for long-term management funding through a non-wasting endowment in an amount determined through the preparation of a Property Assessment Record or similar method. The RMP cannot be approved by the City of Santee or CDFW until the following items have been completed: a qualified Resource Manager has been selected and approved by the City of Santee and CDFW, and the RMP funding mechanism has been established.

Option 3. The purchase of mitigation credits shall occur at a mitigation bank approved by the CDFW in the local area or other location deemed acceptable by CDFW. The applicant shall provide evidence of purchase of credits to the City of Santee prior to issuance of any grading permit or ground disturbance activity impacting disturbed Diegan coastal sage scrub. Evidence of purchase shall consist of the following items:

A A copy of the purchase contract referencing the project name and numbers for which the habitat credits were purchased.

B If not stated explicitly in the purchase contract, a separate letter must be provided identifying the entity responsible for the long-term management and monitoring of the preserved land.

C ~~Bell's vireo breeding habitat within designated critical habitat within the City of Santee~~To ensure the land will be protected in perpetuity, evidence must be provided that a dedicated conservation easement or similar land constraint has been placed over the mitigation land.

D An accounting of the status of the mitigation bank. This shall include the total amount of credits available at the bank, the amount required by this project, and the amount remaining after use by this project.

MM-BIO-3 Permanent Impacts and Temporary Impacts within City of Santee on Sensitive Riparian and Wetland Vegetation Communities. Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive riparian and wetland vegetation communities within the City of Santee, mitigation shall occur in accordance with the following: (1) The applicant shall obtain a permit or authorizations as directed by MM-BIO-11 from the applicable regulatory agencies (e.g., U.S. Army Corps of Engineers [USACE], California Department of Fish and Wildlife [CDFW], and Regional Water Quality Control Board [RWQCB]) pursuant to the regulatory agencies' requirements and regulations together with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e., USFWS and CDFW) through the consultation process; and (2) provide evidence of these permits or authorizations, including all required conditions therein, or confirm that no such permits or authorizations are required, to the City of Santee; and (3) mitigate for permanent and temporary impacts in accordance with the mitigation ratios presented in Tables 3.3-8, 3.3-9, and 3.3-11.

a) For permanent impacts on sensitive riparian and wetland vegetation communities and other aquatic resources, mitigation will be accomplished through on-site restoration (i.e., creation), enhancement, and/or preservation of habitat at the mitigation ratios described in Table 3.3-8 and Table 3.3-9 and as outlined in mitigation strategy in Appendix K, Proposed On-Site Mitigation Overview. If the mitigation for permanent impacts cannot be fully achieved on-site then the creation of the remaining acreage shall be met at an off-site location preferably within the Draft Santee MSCP Subarea Plan Area to be preserved in perpetuity through a dedicated conservation easement. If there are no off-site locations available within the Draft Santee MSCP Subarea Plan Area, then the site can be located outside of the Draft Santee MSCP Subarea Plan but preferably within the San Diego River to ensure mitigation occurs within the same watershed as the impact area.

b) All temporary impacts related to the placement of the Temporary Railcar Crossing and spillway repair area shall be restored in-place to pre-project conditions. The temporary impacts to sensitive riparian and wetland vegetation shall be mitigated at mitigation ratios described in Table 3.3-11.

c) For both permanent and temporary impacts, a Habitat Mitigation and Monitoring Plan (refer to MM-BIO-5) and Resource Management Plan (MM-BIO-6) that include monitoring and restoration requirements for these sensitive riparian and wetland vegetation communities and aquatic resources shall also be prepared. The Habitat Mitigation and Monitoring Plan and the Resource Management Plan shall be approved by the appropriate resource agencies (U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife).

MM-BIO-4 Restoration of Temporary Dewatering Impacts within City of Santee and City of San Diego on Sensitive Riparian and Wetland Vegetation Communities. Prior to the issuance of any grading permit or ground disturbance activity the applicant shall obtain a permit or authorizations as directed by MM-BIO-11 from the applicable regulatory agencies (i.e., U.S. Army Corps of Engineers [USACE], Regional Water Quality Control Board, and California Department of Fish and Wildlife [CDFW]) pursuant to the regulatory agencies' requirements and regulations together with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e., USFWS and CDFW) through the consultation process; and provide evidence of these permits or authorizations, including all required conditions therein, or confirm that no such permits or authorizations are required, to the City of Santee. Riparian and wetland vegetation communities within the San Diego River (North Channel) impoundment would be temporarily impacted during dewatering activities during construction. Direct temporary impacts to coastal valley freshwater marsh, fresh water, southern cottonwood-willow riparian forest, and non-native riparian vegetation shall be replaced in accordance with the mitigation ratios provided in Table 3.3-10 through passive in-situ replacement of habitat to pre-dewatering conditions upon completion of the dewatering activities. The impacted areas shall be restored in place and monitored in accordance with the Habitat Mitigation and Monitoring Plan (refer to MM-BIO-5) until success criteria are achieved to ensure these areas fully recover to pre-dewatering conditions.

MM-BIO-5 Habitat Mitigation and Monitoring Plan (HMMP). Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive riparian and wetland vegetation communities as described in MM-BIO-3 and MM-BIO-4, a final HMMP must be approved by the resource agencies as relevant (U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife), City of San Diego, and the City of Santee. The HMMP shall comply with the following criteria and standards:

- The draft HMMP shall include details for the installation, maintenance, and monitoring. Annual performance standards for native and non-native vegetation cover designed to assess progress toward final mitigation goals (e.g., by the end of Year 5, the establishment area is expected to achieve at least 75% absolute native vegetation cover, non-native plant cover should not exceed 10%, with perennial invasive species maintained at 0%) and long-term site protection and management.
- Monitoring shall include monitoring of the restoration/enhancement areas for a minimum of 5 years or until 5th year performance standards are met. The HMMP shall include performance standards to determine the successful completion of the 5-year mitigation and monitoring program. Attainment of these standards shall indicate the restoration area is progressing toward the habitat functions and services specified in the HMMP. Methods used to measure these performance standards shall be described, and if the mitigation area fails to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed and implemented, and the monitoring and maintenance period shall be extended until all final performance standards are met or as otherwise provided in the HMMP.
- The HMMP shall include performance bonds that would be released after the City of Santee approves the final success of the restoration site.

MM-BIO-6 Resource Management Plan (RMP). Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive riparian and wetland vegetation communities, an RMP to provide for the long-term management of the mitigation sites (on-site wetland mitigation sites and potential Diegan coastal sage scrub sites) shall be prepared by a qualified biologist to address long-term monitoring, maintenance, management, and reporting directives, in perpetuity. The qualified biologist shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of field experience. The RMP shall be approved by the City of Santee and/or the City of San Diego, and Wildlife Agencies (U.S. Fish and Wildlife Service [USFWS] and California Department of Fish and Wildlife [CDFW]). The RMP shall include the following:

- The delineation of the limits of where the conservation easement will be recorded.
- Selection of a qualified Resource Manager approved by the City of Santee, and/or City of San Diego, and CDFW, as applicable.
- Establishment of requirements for long-term monitoring and management actions, including reporting directives, in perpetuity, approved by the City of Santee and/or City of San Diego, and Resource Agencies (i.e., USFWS, U.S. Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB[, and California Department of Fish and Wildlife [CDFW]), as applicable, that will be managed by the Resource Manager.
- Preparation of a Property Analysis Record (prepared for endowment funding) or similar cost estimation to determine the size of a non-wasting endowment necessary to fund the annual costs for basic stewardship of the mitigation sites.
- Establishment of an endowment (or equivalent acceptable funding mechanism) for purposes of long-term monitoring and management actions including reporting directives, in perpetuity based on a Property Analysis Record or similar cost estimation. The funding mechanism shall approved by the applicable city agencies (City of Santee and/or City of San Diego) and Resource Agencies (i.e., USACE, RWQCB, CDFW, and USFWS).
- Identification of the entity that would hold the endowment (or be responsible for the equivalent acceptable funding mechanism).
- Evidence of purchase of the mitigation land to be managed, if applicable.
- Evidence that a conservation easement has been dedicated to an entity approved by CDFW, to ensure that the land is protected in perpetuity.
- Acknowledgment that the Resource Manager accepts responsibility for the management of the site.
- Acknowledgment that the applicable city agency has approved the entity that will be responsible for holding the endowment.

MM-BIO-7 Qualified Biologist to Provide Construction Monitoring. Prior to the start of grading or other ground disturbing activity, a qualified biologist shall conduct environmental awareness training for all construction personnel. Topics to be included in the training include, but are not limited to, the construction limits; sensitive habitats, features, plants, and animal species to avoid; mitigation measure and/or permit condition requirements; seasonal or other time-related restrictions on construction; and measures related to erosion control and spill prevention. Environmental awareness training shall be repeated for any new construction personnel working on the site. The

qualified biologist shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of field experience.

During project vegetation removal or ground disturbing activities (e.g., grubbing, tree removals, grading, discing, soil deposition, etc.), a qualified biologist shall be on-site to oversee compliance with all laws, regulations, permit conditions, mitigation measures, and any other biological resources requirements. The qualified biologist shall review the entire site at least once weekly during other construction activities to ensure that full compliance occurs.

MM-BIO-8 Delineate Environmentally Sensitive Areas. Prior to the issuance of any grading permit or ground disturbance activity impacting environmentally sensitive areas within the City of Santee and City of San Diego, "environmentally sensitive areas" shall be identified on the final construction plans and protected with temporary fencing (e.g., orange snow fencing). A qualified biologist shall monitor the installation of the temporary fencing and ensure it is installed prior to the start of clearing, brushing, grading, or other ground-disturbing construction activities. A qualified biologist shall inspect the temporary fencing at least twice weekly during grading, and monthly after grading is complete, to ensure it remains in place throughout construction.

MM-BIO-9 Stormwater Pollution Prevention Plan. Prior to the issuance of grading permits, the applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) to support coverage under the Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ) to reduce the potential for water pollution and sedimentation from construction. BMPs to be included in the SWPPP that must be submitted to the State Water Resources Quality Control Board shall include, but are not limited to, the following:

- The applicant shall not stockpile brush, loose soils, excavation spoils, or other similar debris material within sensitive habitats.
- If visible dust is present during construction activities, standard dust suppression techniques (e.g., water spraying) shall be used in all ground-disturbance areas.
- During construction activities, measures shall be in place to ensure that contaminants are not discharged from construction sites. The SWPPP shall define areas where hazardous materials and trash shall be stored; where vehicles shall be parked, fueled, and serviced; and where construction materials shall be stored.
- Runoff, sedimentation, and erosion shall be minimized through the use of BMPs such as water bars, silt fences, staked straw bales, wattles, and mulching and seeding of all disturbed areas. These measures shall be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water, and to preserve roadways and adjacent properties.
- Equipment storage, fueling, and staging areas shall be located in upland sites away from riparian areas and other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Where vehicle maintenance (excluding fueling) cannot be avoided in areas outside those previously specified, these maintenance activities shall be performed at least 150 feet from all aquatic resources, or as specified by agency permits, on an impermeable bladder or tarp specified for such

maintenance activities. Project-related spills of hazardous materials shall be cleaned up immediately, and contaminated soils removed to approved disposal areas.

- Measures such as sandbags, silt screens, cleanup of spills of hazardous materials, and cleanup of sediment shall be implemented to prevent polluted (with sediment or hazardous materials) runoff from work areas in paved streets from entering the storm drain system.

~~**Impact BIO-6. Non-listed Special-Status Species Habitat.**~~

~~The proposed project would have permanent direct impacts on up to 0.80 acres of southern cottonwood–willow riparian forest (including disturbed) that is potentially suitable as breeding habitat for yellow warbler, yellow-breasted chat, western bluebird, vermilion flycatcher, Cooper's hawk, and white-tailed kite; suitable as habitat for two-striped garter snake; and suitable as habitat for mule deer (Table 3.3-7). The loss of 0.80 acres of habitat for these species would be considered a potentially significant impact to special status species.~~

- ~~Conditions of MSCP coverage for Cooper's hawk include a 300-foot impact avoidance buffer around active nests and minimization of disturbance to oak riparian forests (City of San Diego 1998).~~Measures such as silt screens, cleanup of spills of hazardous materials, cleanup of sediment, secondary containment for hazardous materials, and avoidance of activities that disturb sediment or have a high potential for hazardous materials spills shall be implemented immediately before or during rain to prevent polluted (with sediment or hazardous materials) runoff from staging areas from draining into water ways such as washes, drainages, and ditches, and from entering municipal storm drain systems.

The applicant shall comply with the City of Santee's Stormwater Pollution Prevention Program, the specifics of which can be found on the City of Santee's website. Verification of Construction General Permit coverage approval and the approved SWPPP(s) shall be provided to the City of Santee at least 30 days prior to start of construction. Updated SWPPPs shall be provided to the City of Santee on request during construction.

MM-BIO-10 Speed Limits During Construction. Vehicle speed limits within the project site shall not exceed 25 miles per hour during project construction.

~~No Cooper's hawk nests, or nesting activities were observed within the BSA during project surveys.~~ ~~The project has been redesigned to minimize disturbance to riparian forests within the City of Santee and would completely avoid impacts on riparian forests within the City of San Diego.~~

~~**Impact BIO-7. Nesting Birds.**~~

~~Impacts on native or naturalized vegetation during the breeding season have the potential to kill nesting birds or their eggs or young, including special status birds, such as least Bell's vireo, yellow warbler, yellow breasted chat, western bluebird, vermilion flycatcher, Cooper's hawk, and white-tailed kite. Any project-related activities that result in the death of nesting birds could be a violation of federal and state laws and would be a significant impact.~~

Impact BIO-8. Crotch's Bumble Bee.

Although Crotch's bumble bee is not known from the BSA, and the project site has low potential to support nesting or foraging Crotch's bumble bee, if the species were present, then underground during ground disturbance, then impacts on a Crotch's bumble bee nest would be significant.

Impact BIO-9. Western Spadefoot.

Although western spadefoot is not known from the BSA, the project site has low potential to support breeding or estivating western spadefoot, and a survey in 2025 was negative, if the species were present, then impacts to western spadefoot would be significant.

Impact BIO-10. Western Burrowing Owl.

Although western burrowing owl is not known from the BSA, suitable habitat was not found within the BSA, and the project site has low potential to support wintering or breeding western burrowing owl, if suitable burrows become present within the open habitats on site, then there is potential for them to colonize the BSA. Burrowing owl may colonize during any time of the year. If the species were present, then impacts to western burrowing owl would be significant.

Impact BIO-11. Cormorant Rookery.

Construction noise and activity associated with the regrading and redesign of the golf course and construction of the golf resort, if they occur during the breeding season, have potential to disrupt the breeding activities of double-crested cormorants. Disruption or loss of breeding at this rookery would be a significant impact on a wildlife nursery site.

Impact BIO-12. Construction Noise.

Indirect, temporary impacts on special-status animal species could occur during project construction due to construction-related noise from such sources as clearing, grubbing, and grading. Nesting special-status bird species can be adversely affected by construction noise levels that exceed a 60 dBA L_{eq} hourly average or ambient conditions (whichever is greater). Construction noise could cause an indirect, temporary impact on special-status animal species even with compliance with the noise requirements of the Cities of Santee and San Diego. These indirect, temporary impacts from noise could be potentially significant, particularly if they occur during the breeding season of special-status avian species.

Impact BIO-13. Indirect Human Activity.

The proposed project would increase human activity in the vicinity of sensitive habitat, including occupied vireo habitat, on the western and northeastern sides of the project as the existing golf course land use adjacent to the San Diego River habitat is converted to residential and commercial land uses. Project design features such as fences and retaining walls would help reduce potential indirect impacts from human activity. However, additional measures, such as signage, are required to reduce indirect human activity impacts to a less-than-significant level.

~~**Impact BIO-14. Domestic Animals.**~~

~~Animals associated with residential development can have a negative effect on wildlife. Free-range cats and off-leash dogs can prey on wildlife and have potential to spread zoonotic diseases to wildlife and other domestic animals. Because least Bell's vireo normally constructs nests at the low height of approximately 3 feet, there is the potential for increased predation of adult and nestling least Bell's vireo by an increased abundance of free-range cats. Increased predation of special-status bird species would represent a potentially significant impact. Homeowner education shall be required to reduce the potential increase of domestic pets generated due to the proposed residential homes adjacent to existing open space.~~

~~Mitigation Measures~~

~~Implementation of these measures would result in a less than significant impact with mitigation incorporated under CEQA.~~ ~~**MM-BIO-1 through MM-BIO-11**~~ ~~are listed under Threshold 2.~~

MM-BIO-12~~.~~ ~~Minimize~~ Indirect Noise Impacts on Non-~~listed~~Listed Riparian Birds and Raptors. The operation of construction equipment (e.g., backhoes, loaders, bulldozers, excavators, skid steers, graders) and construction activities (building construction) shall not occur within ~~a~~any suitable breeding habitat that overlap the "noise impact area" (~~as~~ defined ~~below~~as up to 300 feet from the noise source) during the breeding seasons for yellow warbler, yellow-breasted chat, and vermilion flycatcher (February 15 through August 31), ~~or~~ nesting raptors (January 15 through July 15), or cormorant (April 1 through July 31). If it is not feasible to avoid operation of construction equipment during any of these breeding seasons, then a pre-construction nesting survey shall be conducted within potential habitat of any of these species within 150, 300, or ~~300~~500 feet respectively of proposed construction equipment activity. Pre-construction surveys shall be conducted by a qualified biologist no more than 72 hours prior to the start of construction to determine if active nests of these species are present within the areas potentially impacted by noise. The qualified biologist conducting the survey(s) shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of experience conducting biological field surveys, including surveys for nesting birds.

The "noise impact area" is defined as up to 300 feet from the noise source to the nest for raptors, 500 feet from the noise source to the cormorant rookery, and up to 150 feet from the noise source to the nest for ~~the cormorant rookery and for~~ other sensitive riparian species, including yellow warbler, yellow-breasted chat, and vermilion flycatcher. If it is determined at the completion of pre-construction surveys that active nests belonging to yellow warbler, yellow-breasted chat, vermilion flycatcher, or raptors are absent from the noise impact area, construction shall be allowed to proceed. If pre-construction surveys determine the presence of active nests belonging to any of these sensitive species, then construction shall ~~(1) be postponed within the noise impact area until a qualified biologist determines any nests are no longer active or until after the respective breeding season; (2) be conditionally allowed within portions of the noise impact area if intensive monitoring by the qualified biologist determines that nesting activities are not being substantially (i.e., adults appearing agitated, scolding more, attracting the attention of brown-headed cowbirds, or leaving the nest site more than average) disrupted by adjacent construction activity; or (3) not occur until a temporary noise barrier or berm is constructed at the edge of the construction limits and/or around the piece of equipment to ensure that noise levels within the noise impact area are reduced~~

~~to below 1-hour average of 60 dBA L_{eq} or ambient noise levels, whichever is greater, at the nest location. :Decibel output shall be confirmed by a qualified noise specialist, and intermittent monitoring by a qualified biologist shall be required to ensure that conditions have not changed. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that construction of the noise attenuation feature does not itself result disruption of nesting behavior. Factors used to determine and guide the appropriate buffer distance shall include individual pair behavior responses, amount of buffering topography or structures, proximity to existing disturbance, and ambient noise levels.~~

~~MM-BIO-13. Avoid Disturbance of Vegetation During Bird Nesting Season. To comply with state and federal protections on nesting birds, clearing, trimming, and grubbing of vegetation shall occur September 1 through February 14 (i.e., outside of the general bird breeding season), and tree removal shall occur July 16 through January 14 (outside of the raptor breeding season). If tree or vegetation trimming, clearing, or grubbing cannot feasibly occur outside of these breeding seasons, then pre-construction nesting surveys, as described below, shall be conducted by a qualified biologist prior to initiating vegetation trimming, clearing, or grubbing activities.~~

~~The nesting survey for native birds protected under the Migratory Bird Treaty Act and California Fish and Game Code shall consist of one pre construction nesting survey conducted no more than 72 hours prior to the commencement of vegetation trimming, clearing, or grubbing to determine if active nests of these species are present in the affected areas. If pre-construction surveys determine the presence of active nests, then construction shall~~ (1) be postponed within the noise impact area until a qualified biologist determines any nests are no longer active or until after the respective breeding season; (2) be conditionally allowed within portions of the noise impact area if intensive monitoring by the qualified biologist determines that nesting activities are not being substantially (i.e., adults appearing agitated, scolding more, attracting the attention of brown-headed cowbirds, or leaving the nest site more than average) disrupted by adjacent construction activity; or (3) not occur until a temporary noise barrier or berm is constructed at the edge of the construction limits and/or around the piece of equipment to ensure that noise levels within the noise impact area are reduced to below 1-hour average of 60 A-weighted decibels (dBA) L_{eq} or ambient noise levels, whichever is greater, at the nest location. Decibel output shall be confirmed by a qualified noise specialist, and intermittent monitoring by a qualified biologist shall be required to ensure that conditions have not changed. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that construction of the noise attenuation feature does not itself result in disruption of nesting behavior. Factors used to determine and guide the appropriate buffer distance shall include individual pair behavior responses, amount of buffering topography or structures, proximity to existing disturbance, and ambient noise levels.~~dBA L_{eq} or ambient noise levels, whichever is greater, at the nest location.~~ While the rookery is active, the qualified biologist shall monitor the rookery for any signs of disruption to breeding activities by ongoing construction activities (e.g., adults appearing agitated, leaving the nest more than average, etc.). If the qualified biologist determines breeding activities are disrupted, the avoidance buffer shall be expanded until the disruption is no longer observed.

MM-BIO-13 Disturbance of Vegetation During Bird Nesting Season. Construction activities occurring within all potential nesting resource areas within the Project site and areas within 500 feet of the Project site containing suitable nesting resources should be avoided during the migratory bird nesting

season (typically January 15 through September 15). If construction activities (i.e., grading, tree removal, external construction involving heavy equipment generating noise in excess of 60 dBA [energy equivalent level] or ambient noise levels, whichever is greater, at the nest location) must occur during the bird nesting season, an avian nesting survey of all potential nesting resource areas within the Project site and areas containing suitable nesting resources within 500 feet of all impact areas must be conducted to determine the presence/absence of special-status species, protected migratory birds, and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours of initiation of construction activities in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If construction activities are on hold for more than 30 days, then pre-construction surveys would need to be reinitiated. If an active bird nest is found, the nest shall be flagged (flagging shall be attached to a nearby tree or shrub with distance and direction identified so as not to disturb nest) and mapped on the construction plans, along with an appropriate buffer established around the nest. The buffer will be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species), existing nearby conditions (e.g., natural habitat versus roads or existing noisy activities), existing buffering features (e.g., topography, tall and dense trees, buildings), legal status of species (i.e., listed versus non-listed), general sensitivities of the species (e.g., disturbance tolerant or urban versus not disturbance tolerant), and other variables. The nest buffer area shall be avoided until the nest is vacated and/or the juveniles have fledged. The nest buffer area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when an active nest buffer is in place. No project activities shall encroach into established buffers without the consent of a monitoring biologist.

Construction shall be conditionally allowed within portions of the noise impact area (i.e., buffer surrounding the nest) if a temporary noise barrier or berm is constructed at the edge of the construction limits and/or around the piece of equipment to ensure that noise levels within the noise impact area are reduced to below 1-hour average of 60 A-weighted decibels (dBA) equivalent sound level hourly average (L_{eq}) or ambient noise levels, whichever is greater, at the nest location. Decibel output shall be confirmed by a qualified noise specialist, and intermittent monitoring by a qualified biologist shall be required to ensure that conditions have not changed. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that construction of the noise attenuation feature does not itself result disruption of nesting behavior. Factors used to determine and guide the appropriate buffer distance shall include individual pair behavior responses, amount of buffering topography or structures, proximity to existing disturbance, and ambient noise levels.

The qualified biologist shall determine the appropriate nest avoidance distance based on species type, habitat location and condition, and behavior of the nesting pair. The qualified biologist conducting the survey(s) shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of experience conducting biological field surveys, including surveys for nesting birds.

MM-BIO-14~~:~~ Mitigation, Monitoring, and Reporting Conditions for Potential Impacts to Occupied Least Bell's Vireo Habitat. ~~Prior to the issuance of grading permits, the Cities of Santee and San Diego shall verify that the following project requirements regarding least Bell's vireo are shown on the~~

~~construction plans.~~ No clearing, grubbing, grading, or other construction activities shall occur during the least Bell's vireo breeding season (March 15 through September 15) until the following requirements have been met, to the satisfaction of the applicable jurisdiction issuing the grading permit:

~~1~~A. A qualified biologist shall perform a clearance survey in those wetland areas suitable for the presence of least Bell's vireo~~.~~, as shown on Figure 12 of the Revised Biological Survey Report. Surveys for the species shall be conducted within the current breeding season~~,~~ (i.e., when the impact is to occur – if ~~applicable,~~it cannot wait until after the breeding season), and include at least 3 weekly surveys ~~and monthly follow-up surveys~~with the last survey occurring 24 hours before any clearing, grubbing, grading, or other construction activities commences. If least Bell's vireo is present, then the following conditions must be met:

- ~~A~~ Occupied habitat shall be staked or fenced under the supervision of a qualified biologist;~~.~~ and
- ~~B~~ From March 15 through September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 A-weighted decibels (dBA) equivalent sound level (~~L~~$_{eq}$hourly average (l_{eq}) hourly average (or to the ambient noise level if greater) at the edge of occupied least Bell's vireo habitat. An analysis showing that noise generated by construction activities would not exceed 60 dBA ~~L~~$_{eq}$ hourly average (or to the ambient noise level if greater) at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City of San Diego City Manager or the City of Santee City Planner (depending on applicable jurisdiction) at least 2 weeks prior to the commencement of construction activities in the affected area. Prior to the commencement of any ~~of~~ construction activities during the breeding season, areas restricted from such activities (avoidance buffers) shall be staked or fenced under the supervision of a qualified biologist. This noise analysis may include noise attenuation requirements, including altering grading operations, phasing grading, cessation of vehicle idling, and using quieter machinery near sensitive resources, to obtain the necessary noise levels; or
- ~~C~~ At least 2 weeks prior to the commencement of construction activities in the affected area, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dBA ~~L~~$_{eq}$$l_{eq}$ hourly average (or the ambient noise level if greater) at the edge of habitat occupied by least Bell's vireo. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that the construction of the noise attenuation feature does not itself result in disruption of nesting behavior. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring (as described below) shall be conducted at the edge of the occupied habitat to ensure that noise levels do not exceed 60 dBA ~~L~~$_{eq}$$l_{eq}$ hourly average (or ambient noise levels if greater). If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, or the nesting activities are being substantially disrupted by adjacent construction activity, then the associated construction activities shall cease until

such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).

- ~~2~~ Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dBA l_{eq} hourly average or to the ambient noise level if greater. If not, other measures shall be implemented in consultation with the biologist, the City of San Diego City Manager, or the City of Santee City Planner (depending on the applicable jurisdiction), as necessary, to reduce noise levels to below 60 dBA l_{eq} hourly average or to the ambient noise level if greater. Such measures may include limitations on the placement of construction equipment and the simultaneous use of equipment.

MM-BIO-15~~.~~ Crotch's Bumble Bee Pre-~~construction~~Construction Surveys. Prior to ~~the initiation of~~any ground-~~disturbing~~ disturbance activity within non-developed areas (golf course areas are considered to be developed) during the Colony Active Period (April 1 through August 31), ~~then~~ pre-construction surveys for active Crotch's bumble bee nest colonies shall be required no more than 5 days prior to any ground disturbance or vegetation removal. The following method for nest surveys shall be used unless the Wildlife Agencies provide an updated method based on current understanding of bumble bee nests in the future:

- ~~Within non-developed habitats (golf course areas are considered to be developed), the~~The biologist shall look for nest resources (e.g., burrows) suitable for bumble bee use. If an area of bumble bee activity is detected, the biologist shall watch potential nest resources for a period of time (up to 30 minutes if early in the Colony Active Period, and up to 10 minutes during the peak of the Colony Active Period) looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, although the rate can vary depending on whether it is early/late or at the peak of the Colony Active Period. If a bumble bee worker is detected, then a representative bee shall be identified to species. This should be possible without capture in San Diego County. Biologists shall ensure that 100% visual coverage of all potential burrow resources are surveyed. Therefore, the biologist shall select a view that balances viewing multiple burrows while ensuring detection if bees are present. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point, but this limit shall not exceed 50 feet. The biologist shall reduce the 50-foot limit as necessary to ensure 100% visual coverage of potential burrow resources depending on topography, vegetation height and cover, and other factors. This approach shall allow the biologist to assess multiple burrows at one time to sufficiently determine if bees are entering/exiting them. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). A photo voucher of the bee species shall be collected, and the location mapped using GPS. If identification is not feasible without capture, then the project proponent shall consult with the California Department of Fish and Wildlife prior to allowing the biologist to capture and identify to species (using the protocol for the California Bumble Bee Atlas project managed by the Xerces Society) to determine if a California Endangered Species Act Memorandum of Understanding and/or Scientific Collecting Permit would be required.

- A written survey report shall be submitted to the City of Santee and City of San Diego within 30 days of the pre-construction nest surveys. The report shall include survey methods, weather conditions, and survey results, including botanical results, a list of insect species observed, and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed (as appropriate for the level of survey required). The survey report shall include the qualifications of the surveyor(s) and approved biologist(s) for identification of photo vouchers and a detailed habitat assessment. If Crotch's bumble bee nests are observed, location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report. If Crotch's bumble bee is not detected during the surveys, no further action or mitigation would be required.
- If a Crotch's bumble bee nest is detected, the project biologist shall establish, monitor, and maintain a no-work buffer around the nest. The size and configuration of the no-work buffer shall be based on best professional judgement of the project biologist in consultation with the Wildlife Agencies. The buffer shall provide at least 50 feet of clearance around nest entrance(s). Construction activities shall not occur within the no-work buffer until the colony is no longer active. To determine that a nest is no longer active, the nest shall be observed for a minimum of 60 minutes each day across a minimum of 3 days during suitable flight weather (i.e., ambient air temperature between 60°F and 90°F, winds under 10 miles per hour, and no precipitation higher than a drizzling rain). If no bees are seen flying in or out of the nest by the end of the observation period, it shall be determined that the nest is no longer active. If project activities occur outside of the Colony Active Period, then pre-construction surveys for active bee nest colonies and avoidance measures are not required.
- If required, based on positive identification during the preconstruction survey, mitigation for direct impacts to Crotch's bumble bee nesting habitat shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project to be provided through implementation of the project's mitigation measures MM-BIO-1 and MM-BIO-2. If required by the California Department of Fish and Wildlife (CDFW) 2081 incidental take permitting process, additional mitigation measures may be required through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, a cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of a conservation easement area(s) in perpetuity for the Crotch's bumble bee, in coordination with CDFW. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall account for all management activities required to fulfill the requirements of the conservation easement(s), which are currently under review and development by CDFW.

MM-BIO-16~~.~~ Western Spadefoot Pre-~~construction~~Construction Survey. During the rainy season (typically begins with the first rains in October) prior to ~~the issuance~~any ground-disturbance activities which impact potentially suitable western spadefoot ponded habitat in the project's biological study area (BSA), south of the ~~grading permit~~San Diego River North Channel, the project must either perform an egg mass/larval survey for western spadefoot ~~within standing water in the biological study area~~

(BSA) or perform nocturnal eyeshine surveys for adults across the BSA. If performed, egg mass/larval surveys must be performed in March and/or April. If performed, nocturnal adult surveys must be performed during or the night after the first three large (0.25-inch or greater) rain events of the winter. If the standing water or nocturnal survey is negative, then no additional measures are required. If the surveys find western spadefoot, then a 1,500-foot buffer shall be applied, originating from the breeding resource. The buffer area between the BSA open space limit and farthest project impact limit shall be enclosed by exclusion fencing. That interior area shall be surveyed during the first three rain events, and western spadefoot shall be relocated outside of the buffer area within the BSA. AIf detected, a relocation plan shall be prepared prior to grading or relocation that identifies the specific methods and relocation areas, shall be prepared prior to implementation, and shall be approved by the lead agency. and any relevant wildlife agencies (Note that if the species becomes listed, then that wildlife agency would also need to review and approve the relocation plan). Any relevant incidental take permits required (e.g., Section 7 or 10 under the Federal Endangered Species Act or scientific collecting permits or 2081 under California Department of Fish and Wildlife (CDFW) to perform this task shall be acquired. If 100% avoidance of occupied habitat is not feasible AND the species is listed, consultation and possible incidental take permitting with U.S. Fish and Wildlife Service (USFWS) and/or CDFW shall be completed prior to implementation of any activities that may impact occupied habitat or animals, directly or indirectly.

This measure is not required north of the San Diego River (north) because that section of the San Diego River does not provide suitable habitat for western spadefoot and would provide a suitable buffer if spadefoot were found south of there.

MM-BIO-17 Western Burrowing Owl Pre-constructionConstruction Survey. Prior to gradingground disturbance activities impacting suitable habitat for burrowing owl, the project shall determine if suitable burrowing owl nesting and overwintering habitat occurs within the project site based on a current habitat assessment. Suitable habitat generally consists of open habitats that are situated on flat to rolling slopes and include minimum 11-centimeter diameter burrows or other openings like rock crevices. The most important characteristic is the burrow. If suitable burrows are identified (e.g., greater than 11 centimeters in diameter and greater than 150 centimeters in depth), then the following shall be implemented:

- PreIf suitable burrowing owl habitat with burrows are present, pre-construction burrowing owl surveys shall be conducted consistent with the 2012 California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation. No more than 14 days prior to the initiation of project activities, a qualified biologist shall conduct at least two surveys at least 7 days apart, with the final survey conducted no more than 48 hours prior to the initiation of project activities. A report of the survey results, including mapping of any occupied burrows (including natural or constructed), burrowing owls, or burrowing owl sign observed, shall be submitted to the Cities of Santee and San Diego for their review and approval prior to initiation of project activities. Pre-construction surveys that are not seasonally dependent and shall be required whenever ground disturbance is planned to address potential impacts during both overwintering and nesting seasons. If the survey is negative, then nothing more is required. If an occupied burrowIf a burrow with burrowing owl sign (e.g., feathers, white-wash, pellets, insect remains) or burrowing owl is found, then the following measures shall be implemented:

- ~~Depending on the jurisdiction (City of Santee/City of San Diego) and their respective Multiple Species Conservation Program requirements at the time, either those requirements shall be implemented, or a CDFW 2081 Incidental Take Permit shall be secured and the following shall be implemented unless superseded by the Multiple Species Conservation Program or Incidental Take Permit:~~
  - Project activities shall be restricted within occupied burrowing owl habitat (inclusive of the appropriate buffer) during the breeding season (February 1 through August 31) until nesting is complete (i.e., the young have dispersed and are fledged, independently foraging, and no longer using the burrows or burrow complex, and/or adults are no longer nesting).
  - During the breeding season, buffers shall be established by a qualified biologist consistent with guidance provided in the 2012 CDFW Staff Report on Burrowing Owl Mitigation. Appropriate buffer size shall depend on the time of year, level of disturbance, and project-specific site conditions. Buffers around active nesting sites shall be a minimum of 200 meters (656 feet) regardless of the time of year. The monitoring biologist shall have the authority to order stop work if burrowing owls exhibit distress or abnormal behavior and shall consult with the appropriate entities to determine next steps (e.g., stop work or increase buffers).
- Where impacts to burrowing owl are unavoidable, the following measures shall be required:
  - If suitable but ~~unoccupied~~un-occupied burrows cannot be avoided, burrow exclusion may be appropriate. Burrow exclusion shall only be allowed after the burrow has been determined by a qualified biologist to be inactive. No exclusions shall be permitted during the nesting season when there is evidence of burrowing owl activity. Prior to the initiation of any burrow exclusions, a Burrow Exclusion Plan shall be submitted to the Cities of Santee and San Diego and CDFW for review and approval. Implementation of the plan may require a CDFW 2081 incidental take permit or an MOU/Scientific Collecting Permit.
  - Mitigation for impacts to occupied habitat shall occur through the conservation of occupied burrowing owl habitat at a ratio ~~of~~coordinated in consultation with CDFW but no less than 1:1 for the territory of the burrowing owl. If occupied burrowing owl habitat is not available for mitigation within the Santee Subarea Plan Area, lands with potential to be occupied through appropriate restoration, management, and enhancement of burrowing owl nesting and foraging requirements may be considered. The land to be conserved shall be approved by the Cities of Santee and San Diego and CDFW. The land to be conserved shall be secured by a legal instrument (e.g., conservation easement) to the satisfaction of CDFW.
  - ~~MM-BIO-18. Homeowner Education Program. Prior to the issuance of a building permit for~~Respectively, the applicant shall secure a CDFW 2081 Incidental Take Permit or obtain issuance of required permit(s) based on the City of San Diego Multiple Species Conservation Program requirements for implementation of any activities that may impact occupied habitat, directly or indirectly.

MM-BIO-18 Avoidance of California Gnatcatcher Take. Prior to the grading or removal of coastal sage scrub, a California gnatcatcher pre-construction survey will be performed. A permitted biologist (i.e., possessing a valid Endangered Species Act Section 10(a)(1)(a) Recovery Permit) shall conduct a focused pre-construction survey for coastal California gnatcatcher (*Polioptila californica*

californica) within all coastal sage scrub areas of the project site. If presence of coastal California gnatcatcher is determined to occur on the project site, the following measures shall be required to be implemented by the applicant:

- If habitat is occupied by coastal California gnatcatcher, no vegetation removal shall occur within occupied habitat during the coastal California gnatcatcher breeding season (March 15 to August 15).
- A 500-foot buffer will be required around the nest site until it is shown to be vacated.
- If 100% avoidance of occupied habitat and buffer is not feasible, consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife and possible receipt of an incidental take permit through Section 7 or 10 (FESA) shall be required prior to implementation of any activities that may impact occupied habitat, directly or indirectly.

MM-BIO-19 Homeowner Education Program and Signage. Prior to the first occupancy of the residential homes on the project site, a homeowner education program shall be prepared by a qualified biologist for approval by City of Santee and distributed by the applicant to inform homeowners of the need to keep pets outside of the adjacent open space areas. The homeowners' association shall incorporate signage, where appropriate, to inform residents of the importance of preservation of native flora and fauna and to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in proposed open space areas and/or suitable habitat for special-status wildlife.

~~**Level of Significance After Mitigation**~~

MM-BIO-20 Adjacency Guidelines. Prior to the commencement of any construction activities, the construction contractor shall prepare construction plans for submission to and approval by the City of Santee that shall include the following to address potential indirect impacts to special-status species occurring within all suitable habitat associated with the San Diego River (i.e., within 500 feet of the project site):

A **Invasive Weeds**. To reduce the spread of invasive plant species, landscape plants shall not be on the most recent version of the California Invasive Plant Council's Invasive Plant Inventory (https://www.cal-ipc.org/plants/inventory/). Landscape plans shall incorporate native species that occur in the region to the extent feasible and all stream courses within the redeveloped golf course shall include a 10-foot-wide strip of planted native vegetation. This strip shall have an emphasis on saltgrass (*Distichlis spicata*), a native, wetland tolerant grass species.

B **Night Work.** All construction activities shall be conducted during the daytime, and lights shall not be kept on overnight in the construction area, as practicable. If night lighting is required during construction activities, all exterior lighting along undeveloped land shall be fully shielded and directed downward in a manner that shall prevent light spillage or glare into the adjacent open space.

C **Lighting.** Project lighting shall be designed consistent with the requirements of Section 13.30.030(B) of the Santee Municipal Code. Night lighting shall be directed away from open space and/or suitable habitat for special-status species to protect species from direct night

lighting. Shielding shall be incorporated in project designs to ensure that ambient lighting is not increased.

MM-BIO-21 Wildlife-Friendly Fencing. Prior to the issuance of a grading permit, the Applicant/Developer shall prepare a fencing plan to prevent the exclusion of wildlife usage of the secondary movement corridor (golf course area) for the approval of the City of Santee. The chain-link fencing shall include a 42-inch gap at the bottom that includes a bottom twisted wire strand at 20 inches above the ground within the gap. Up to three additional strands may be placed between the bottom wire and the protective fence. The resulting wire strands at 20 inches, 23 inches, 26 inches, and 38 inches. The fencing design shall allow wildlife through the fence and through the secondary wildlife corridor, including deer with antlers that could crawl under the fence. The fencing plan shall be approved by the City of Santee as part of design review and approval. The fencing shall be maintained in perpetuity through contractual obligation with the Homeowners' Association or other equivalent mechanism(s).

Level of Significance After Mitigation

~~With implementation of **MM-BIO-3 through MM-BIO-10** and **MM-BIO-14**, potential impacts on habitat occupied by least Bell's vireo (**Impact BIO-5**) would be minimized and mitigated to a less-than-significant level.~~

~~With implementation of **MM-BIO-1 through MM-BIO-8**, potential impacts on habitat of non-listed special-status species (**Impact BIO-6**) would be less than significant through implementation of habitat-based mitigation and avoidance.~~

~~Potentially significant direct impacts on nesting birds (**Impact BIO-7**) and indirect effects of construction noise (**Impact BIO-12**) and human activity (**Impact BIO-13**) would be reduced to less than significant with implementation of **MM-BIO-12**, **MM-BIO-13**, and **MM-BIO-18**. These measures would reduce significant noise impacts and vegetation disturbance during the nesting season.~~

~~Potentially significant direct impacts on Crotch's bumble bee (**Impact BIO-8**) would be reduced to less than significant through implementation of **MM-BIO-15**, which would require pre-construction surveys prior to the initiation of ground disturbance. Direct impacts on western spadefoot (**Impact BIO-9**) would be significant and would be mitigated through implementation of **MM-BIO-16**. Direct impacts to western burrowing owl (**Impact BIO-10**) would be significant and would be mitigated through implementation of **MM-BIO-17**. Potentially significant impacts on sensitive wildlife from increased abundance of domestic pets (**Impact BIO-14**) would be mitigated through implementation of **MM-BIO-18**.~~

With implementation of **MM-BIO-1** through **MM-BIO-10** and **MM-BIO-12** through **MM-BIO-21**, potential direct and indirect impacts on special-status species would be less-than-significant.

Threshold 2: Would implementation of the proposed project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS?

Threshold 2 (City of San Diego): Would the project result in a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

Impact Discussion

The proposed project is primarily situated ~~on~~ in areas mapped as developed ~~land, which includes an existing~~ or developed golf course. The proposed project would result in direct permanent impacts on approximately ~~148.17~~133.42 acres of land, of which ~~1.91~~3.56 acres are classified as native or naturalized vegetation communities. ~~Potential~~ The proposed project would also temporarily impact 3.28 acres, of which 3.13 acres are native or naturalized vegetation communities. The direct permanent and temporary impacts on these communities are detailed in Table 3.3~~-5~~-12 through Table 3.3~~-10~~-14 and shown on Figure 3.3-7, Potential Impacts on Vegetation Communities.

Direct Impacts

City of San Diego~~Potential impacts on biological resources have been categorized as follows:~~

~~**Permanent Impact – Residential:** Permanent impacts would~~

- ~~result from the hardscape development of the proposed project's residential development.~~
- ~~**Permanent Impact – Clubhouse/Hotel:** Permanent impacts would result from the proposed project's hardscape development of the hotel and hotel cottages, restaurant, event space, golf clubhouse, learning center, portions of the parking lot, the outdoor swimming pool and deck area, a patio, and a courtyard.~~
- ~~**Permanent Impact – Golf Course Redesign:** Permanent impacts would result from the redesign of the golf course.~~
- ~~**Permanent Impact – Fuel Modification Zone:** Areas outside of permanent impacts from site development would be subject to FMZ requirements for vegetation thinning and removal. FMZs are considered a permanent impact unless the vegetation community would either not be affected by fuel modification (i.e., nonnative grassland) or would not be subject to fuel modification due to the level of existing moisture in the community (e.g., open water, nonnative riparian).~~
- ~~**Temporary Impacts – Along San Diego River (North Channel):** Impact areas include all of the natural habitat along the San Diego River (North Channel) that could be temporarily affected during construction but would later be restored in the same location. The majority of this area would only be subject to dewatering; the pond is currently an intermittent feature, drying up when water is not flowing to the area from either Sycamore Canyon or the San Diego River. As such, dewatering of this area, which would cause the pond to dry up, would have a similar impact on the existing variation in hydrology. These areas may also be subject to sediment removal from unvegetated areas; however, no sediment would be removed from freshwater marsh areas. Temporary impacts may also occur from installation of the temporary access road and bent/footing that is associated with bridge construction over the San Diego River (North Channel).~~

- **Temporary Impacts – Golf Course:** Temporary impacts would result from construction of the emergency access pathway in the northeastern corner of the project site. These areas are adjacent to other native habitats and would be revegetated once construction of the emergency access pathway is complete.
- **Avoidance Areas:** Direct disturbance would be fully avoided in specific areas of natural habitat.
- **Off-Site Areas:** Direct permanent impacts have the potential to occur in areas outside of the project footprint. Descriptions of off-site activities are provided in Appendix E.

Table 3.3-5. Impacts on Vegetation Communities and Land Cover Types (Acres) – City of San Diego Jurisdiction

Vegetation Community/ Land Cover Type	On-Site Impacts			Total Permanent On-Site Impacts	Permanent Off-Site Impacts	Total Impacts
	Residential	Clubhouse/ Hotel	Golf Course Redesign			
Developed[1]	–	–	–	–	1.57	1.57
Developed – Golf Course[1]	–	0.41	58.48	58.89	–	58.89
Diegan Coastal Sage Scrub – disturbed	0.08	–	–	0.08	0.11	0.19
Disturbed Habitat[1]	–	–	1.40	1.40	0.12	1.52
Eucalyptus Woodland[1]	0.10	–	–	0.10	0.02	0.12
Sensitive Habitat Subtotal	0.08	–	–	0.08	0.11	0.19
City of San Diego Totals	0.18	0.41	59.88	60.47	1.82	62.29

Note:
[1] Non sensitive vegetation community or land cover type.

Table 3.3-6. Permanent Impacts on Vegetation Communities and Land Cover Types (Acres) – City of Santee Jurisdiction

Vegetation Community/ Land Cover Type	On-Site Impacts			Fuel Modification Zone	Permanent Off-Site Impacts	Total Impacts
	Residential	Clubhouse/ Hotel	Golf Course Redesign			
Developed[1]	7.07	–	0.10	–	1.81	8.98
Developed – Golf Course[1]	20.29	6.31	42.71	–	–	69.31
Diegan Coastal Sage Scrub – disturbed	0.41	–	–	–	–	0.41
Disturbed Habitat[1]	2.14	0.19	1.77	–	–	4.10
Disturbed Wetland	0.12	–	–	–	–	0.12
Eucalyptus Woodland[1]	1.19	–	0.04	–	–	1.25
Mule Fat Scrub – disturbed	–	0.01	0.29	0.04	–	0.34
Nonnative Grassland	–	–	0.01	–	–	0.01
Nonnative Riparian	–	0.01	0.01	0.02	–	0.04
Nonnative Woodland[1]	0.15	–	0.14	0.23	–	0.52

Table 3.3-6. Permanent Impacts on Vegetation Communities and Land Cover Types (Acres) – City of Santee Jurisdiction

	On-Site Impacts					
Vegetation Community/ Land Cover Type	Residential	Clubhouse/ Hotel	Golf Course Redesign	Fuel Modification Zone	Permanent Off-Site Impacts	Total Impacts
Southern Cottonwood–Willow Riparian Forest	0.35	—	0.10	0.05	—	0.50
Southern Cottonwood–Willow Riparian Forest – disturbed	0.02	0.20	0.06	0.02	—	0.30
Sensitive Habitat Subtotal	*0.90*	*0.22*	*0.48*	*0.13*	—	*1.73*
City of Santee Total	31.74	6.72	45.24	0.36	1.81	85.88

Notes:
[1] Non-sensitive vegetation community or land cover type.

Table 3.3-7. Temporary Impacts on Vegetation Communities and Land Cover Types – City of Santee Jurisdiction (Acres)

Vegetation Community/ Land Cover Type	Temporary Impacts Along San Diego River	Temporary Impacts Within Golf Course Access	Total Impacts
Coastal and Valley Freshwater Marsh	0.56	—	0.56
Developed – Golf Course[1]	0.26	0.01	0.27
Fresh Water	2.43	—	2.43
Mule Fat Scrub – disturbed	—	0.02	0.02
Nonnative Riparian	0.05	—	0.05
Southern Cottonwood–Willow Riparian Forest	0.01	—	0.01
Southern Cottonwood–Willow Riparian Forest – disturbed	—	0.06	0.06
Sensitive Habitat Subtotal	*0.62*	*0.08*	*0.70*
City of Santee Total	3.31	0.09	3.40

Notes:
[1] Non sensitive vegetation community or land cover type.

Table 3.3-8. Summary of Impacts on Sensitive Upland Vegetation Communities (Acres)

Vegetation Community/ Land Cover Type	On-Site Impacts			Total Permanent On-Site Impacts	Permanent Off-Site Impacts	Total Impacts
	Residential	Clubhouse/ Hotel	Golf Course Redesign			
City of San Diego[1] Jurisdiction						
Diegan Coastal Sage Scrub – disturbed	0.08	–	–	0.08	0.11	0.19
City of San Diego Subtotal	0.08	–	–	0.08	0.11	0.19
City of Santee Jurisdiction						
Diegan Coastal Sage Scrub – disturbed	0.41	–	–	0.41	–	0.41
Nonnative Grassland	–	–	0.01	0.01	–	0.01
City of Santee Subtotal	*0.41*	–	*0.01*	*0.42*	–	*0.42*
Project Total	**0.49**	–	**0.01**	**0.50**	**0.11**	**0.61**

Note:
[1] All impacts outside of the MHPA.

Table 3.3-9. Permanent Impacts on Wetland and Riparian Vegetation Communities – City of Santee (Acres)

Vegetation Community/ Land Cover Type	Residential	Clubhouse/ Hotel	Golf Course Redesign	Fuel Modification Zone	Total Permanent Impacts
Disturbed Wetland	0.12	–	–	–	0.12
Mule Fat Scrub – disturbed	–	0.01	0.29	0.04	0.34
Nonnative Riparian	–	0.01	0.01	0.02	0.04
Southern Cottonwood–Willow Riparian Forest	0.35	–	0.10	0.05	0.50
Southern Cottonwood–Willow Riparian Forest – disturbed	0.02	0.20	0.06	0.02	0.30
Project Total	**0.49**	**0.22**	**0.46**	**0.13**	**1.30**

Note: No wetland impacts would occur in the City of San Diego.

~~Table 3.3-10. Temporary Impacts on Wetland and Riparian Vegetation Communities – City of Santee (Acres)~~

~~Vegetation Community/ Land Cover Type~~	~~Temporary Impacts along San Diego River~~	~~Temporary Impacts within Golf Course Access~~	~~Total Temporary Impacts~~
~~Coastal and Valley Freshwater Marsh~~	~~0.56~~	~~—~~	~~0.56~~
~~Fresh Water~~	~~2.43~~	~~—~~	~~2.43~~
~~Mule Fat Scrub – disturbed~~	~~—~~	~~0.02~~	~~0.02~~
~~Nonnative Riparian~~	~~0.05~~	~~—~~	~~0.05~~
~~Southern Cottonwood–Willow Riparian Forest~~	~~0.01~~	~~—~~	~~0.01~~
~~Southern Cottonwood–Willow Riparian Forest – disturbed~~	~~—~~	~~0.06~~	~~0.06~~
~~**Project Total**~~	~~**3.05**~~	~~**0.08**~~	~~**3.13**~~

The project will result in a direct and permanent impact, totaling 0.19~~**Note:** No wetland impacts would occur in the City of San Diego.~~

~~As shown in Table 3.3-8, a total of 0.61 acres of Diegan coastal sage scrub – disturbed was identified in the BSA; 0.19 acres is present within the City of San Diego, and 0.42~~ acres ~~is present within the City of Santee. Diegan coastal sage scrub is a sensitive upland vegetation community that the Biology Guidelines identify as a Tier II sensitive upland habitat (City of San Diego 2018).~~

~~Areas mapped as Diegan coastal sage scrub – disturbed on the project site consist of dry, open plantings on the shoulder and embankment of West Hills Parkway. Broom baccharis (*Baccharis sarothroides*) was the dominant plant species observed during project surveys, with associated species, such as California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), and invasive nonnative weeds, also present adjacent to the broom baccharis. This habitat is isolated between the existing golf course and West Hills Parkway. Focused surveys were conducted within this habitat for California gnatcatcher in 2019 and 2022 but did not detect species' occupancy of the area.~~

~~Within the City of San Diego, direct permanent~~, including on-site impacts on 0.08 acres of Diegan coastal sage scrub – disturbed and direct permanent off-site impacts on 0.11 acres of Diegan coastal sage scrub – disturbed ~~would occur~~, within the City of San Diego, as described in Table 3.3-13 and shown on Figure 3.3-7, and would represent a significant ~~impact on a sensitive natural community (**Impact BIO-1**). In addition, as shown in Table 3.3-6 and Table 3.3-7, direct permanent and temporary impacts~~adverse effect on sensitive natural ~~or naturalized~~communities and a sensitive upland vegetation ~~communities, including Diegan coastal sage scrub – disturbed, within the City of Santee would represent a significant impact on sensitive natural and riparian communities (**Impact BIO-2** and **Impact BIO-3**). No sensitive vegetation communities would be affected within~~community under the Biology Guidelines as a Tier II (City of San Diego ~~MHPA.~~2018). Mitigation measure **(MM)-BIO-1,** which would require mitigation at ratios based on the City of San Diego Biology Guidelines (City of San Diego 2018), inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6** would be implemented to reduce this impact to less than significant.

The project's temporary dewatering footprint overlaps 0.02 acres of sensitive riparian vegetation communities (i.e., coastal and valley freshwater marsh and southern cottonwood-willow riparian forest) associated with the impounded portion of the San Diego River (North Channel) (Figure 3.3-7). Dewatering activities are proposed only during the project's construction phase, and the ponded area would be rehydrated after removal of the dewatering weirs. No vegetation or tree removal, fill, or grading would occur as part of the temporary dewatering activities. The pond is an intermittent feature, drying up when water is not coming from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing variation in hydrology. Therefore, the vegetation communities located within the impounded portion of the San Diego River (North Channel) would not be significantly impacted by dewatering activities. However, these areas would be passively restored as directed by **MM-BIO-4** and included in the project's HMMP as directed by **MM-BIO-5**. It should be noted that based on project-specific discussions with the City of San Diego, dewatering activities would not require a wetland deviation from the City of San Diego ESL wetland regulations.

No sensitive vegetation communities would be permanently or temporarily impacted within the City of San Diego MHPA.

City of Santee

A total of 3.40 acres of permanent impacts and 3.11 acres of temporary impacts to sensitive vegetation communities within the City of Santee with project implementation as summarized in Table 3.3-14 and shown on

Figure 3.3-7. Permanent impacts to sensitive uplands total 0.55 acres and permanent impacts to sensitive riparian and wetland vegetation communities total 2.86 acres. Temporary impacts from project implementation would only occur within sensitive riparian and wetland vegetation communities totaling 3.11 acres, including 0.03 acres from the Temporary Railcar Crossing, 0.09 acres from the spillway repair, and 2.99 acres from dewatering activities during construction.

Direct permanent impacts to 0.55 acres of sensitive upland vegetation communities within the City of Santee, including 0.41 acres of disturbed coastal sage scrub and 0.13 acres of non-native grassland as shown in Table 3.3-14, would represent a significant adverse effect on sensitive upland vegetation communities. These impacts would be reduced to less than significant through implementation of **MM-BIO-2** and **MM-BIO-3** inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

Direct permanent impacts to 2.86 acres and direct temporary impacts to 0.12 acres from the Temporary Railcar Crossing and spillway repair work area on sensitive riparian and wetland vegetation communities within the City of Santee, as shown in Table 3.3-14, would represent a significant adverse effect on sensitive natural and riparian communities. These impacts would be reduced to less than significant through implementation of the mitigation ratios described in **MM-BIO-3**, inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

The project's temporary dewatering footprint overlaps 2.99 acres of sensitive riparian vegetation communities (i.e., coastal and valley freshwater marsh, fresh water, non-native riparian, and southern cottonwood-willow riparian) associated with the impounded portion of the San Diego River (North Channel). Dewatering activities are proposed only during the project's construction phase, and the ponded area would be rehydrated after removal of the dewatering weirs. No vegetation or tree removal, fill, or grading would occur as part of the temporary dewatering activities. The pond is an intermittent feature, drying up when water is not coming from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing variation in hydrology. Therefore, the vegetation communities located within the impounded portion of the San Diego River (North Channel) would not be significantly impacted by dewatering activities. However, these areas would be passively restored as directed by **MM-BIO-4** and included in the project's HMMP as directed by **MM-BIO-5**.

Indirect Impacts

As discussed ~~previously~~under Threshold 1, the proposed project also has the potential to result in various permanent and temporary indirect impacts from project construction activities, which would result in indirect impacts on surrounding sensitive biological resources, such as the introduction of invasive plants and changes in water quality.

Invasive exotic (i.e., non-native) plant species have the potential to spread into adjacent habitat if planted as part of the ornamental landscaping of new development, including plantings for new residences, which would result in a potentially significant impact prior to mitigation. Weeds can be introduced through the increased movement of people or domestic animals along native areas and from construction vehicles brought onto the site. However, because the vegetation palette of the proposed project does not include invasive plant species, and no invasive plant species would be planted in or adjacent to the MHPA, the proposed project would not install invasive plant species that could indirectly affect natural vegetation communities~~. During golf course redesign, the proposed project also would remove existing ornamental trees that are considered invasive, such~~ as ~~Brazilian peppertree (*Schinus terebinthifolia*).~~directed by **MM-BIO-20**. As such, ~~project design features would ensure that there would be~~

~~no significant~~with implementation of **MM-BIO-20,** indirect impacts from invasive plants~~.~~ would be less than significant.

Water runoff from urban development has the potential to temporarily and permanently affect local water quality and the ecological systems associated with riparian and wetland vegetation communities. The development of the ~~country club and resort~~project is required by state law to comply with current regulations promulgated by the RWQCB for water quality. Implementation of ~~project design features, such as~~ proprietary water-quality systems~~,~~ at the project site are expected to prevent a permanent indirect impact on local water quality. However, water and sediment runoff during construction of the proposed project have the potential to result in temporary indirect impacts on sensitive ~~wetland vegetation communities, which would be a significant impact (**Impact BIO-15**).~~vegetation communities, which would be a potentially significant impact prior to implementation of mitigation measures. Therefore, the project would implement **MM-BIO-7,** which requires construction monitoring, **MM-BIO-8,** which requires delineation of environmentally sensitive areas, and **MM-BIO-9,** which requires a stormwater pollution prevention plan (SWPPP), to reduce impacts to water quality during construction to less than significant.

Dust resulting from heavy-equipment grading on the project site may also have the potential to settle on nearby vegetation and interfere with the photosynthetic process of native vegetation, which ~~could~~would result in a potentially significant impact to a sensitive natural community ~~(**Impact** prior to implementation of mitigation measures. Therefore, the project would implement measures **MM-**BIO-~~16~~).7, **MM-BIO-9,** and **MM-BIO-10,** which requires reduced speed limits during construction activities, to reduce impacts from dust during construction to less than significant.

The project would also implement measure **MM-BIO-19,** which requires homeowner education program and signage to minimize impacts from human activity within the MHPA and adjacent open space areas, which would reduce impacts to less than significant.

Table 3.3-12. Summary of the Project's Permanent and Temporary Impacts on Vegetation Communities and Land Cover Types (acres)

Vegetation Community/Land Cover Type	Permanent Impact Total[1]			Temporary Impact Total[2]			
	On-Site	Off-Site	Total	Railcar Crossing	Dewatering	Spillway Repair	Total
Sensitive Vegetation Communities							
Coastal and Valley Freshwater Marsh	0.55	0	0.55	0.03	0.47	0.05	0.54
Diegan Coastal Sage Scrub – disturbed	0.50	0.11	0.61	0	0	0	0
Disturbed Wetland	0.29	0	0.29	0	0	0	0
Fresh Water	0.02	0	0.02	0.01	2.36	0.04	2.41
Mule Fat Scrub-disturbed	0.29	0	0.29	0	0	0	0
Non-Native Grassland	0.13	0	0.13	0	0	0	0
Non-Native Riparian	0	0	0	0	0.05	0	0.05
Southern Cottonwood-Willow Riparian Forest	1.19	0	1.19	0	0.12	<0.01	0.13
Southern Cottonwood-Willow Riparian Forest – disturbed	0.34	0	0.34	0	0	0	0
Southern Willow Scrub	0.17	0	0.17	0	0	0	0
Sensitive Vegetation Community Subtotal	*3.49*	*0.11*	*3.60*	*0.04*	*3.00*	*0.09*	*3.13*
Land Cover Types							
Developed	7.06	3.30	10.36	0	0	0	0
Developed-Golf Course	113.63	0.02	113.66	0.03	0.09	0.03	0.15
Developed – Culvert	<0.01	0	<0.01	0	0	0	0
Developed – Spillway	0.03	0	0.03	0	0	<0.01	<0.01
Disturbed Habitat	0.52	0.12	0.64	0	0	0	0
Eucalyptus Woodland	0.10	0	0.10	0	0	0	0
Non-Native Woodland	5.05	<0.01	5.05	0	0	0	0
Land Cover Types Subtotal	*126.39*	*3.44*	*129.83*	*0.03*	*0.09*	*0.03*	*0.15*
Total	**129.88**	**3.55**	**133.42**	**0.07**	**3.10**	**0.12**	**3.28**

Notes: Totals may not sum due to rounding.
[1] Permanent impacts include residential development, FMZ, golf course redesign, and clubhouse/hotel.
[2] Temporary impacts all occur on site.

Table 3.3-13. Summary of Permanent and Temporary Impacts on Sensitive Vegetation Communities and Land Cover Types within the City of San Diego (acres)

Vegetation Community/Land Cover Type	Permanent Impact[1]				Temporary Impact[2]
	On-Site (MHPA)[3]	On-Site (outside MHPA)	Off-Site	Total	On site (outside MHPA)
Sensitive Vegetation Communities					
Coastal and Valley Freshwater Marsh	0	0	0	0	<0.01
Diegan Coastal Sage Scrub – disturbed	0	0.08	0.11	0.19	0
Southern Cottonwood-Willow Riparian Forest	0	0	0	0	0.01
Sensitive Vegetation Community Subtotal	*0*	*0.08*	*0.11*	*0.19*	*0.02*
Land Cover Types					
Developed	0	0	1.57	1.57	0
Developed-Golf Course	6.92	44.15	0.02	51.10	0
Disturbed Habitat	0	0	0.12	0.12	0
Non-Native Woodland	0	0.45	0	0.45	0
Land Cover Types Subtotal	*6.92*	*44.60*	*1.71*	*53.23*	*0*
Total	**6.92**	**44.68**	**1.82**	**53.42**	**0.02**

Notes: Totals may not sum due to rounding. Perm = permanent; Temp = temporary. MHPA = Multi-Habitat Planning Area.

1 Permanent impacts include residential development, FMZ, golf course redesign, and clubhouse/hotel.

2 Temporary dewatering activities during construction would be similar to existing variation in hydrology (i.e., the ponded portion of the San Diego River (North Channel) is an intermittent feature, drying up when water is not coming from Sycamore Canyon or high-water flows from the San Diego River). No vegetation or tree removal, fill, or grading would occur as part of the temporary dewatering activities. Therefore, the vegetation communities located within the impounded portion of the San Diego River (North Channel) would not be significantly impacted by dewatering activities.

3 Impacts within the MHPA would only occur to the existing golf course. No sensitive vegetation communities would be permanently or temporarily impacted within the City of San Diego MHPA.

Table 3.3-14. Summary of Permanent and Temporary Impacts on Sensitive Vegetation Communities and Land Cover Types within the City of Santee (acres)

Vegetation Community/Land Cover Type	Permanent Impact[1]			Temporary Impact[2]
	On-Site	Off-Site	Total	On-Site
Sensitive Vegetation Communities				
Coastal and Valley Freshwater Marsh	0.55	0	0.55	0.54
Diegan Coastal Sage Scrub – disturbed	0.41	0	0.41	0
Disturbed Wetland	0.29	0	0.29	0
Fresh Water	0.02	0	0.02	2.41
Mule Fat Scrub-disturbed	0.29	0	0.29	0
Non-Native Grassland	0.13	0	0.13	0
Non-Native Riparian	0	0	0	0.05
Southern Cottonwood-Willow Riparian Forest	1.19	0	1.19	0.11
Southern Cottonwood-Willow Riparian Forest – disturbed	0.34	0	0.34	0
Southern Willow Scrub	0.17	0	0.17	0
Sensitive Vegetation Community Subtotal	*3.40*	*0*	*3.40*	*3.11*
Land Cover Types				
Developed	7.06	1.73	8.79	0
Developed-Golf Course	62.55	0	62.55	0.15
Developed-Culvert	<0.01	0	<0.01	0
Developed-Spillway	0.03	0	0.03	<0.01
Disturbed Habitat	0.52	0	0.52	0
Eucalyptus Woodland	0.09	0	0.09	0
Non-Native Woodland	4.60	<0.01	4.60	0
Land Cover Types Subtotal	*74.88*	*1.73*	*76.59*	*0.15*
Total	**78.27**	**1.73**	**80.00**	**3.26**

Notes: Totals may not sum due to rounding Perm = permanent' Temp = temporary.

[1] Permanent impacts include residential development, FMZ, golf course redesign, and clubhouse/hotel.

[2] Temporary impacts include Temporary Railcar Crossing, dewatering and spillway repair work area.

Impact Determination

Impact BIO-2. Potential Impacts to Sensitive Natural Communities or Riparian Habitat

~~Impact Determination~~

Implementation of the proposed project would have a substantial adverse effect, either directly or through habitat modifications, on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS. ~~Potentially significant impact(s) include those described below~~Potentially significant impacts to sensitive natural communities or riparian habitat would occur with project implementation prior to implementation of mitigation measures.

~~Impact~~ Mitigation Measures

The following mitigation measures are necessary to reduce impacts to Impact BIO-2:

Mitigation Measures MM-BIO-1~~. Diegan Coastal Sage Scrub (City of San Diego).~~

~~Within the City of San Diego,~~ through MM-BIO-10, MM-BIO-19, and MM-BIO-20, would reduce potential direct ~~permanent on-site impacts outside of the HMPA on 0.08 acres of Diegan coastal sage scrub – disturbed and direct permanent off site~~and indirect impacts on ~~0.11 acres of Diegan coastal sage scrub – disturbed, as shown in Table 3.3-5, would represent a significant adverse effect on sensitive~~ natural ~~communities.~~

~~Impact BIO-2. Permanent Impacts on Sensitive Communities (City of Santee).~~

~~Direct permanent impacts on sensitive natural or naturalized~~ vegetation communities ~~within the City of Santee, as shown in Table 3.3-6, would represent a significant adverse effect on sensitive natural and riparian communities.~~

~~Impact BIO-3. Temporary Impacts on Sensitive Communities (City of Santee).~~

~~Direct temporary impacts on sensitive natural or naturalized vegetation communities within the City of Santee, as shown in Table 3.3-7, would represent a significant adverse effect on sensitive natural~~ and riparian ~~communities.~~

~~Impact BIO-15. Water Quality.~~

~~Water and sediment runoff from construction areas has the potential to temporarily affect local water quality, and sediment deposition can negatively affect wetland vegetation communities. Erosion of sediments during rain events during construction could deposit into waterways or wetlands and negatively affect the hydrology and associated ecology of the system. Temporary indirect impacts on sensitive wetland vegetation communities would be considered a significant impact.~~

~~Impact BIO-16. Fugitive Dust.~~

~~Dust resulting from heavy equipment grading the project could settle on nearby vegetation and interfere with the photosynthetic process of native vegetation, which could result in a significant impact on sensitive vegetation communities.~~

Mitigation Measures

Proposed habitat to less-than-significant. These mitigation measures are all included under Threshold 1, above.

mitigation ratios and corresponding required mitigation acreages for impacts on sensitive upland vegetation communities are presented in Table 3.3-11, and permanent impacts on wetland and riparian vegetation are presented in Table 3.3-12. Mitigation ratios are based on the City of San Diego's Biological Guidelines (2018) and the 2018 Wildlife Agency Draft Santee MSCP Subarea Plan. Proposed habitat mitigation ratios and corresponding acreages for temporary impacts on sensitive vegetation communities (San Diego River [North Channel] and Golf Course Emergency Access Road Area) are presented in Table 3.3-13 and Table 3.3-14.

Table 3.3-11. Proposed Mitigation for Impacts on Sensitive Upland Vegetation Communities – Cities of San Diego and Santee

Vegetation Community/ Land Cover Type	Total Impact (Acres)	Mitigation Ratio	Total Mitigation Required (Acres)
City of San Diego			
Diegan Coastal Sage Scrub – disturbed[1] Permanent On-Site Impact	0.08	1:1	0.08
Diegan Coastal Sage Scrub – disturbed[1] Permanent Off-Site Impact	0.11	1:1	0.11
City of San Diego Subtotal	0.19	–	0.19
City of Santee			
Diegan Coastal Sage Scrub – disturbed Permanent Impact	0.41	1:1	0.41
Nonnative Grassland Permanent Impact	0.01	1:1	0.01
City of Santee Subtotal	0.42	–	0.42
Project Total	**0.61**	–	**0.61**

Note:
[1] MSCP Tier II; impacts outside MHPA, mitigation within MHPA through City of San Diego Habitat Acquisition Fund.

Table 3.3-12. Proposed Mitigation for Permanent Impacts on Wetland and Riparian Vegetation Communities – City of Santee

Vegetation Community/ Land Cover Type	Total Permanent Impact (Acres)	Mitigation Ratio	Total Mitigation Required (Acres)
Disturbed Wetland	0.12	2:1	0.24
Mule Fat Scrub – disturbed	0.34	3:1	1.02
Nonnative Riparian	0.04	2:1	0.08
Southern Cottonwood–Willow Riparian Forest	0.50	3:1	1.50
Southern Cottonwood–Willow Riparian Forest – disturbed	0.30	3:1	0.90
Project Total	**1.30**	–	**3.74**

Note: No impacts would occur on wetland or riparian habitat within the City of San Diego.

Temporary impacts along the San Diego River (North Channel), within the mainstem of Sycamore Creek, that have the potential to occur as a result of dewatering the golf course pond during bridge construction are presented in Table 3.3-13. All 1:1 mitigation would occur in situ, through the re-establishment of the preexisting channel bottom and removal of the dewatering weirs to allow for the passive re-establishment of open water, riparian, and marsh habitat. Temporary impacts within the Golf Course Emergency Access Road Area, mitigation ratios, and corresponding acreages for temporary impacts on vegetation communities are presented in Table 3.3-14.

Table 3.3-13. Proposed Mitigation for Temporary Impacts Along San Diego River (North Channel) – City of Santee

Vegetation Community/ Land Cover Type	Total Temporary Impact (Acres)	Mitigation Ratio	Total Mitigation Required (Acres)
Coastal and Valley Freshwater Marsh	0.56	1:1[1]	0.56 in situ
Fresh Water (Open Water)	2.43	1:1	2.43 in situ
Nonnative Riparian	0.05	1:1	0.05 in situ
Southern Cottonwood–Willow Riparian Forest	0.01	2:1	0.01 in situ + 0.01 enhancement
Project Totals[2]	**3.05**	**N/A**	**3.05 in situ + 0.01 enhancement**

Notes: No impacts would occur on wetland or riparian habitat within the City of San Diego.
[1] 1:1 mitigation for temporary impacts through rewatering of dewatered habitat at original location.
[2] Totals may not sum precisely due to rounding.

Table 3.3-14. Proposed Mitigation for Temporary Impacts Within Golf Course Emergency Access Road Area – City of Santee

Vegetation Community/ Land Cover Type	Total Temporary Impact (Acres)	Mitigation Ratio	Total Mitigation Required (Acres)
Mule Fat Scrub – disturbed	0.02	2:1	0.02 in situ + 0.02 enhancement
Southern Cottonwood–Willow Riparian Forest – disturbed	0.06	3:1	0.06 in situ + 0.12 enhancement
Project Totals[1]	**0.08**	**N/A**	**0.08 in situ + 0.14 enhancement**

Note: No impacts would occur on wetland or riparian habitat within the City of San Diego.
[1] Totals may not sum precisely due to rounding.

MM-BIO-9 and **MM-BIO-10** have been identified to reduce potential impacts from fugitive dust (**Impact BIO-16**) to a less than significant level. In addition, potential impacts from changes in water quality (**Impact BIO-15**) on sensitive wetland vegetation communities would be reduced to a less-than-significant level with implementation of **MM-BIO-9.**

The Habitat Acquisition Fund (HAF) is codified in the City of San Diego's Municipal Code in the Development Regulations for Sensitive Biological Resources (Section 143.0141 (a)(1)(C)) and in the City's Biology Guidelines (Section III[B][1][c][4]). Payment into the HAF consistent with the San Diego Subarea Plan mitigation ratios (**MM-BIO-1**) would reduce the significance of impacts on sensitive vegetation within City of San Diego (**Impact BIO-1**) to

below a level of significance. Implementation of restoration and preservation of habitat would reduce the significance of impacts on sensitive vegetation within the City of Santee (**Impact BIO-2** and **Impact BIO-3**) to below a level of significance. Any of the options for upland mitigation presented in **MM-BIO-2** would fully mitigate impacts on sensitive upland vegetation within the City of Santee.

Impact BIO-1 is proposed to be mitigated through the City of San Diego's Habitat Acquisition Fund, for the 0.19 acres of impacts. This would be appropriate because of the small size of the habitat patch, the low quality and isolation, and the lack of occupancy by sensitive species.

MM-BIO-1. Mitigate Temporary and Permanent Impacts Within City of San Diego on Sensitive Upland Vegetation Communities. Direct permanent impacts on 0.08 acres of disturbed Diegan coastal sage scrub (outside of MHPA) and direct temporary off-site impacts on 0.11 acres of disturbed Diegan coastal sage scrub (outside of Multi Habitat Planning Area), 0.19 acres total within the City of San Diego shall be mitigated at a 1:1 ratio in accordance with the Upland Mitigation Ratios provided in the City of San Diego Biological Guidelines (as specified in Table 3 of the Biological Guidelines). Prior to beginning any ground disturbing activities or being issued grading permits by the City of San Diego, the applicant shall provide a contribution into the City of San Diego Habitat Acquisition Fund (HAF). The HAF fee calculated shall be based on the current market rate amount per acre set by Real Estate Assets Department (READ) each year at the trigger time. Per the City of San Diego Municipal Code, an additional 10% administration fee is required to be paid for City of San Diego HAF staff administration and maintenance costs. The 10% fee is calculated and applied after the mitigation HAF amount is determined based upon the required mitigation acreage/ratio. Documentation of this contribution shall be provided to the City of San Diego by the applicant prior to the issuance of any construction permit.

MM-BIO-2. Mitigate Permanent Impacts Within City of Santee on Sensitive Upland Vegetation Communities. Direct permanent impacts on disturbed Diegan coastal sage scrub and nonnative grassland within the City of Santee shall be mitigated at a 1:1 ratio either through the purchase of mitigation bank credits of Diegan coastal sage scrub(Option 1) or through off-site preservation or on-site creation and preservation of Diegan coastal sage scrub (Option 2).

1 **Option 1:** The purchase of mitigation credits shall occur at a mitigation bank approved by the California Department of Fish and Wildlife (CDFW) in the local area or other location deemed acceptable by CDFW. The applicant shall provide evidence of purchase of credits to the City of Santee prior to being issued grading permits by the City of Santee. Evidence of purchase shall consist of the following items:

A A copy of the purchase contract referencing the project name and numbers for which the habitat credits were purchased.

B If not stated explicitly in the purchase contract, a separate letter must be provided identifying the entity responsible for the long-term management and monitoring of the preserved land.

- C To ensure that the land shall be protected in perpetuity, evidence must be provided that a dedicated conservation easement or similar land constraint has been placed over the mitigation land.

- ~~D An accounting of the status of the mitigation bank shall be provided and include the total amount of credits available at the bank, the amount required by this project, and the amount remaining after use by this project.~~
- ~~2 **Option 2:** If habitat credit cannot be purchased in a mitigation bank, then the applicant shall provide for the off site preservation or on site creation and preservation of Diegan coastal sage scrub habitat at a 1:1 ratio, as described below, prior being issued grading permits by the City of Santee.~~
- ~~A **Off-Site Preservation:** The applicant shall provide for the off site preservation of land that meets criteria for sensitive upland vegetation community mitigation through the recordation of a conservation easement at a location approved by the City of Santee and the Wildlife Agencies (U.S. Fish and Wildlife Service and CDFW) that will be managed in perpetuity under a Resource Management Plan (RMP) that establishes long-term monitoring, maintenance, management, and reporting directives. The RMP will be prepared as described in **MM-BIO-6**. Off-site mitigation shall occur within one of the following areas: (1) preserve areas in the City of Santee; (2) City of San Diego Multi-Habitat Planning Area; or (3) County of San Diego Pre-Approved Mitigation Areas. The off-site land being preserved must be at a location approved by the City of Santee and the Wildlife Agencies. Long term management shall be funded through a non-wasting endowment in an amount determined through preparation of a Property Assessment Record or similar method for determining funding amount. The Conservation Easement shall be owned by a conservancy, or other similar, experienced entity, subject to approval by CDFW, and CDFW shall be listed as a third-party beneficiary.~~

~~B **On-Site Restoration and Preservation.** Diegan coastal sage scrub shall be restored and preserved on site at a 1:1 ratio through the recordation of a conservation easement at a location approved by the City of Santee, granted to an entity approved by the City of Santee, and restored pursuant to an Upland Restoration Plan described below. The Conservation Easement shall be owned by a conservancy, or other similar, experienced entity subject to approval by CDFW, and CDFW shall be listed as a third-party beneficiary. The Upland Restoration Plan shall include the following:~~

~~i.Monitoring of the restoration areas will occur for a minimum of 5 years or until the fifth year performance/success criteria are met to determine the successful completion of the 5-year mitigation and monitoring program. The performance standards and success criteria must be approved by the City of Santee and CDFW and shall include requirements for 100% survival of native shrub container stock plantings at the first annual monitoring (or sufficient number of shrubs emerging from seed to replace the container stock), as well as Year 5 standards of native vegetation cover of at least 90% of that of a nearby Diegan coastal sage scrub reference site. Methods used to measure these performance standards shall be described, and, if the restored areas fail to meet the Year 5 standards after the full monitoring term, then a specific set of remedial measures will be developed and implemented, and the monitoring and maintenance period would be extended until all Year 5 standards are met, or as otherwise provided in this document. The Upland Restoration Plan must be approved City of Santee and CDFW prior to implementation.~~

ii. In the absence of any restoration plan guidance from the City of Santee, the City of San Diego's *General Outline for Conceptual Revegetation/Restoration Plans* shall be used for guidance.

iii. The Upland Restoration Plan shall detail the installation, maintenance, and monitoring which would occur as part of the restoration effort.

iv. The Upland Restoration Plan shall include an evaluation of restoration suitability specific to proposed vegetation types, soil preparation, plant palettes, irrigation, erosion control, maintenance and monitoring program, and success criteria.

v. The applicant shall also secure performance bonds prior to being issued grading permits by the City of Santee. These bonds would be released after the City of Santee approves the final success of the restoration site. The specifics regarding long term management and management funding will be included in a Resource Management Plan (RMP) that establishes long-term monitoring, maintenance, management, and reporting directives. The final RMP shall be prepared as described in **MM-BIO-6**. The RMP cannot be approved by the City of Santee or CDFW until the following has been completed: easements shall be dedicated, a qualified Resource Manager approved by the City shall be selected, and the RMP funding mechanism shall be in place.

MM-BIO-3. Mitigate Permanent and Certain Temporary Impacts Within City of Santee on Sensitive Riparian and Wetland Vegetation Communities. Impacts on sensitive riparian and wetland vegetation communities shall be mitigated through on-site restoration, enhancement, and preservation of habitat. The impacts to sensitive riparian and wetland vegetation shall be mitigated at the mitigation ratios described below:

- 1 **Direct permanent impacts on disturbed wetland** shall be mitigated at a 2:1 ratio through preservation of enhanced or restored native wetland habitat.
- 2 **Direct permanent impacts on mule fat – disturbed** shall be mitigated at a 3:1 ratio through preservation of enhanced or restored riparian scrub habitat (mule fat and/or willow scrub).
- 3 Direct permanent impacts on southern cottonwood–willow riparian forest and southern cottonwood willow riparian forest – disturbed shall be mitigated at a 3:1 ratio through preservation of enhanced or restored riparian forest habitat.
- 4 **Direct temporary impacts on nonnative riparian communities** shall be mitigated at a 1:1 ratio through preservation of enhanced or restored riparian or wetland habitat.
- 5 **Direct temporary impacts on southern cottonwood–willow riparian forest (including disturbed)** shall be mitigated at a 3:1 ratio through in situ re-establishment of riparian forest and preservation of enhanced or restored riparian forest.
- 6 **Direct temporary impacts on mule fat scrub** shall be mitigated at a 2:1 ratio through in situ re-establishment of mule fat scrub and enhancement of riparian scrub habitat.

The monitoring and restoration requirements for these sensitive riparian and wetland vegetation communities shall be identified in a Habitat Mitigation and Monitoring Plan (HMMP) (refer to **MM-BIO-5**) and Resource Management Plan (RMP) (**MM-BIO-6**). The HMMP must be approved by the resource agencies (U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife [CDFW]), and the RMP must be approved by the Wildlife

Agencies (U.S. Fish and Wildlife Service and CDFW) prior to issuance of grading permits by the City of Santee.

MM-BIO-4. Mitigate Temporary Dewatering Impacts on Sensitive Riparian and Wetland Vegetation Communities Within the City of Santee. Riparian and wetland vegetation communities within the City of Santee are considered sensitive by California Department of Fish and Wildlife. Direct temporary impacts on coastal valley freshwater marsh, fresh water, and nonnative riparian vegetation shall be mitigated through passive, in situ restoration of habitat to pre-dewatering conditions. The impacts shall be mitigated through implementation of the Habitat Mitigation and Monitoring Plan (refer to **MM-BIO-5**).

MM-BIO-5. Habitat Mitigation and Monitoring Plan (HMMP). To implement the restoration and enhancement of sensitive riparian and wetland vegetation communities as mitigation for loss of, or temporary impact on, those communities within the project site, as described in **MM-BIO-3** and **MM-BIO-4**, a final HMMP must be approved by the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and the City of Santee prior to being issued grading permits by the City of Santee. The HMMP shall do the following:

- The draft HMMP (Appendix K of the Biological Survey Report) shall be used as a basis for the final HMMP. The HMMP shall include details for the installation, maintenance, and monitoring of sensitive riparian and wetland vegetation that would occur after approval of the HHMP.
- Monitoring shall include monitoring of the restoration/ enhancement areas for a minimum of 5 years or until fifth year performance/success criteria are met. The HHMP shall include performance standards to determine the successful completion of the 5-year mitigation and monitoring program. Attainment of these standards shall indicate the restoration area is progressing toward the habitat functions and services specified in the HHMP. Methods used to measure these performance standards shall be described and if the restored area fails to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed, implemented, and the monitoring and maintenance period would be extended until all Year 5 standards are met or as otherwise provided in the HMMP.
    - The HMMP shall include performance bonds that would be released after the City of Santee approves the final success of the restoration site.

MM-BIO-6. Resource Management Plan (RMP). To provide for the long-term management of the mitigation sites (i.e., on-site wetland mitigation sites and potential Diegan coastal sage preservation sites), an RMP shall be prepared by a qualified biologist to address long-term monitoring, maintenance, management, and reporting directives, in perpetuity. The RMP shall be approved by the City of Santee and the Wildlife Agencies (U.S. Fish and Wildlife Service and California Department of Fish and Wildlife [CDFW]) and implemented prior to any ground disturbance activities or issuance of grading permits by the City of Santee. The RMP shall include the following:

- Delineation of the limits of where the conservation easement will be recorded.
- Selection of a qualified Preserve Manager approved by the City of Santee and Wildlife Agencies.
- Requirements of long-term monitoring, maintenance, management, and reporting directives, in perpetuity, approved by the City of Santee and Wildlife Agencies, that will be managed by the Preserve Manager.

- Monitoring requirements for the mitigation area for a minimum of 5 years or until fifth-year performance/success criteria are met.
- Draft performance standards to determine the successful completion of the 5 year mitigation and monitoring program. Attainment of these standards shall indicate that the restoration area is progressing toward the habitat functions and services specified in the RMP. Methods used to measure these performance standards will be described, and, if the restored area fail to meet the Year 5 standards after the full monitoring term, then a specific set of remedial measures will be developed and implemented, and the monitoring and maintenance period will be extended until all Year 5 standards are met, or as otherwise provided in the RMP.
- Preparation of a Property Analysis Record prepared for endowment funding or similar cost estimation, to determine the size of a non wasting endowment necessary to fund the annual costs for basic stewardship of the preserve.
- Identification of what entity would hold the endowment (or equivalent acceptable funding mechanism).

The final RMP document must include the additional following items:

- Evidence of purchase of the mitigation land to be managed.
- Evidence that a conservation easement has been dedicated to CDFW, or other entity approved by CDFW to ensure that the land is protected in perpetuity.
- Acknowledgment that the resource manager accepts the responsibility for the management of the site.
- Establishment of an endowment or equivalent acceptable funding mechanism.
- Acknowledgment that the City of Santee has approved the entity that will be responsible for holding the endowment.

MM-BIO-7. Qualified Biologist to Provide Construction Monitoring: A qualified biologist shall be responsible for overseeing compliance with all laws, regulations, permit conditions, mitigation measures, and any other biological resources requirements during project construction. Prior to the start of construction, a qualified biologist shall conduct environmental awareness training for all construction personnel. Topics to be included in the training include, but are not limited to, the construction limits, sensitive habitats, features, plants, and animal species to avoid, mitigation measure and/or permit condition requirements, seasonal or other time-related restrictions on construction, and measures related to erosion control and spill prevention. Environmental awareness training shall be repeated for any new construction personnel working on the site. The qualified biologist shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of field experience.

MM-BIO-8. Delineate Environmentally Sensitive Areas: Sensitive vegetation communities, jurisdictional waters and wetlands, and other sensitive biological resources located outside of permanent and temporary impact areas shall be identified on the final construction plans as *environmentally sensitive areas* and protected with temporary fencing (e.g., orange snow fencing). A qualified biologist shall monitor the installation of the temporary fencing and ensure that it is installed prior to the start of clearing, brushing, grading, or other ground-disturbing construction activities. A qualified

biologist shall inspect the temporary fencing at least twice weekly during grading and monthly after grading is complete, ensuring that it remains in place throughout construction.

MM-BIO-9. Stormwater Pollution Prevention Plan. To control erosion and sedimentation and to preserve water quality, the applicant will obtain coverage for the project under the Construction General Permit (Order No. 2022-0057-DWQ). Prior to the issuance of grading permits, the applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) to reduce the potential for water pollution and sedimentation from construction. Best management practices (BMPs) to be included in the SWPPP that must be submitted to the State Water Resources Quality Control Board shall include, but are not limited to, the following:

- 1 The applicant shall not stockpile brush, loose soils, excavation spoils, or other similar debris material within sensitive habitats.
- 2 If visible dust is present during construction activities, then standard dust-suppression techniques (e.g., water spraying) shall be used in all ground-disturbance areas.
- 3 During construction activities, measures shall be in place to ensure that contaminants are not discharged from construction sites. The SWPPP will define areas where hazardous materials and trash would be stored, vehicles would be parked, fueled, and serviced, and construction materials would be stored.
- 4 Runoff, sedimentation, and erosion shall be minimized through the use of BMPs, such as water bars, silt fences, staked straw bales, wattles, and mulching and seeding of all disturbed areas. These measures shall be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water, and preserve roadways and adjacent properties.
- 5 Equipment storage, fueling, and staging areas shall be located in upland sites, away from riparian areas and other sensitive habitats. These designated areas would be located in such a manner as to prevent any runoff from entering sensitive habitat. Where vehicle maintenance (excluding fueling) cannot be avoided in areas outside of those previously specified, these maintenance activities will be performed at least 150 feet from all aquatic resources, or as specified by agency permits, on an impermeable bladder or tarp specified for such maintenance activities. Project-related spills of hazardous materials shall be cleaned up immediately, and contaminated soils removed to approved disposal areas.
- 6 Measures such as sandbags, silt screens, cleanup of spills of hazardous materials, and cleanup of sediment shall be implemented to prevent polluted (with sediment or hazardous materials) runoff from work areas in paved streets from entering the storm drain system.
- 7 Measures such as silt screens, cleanup of spills of hazardous materials, cleanup of sediment, secondary containment for hazardous materials, and avoidance of activities that disturb sediment or have a high potential for hazardous materials spills shall be implemented immediately before or during rain to prevent polluted (with sediment or hazardous materials) runoff from staging areas from draining into water ways such as washes, drainages, and ditches and from entering municipal storm drain systems.

~~The applicant shall comply with the City of Santee's Stormwater Pollution Prevention Program, the specifics of which can be found on the City of Santee's website. Verification of Construction General Permit coverage approval and the approved SWPPP(s) will be provided to the City of Santee at least 30 days prior to start of construction. Updated SWPPPs will be provided to the City of Santee on request during construction.~~

~~MM-BIO-10. Speed Limits During Construction. The City of Santee shall require that vehicle speed limits within the project site will not exceed 25 miles per hour during project construction.~~

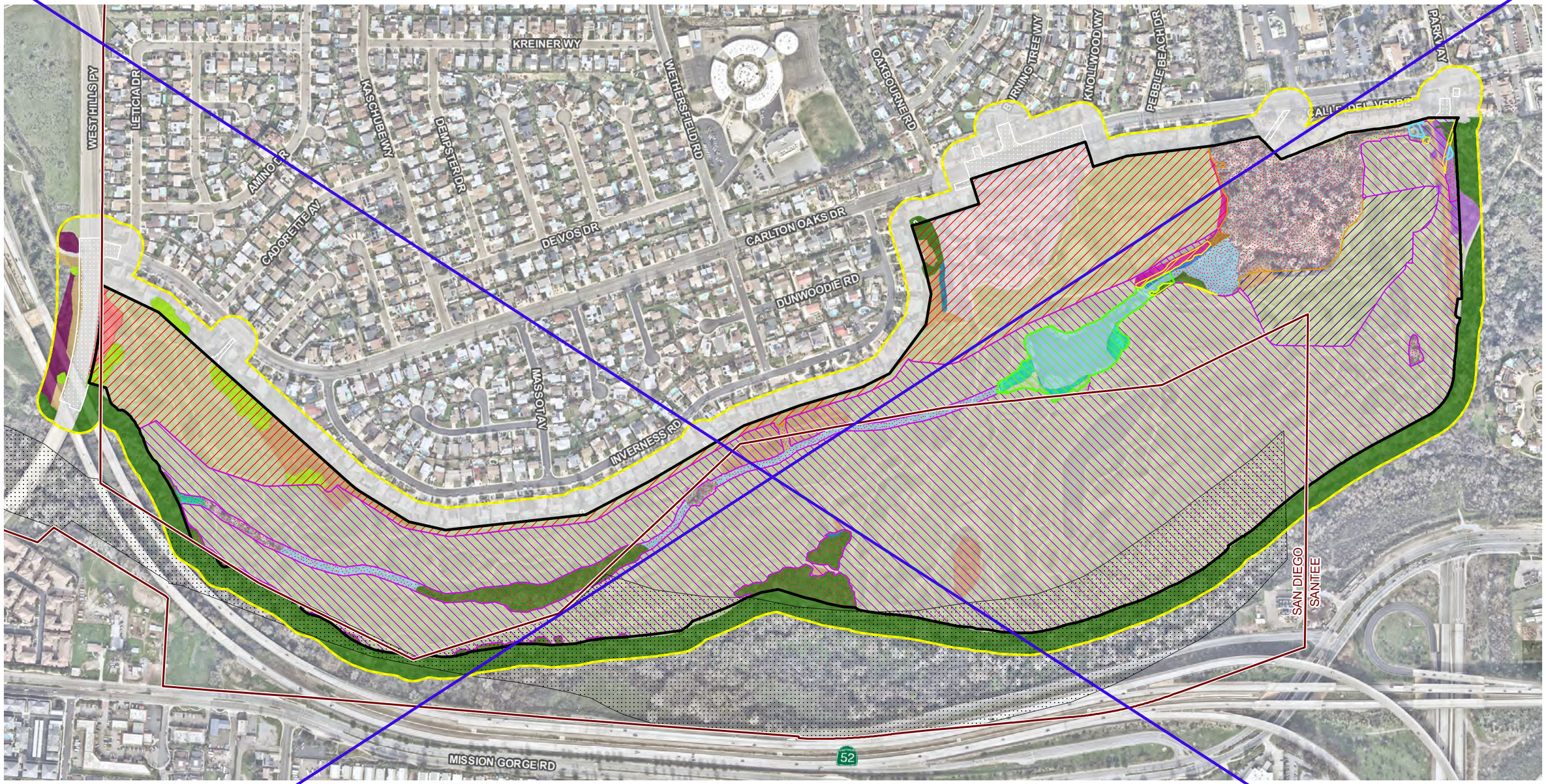
Level of Significance After Mitigation

~~Potential impacts on sensitive vegetation communities within the City of San Diego (**Impact BIO-1**) would be avoided and minimized with~~With implementation of **MM-BIO-~~7~~1** through **MM-BIO-10** and ~~reduced to a less-than-significant level with implementation of **MM-BIO-1**.~~

~~Potential permanent impacts on sensitive upland vegetation communities within City of Santee (**Impact BIO-2**) would be avoided and minimized with implementation of **MM-BIO-5**~~MM-BIO-19 through **MM-BIO-~~10~~** ~~and reduced to a less than significant level with implementation of **MM-BIO-2** and **MM-BIO-3**.~~

~~Potential direct temporary impacts on riparian upland vegetation communities within City of Santee (**Impact BIO-3**) would be avoided and minimized with implementation of **MM-BIO-7 through MM-BIO-10** and reduced to a less-than-significant level with implementation of **MM-BIO-3 through MM-BIO-6**.~~

~~In addition~~20, potential direct and indirect impacts ~~from fugitive dust (**Impact BIO-16**)~~ on ~~sensitive~~natural vegetation communities and riparian habitat would be ~~reduced to a~~ less-than-significant ~~level with implementation of **MM-BIO-9** and **MM-BIO-10**. Potential impacts from changes in water quality (**Impact BIO-15**) on sensitive vegetation would be reduced to a less-than-significant level with implementation of **MM-BIO-9**~~.



Project Site
Biological Study Area
City of Santee/San Diego Municipal Boundary
City of San Diego MHPA

Permanent Impact: Clubhouse/Hotel/Other
Permanent Impact: Residential
Permanent Impact: Golf Course Redesign
Permanent Impact for Fuel Modification Zone

Temporary Impacts Along Sycamore Creek
Temporary Impacts Within Golf Course
Avoidance
Offsite

Vegetation Classification (Holland Code)

Riparian
- Mule Fat Scrub-disturbed (63310)
- Non-Native Riparian (65000)
- Southern Cottonwood-Willow Riparian Forest (61330)
- Southern Cottonwood-Willow Riparian Forest-disturbed (61330)
- Southern Riparian Scrub (63320)

Wetlands
- Coastal and Valley Freshwater Marsh (52410)
- Disturbed Wetland (11200)
- Fresh Water (64140)

Upland
- Diegan Coastal Sage Scrub-disturbed (32500)
- Non-Native Grassland (42200)
- Non-Native Woodland (79000)

Developed/Disturbed
- Developed (12000)
- Developed-Golf Course
- Disturbed Habitat (11000)
- Eucalyptus Woodland (79100)

Source: Biological Resources-ICF (2022); Hunsaker & Associates (2023); Imagery-SANGIS (2023)

DUDEK

N

0 225 450 Feet

1 in = 450 feet

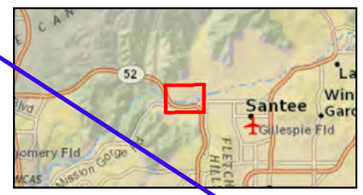


Figure 10
Potential Impacts on Vegetation Communities
Carlton Oaks Country Club and Resort

P:\CCT\DS\SD\Projects_In_Limbo\CarltonOaks_Residential\Figures\Doc\BTR\Fig_10_MetroPHO_PotentialImpacts_VegetationImpact_Use_27x37_Date_8/5/2024

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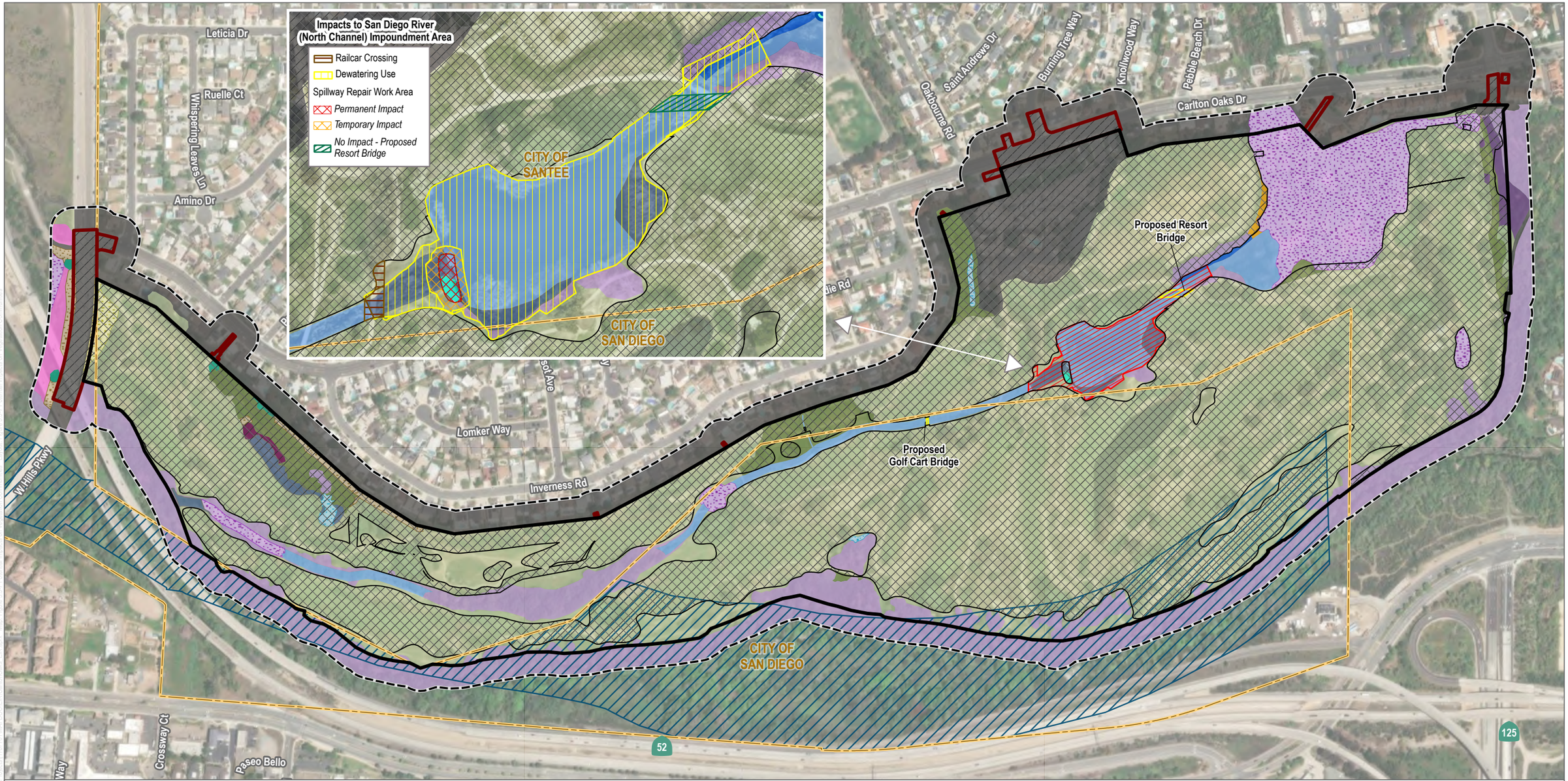

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

N

0 215 430 Feet

FIGURE 3.3-7

Potential Impacts on Vegetation Communities

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Threshold 3: Would implementation of the proposed project have a substantial adverse effect on federally or state-protected wetlands (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means?

Threshold 3 (City of San Diego): Would the project result in a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?

~~Impact Thresholds~~

~~In accordance with the City of San Diego's Significance Determination Thresholds, the project would have a significant impact if it would:~~

- ~~Result in substantial adverse impacts on wetlands through direct removal, filling, hydrological interruption, or other means.~~

Impact Discussion

The information in this section is based on the Jurisdictional Delineation prepared for the proposed project, which is included ~~in~~as Appendix I of the Biological Survey Report (Appendix E). ~~Any references to and analysis of non-wetland waters are provided only for informational purposes because~~Although the CEQA Appendix G thresholds and the City of San Diego thresholds do not ~~protect~~specifically discuss non-wetland waters, the analysis provided below includes both wetlands and non-wetland~~-~~ waters~~.~~ (i.e., jurisdictional aquatic resources).

The project has been designed to avoid direct impacts on waterways~~, except~~ to the greatest extent feasible. Exceptions include areas for linear stream crossings (primarily culvert improvements of the existing river crossing at the northeastern side of the project site [~~NWW5]~~)NWW 5]), residential development and golf course impacts, and localized, temporary, summer stream dewatering associated with construction~~ (allowing for access for bridge construction).~~, the Temporary Railcar Crossing, and the spillway repair work area within NWW 1. Areas of riparian vegetation ~~less than 100 feet from buildings will be considered affected~~impacted by fuel management zones ~~and~~ were considered permanent and shall be mitigated accordingly; no impacts ~~will~~would occur to the channel topography in these fuel management zones, so there will ~~not~~ be ~~a~~no negative effect on water channel function.~~ All other buildings, including all residential buildings, are positioned at least 100 feet back from riparian habitat, providing buffers for wetlands. All stream courses within the redeveloped golf course would include a 10-foot-wide strip of planted native vegetation. This strip will have an emphasis on saltgrass (*Distichlis spicata*), a native, wetland tolerant grass species. There is currently no buffer between the existing golf course and existing waterways.~~

The project would not result in permanent negative development of jurisdictional waterways relative to flood conveyance (i.e., no direct alteration of stream elevation~~); improvements~~). Improvements at ~~NWW5~~the culvert connecting NWW 5 into NWW 1 would improve water conveyance at that location. ~~The hydrology section~~Section 3.9, Hydrology and Water Quality, of this Draft EIR ~~states~~, demonstrates that the project would not ~~(i)~~ result in substantial erosion or siltation on or off site;~~ (ii)~~ substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site; ~~(iii)~~ create or contribute runoff water that would exceed the capacity of existing or planned stormwater-drainage systems or provide substantial additional sources of polluted runoff; or ~~(iv)~~ impede or redirect flood flows.

The *Drainage Report for Carlton Oaks Country Club & Resort TM 2019-1/DR 2019-5* (Appendix ~~J~~J1 to the Draft EIR) states that "there would be a substantial lag time between the time the peak flows from the proposed development outlet to the San Diego River and time the peak flows along the San Diego River reach the proposed outlet locations since the tributary area to the San Diego River is several thousand acres. Due to this lag time, there is no net increase of flows to the San Diego River from the development of Carlton Oaks Country Club and Resort when compared to existing conditions." Potential indirect impacts from project implementation to hydrology are discussed in detail below.

Regarding the driving range, soil was placed within the driving range in 2023–2024. There is an existing silt fence along the chain-link fence on the outer boundary of the driving range, where it abuts Sycamore Canyon Creek. The silt fence was in good condition in 2024 and would have prevented any sediment from entering the adjacent waterway. Soil was removed in 2024, and the site was returned to original conditions prior to soil deposition. No impacts occurred on Sycamore Canyon Creek from activities at the driving range.

~~U.S. Army Corps of Engineers/Regional Water Quality Control Board Jurisdictional Wetlands~~

~~The proposed project would have no impact (temporary or permanent) on USACE/RWQCB jurisdictional wetlands; wetlands WW1 and WW2 are within designated Avoidance Areas and would not be affected by the proposed project (Figure 3.3-8, Potential Impacts on Jurisdictional Waters and Wetlands).~~

Direct Impacts

The proposed project would result in ~~the~~ direct permanent impacts to 0.35 acres and temporary impacts 2.84 acres of USACE jurisdictional aquatic resources (Table 3.3-15). The proposed project would result in direct permanent ~~loss of 0.289 acres of USACE/RWQCB jurisdictional non-wetland waters, as well as permanent impacts on~~ impacts to 0.~~575 acres of USACE/RWQCB jurisdictional non-wetland waters (Table 3.3-15; Figure 3.3-8). The proposed project would also result in direct~~ 60 acres and temporary impacts ~~on 2.373 acres of USACE/RWQCB non-wetland waters, including~~to 2.~~339~~84 acres of RWQCB jurisdictional aquatic resources (Table 3.3-16). The proposed project would result in direct permanent impacts to 3.75 acres and temporary impacts ~~associated with the dewatering of a pond in the San Diego River (North Channel) (NWW1) during construction~~to 3.13 acres of CDFW jurisdictional aquatic resources (Table 3.3-~~16; Figure 3.3-8~~17). The ~~remainder of the~~ impact totals presented in Tables 3.3-15 through 3.3-17 should not be summed due to overlap between aquatic resources. Impacts to jurisdictional aquatic resources would be considered significant absent the project's mitigation measures outlined below.

Impacts to jurisdictional aquatic resources are shown on Figure 3.3-8. Permits from the aquatic resource agencies (USACE, RWQCB, and CDFW) would be obtained prior to any ground disturbances occurring on the project site so as to ensure that the impacts are mitigated in compliance with state and federal water laws as directed by **MM-BIO-11**. The manner in which the permanent impact mitigation will be determined during the permitting process in accordance with permitting requirements of the applicable resource agencies (i.e., USACE, CDFW, and RWQCB) (as outlined in Appendix K, Proposed On-Site Mitigation Overview, to Appendix E, Revised Biological Survey Report).

Direct permanent impacts from the golf course redesign and development and direct temporary impacts ~~at NWW5~~from the Temporary Railcar Crossing and spillway repair work area on jurisdictional aquatic resources would represent a potentially significant impact prior to implementation of mitigation measures. These impacts would be reduced to less than significant through implementation of **MM-BIO-3** and inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

Temporary impacts would occur ~~around improvements to the emergency exit pathway in the northeastern corner of the project site.~~to jurisdictional aquatic resources (i.e., coastal and valley freshwater marsh, fresh water, non-native riparian, and southern cottonwood-willow riparian) associated with the impounded portion of the San Diego River (North Channel) from dewatering activities during construction. The pond is an intermittent feature, drying up when water is not flowing from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing seasonal variation in hydrology. Therefore, temporary dewatering impacts would not require habitat mitigation as the vegetation communities would not be significantly impacted. However, these areas would be passively restored as directed by **MM-BIO-4** and included in the project's HMMP as directed by **MM-BIO-5**.

~~Table 3.3-15. Permanent Impacts on U.S. Army Corps of Engineers/Regional Water Quality Control Board Jurisdictional Waters (Acres)~~

~~Aquatic Resource~~	~~Permanent Impact[1]~~	~~Permanent Loss[2]~~
~~Clubhouse/Hotel~~		
~~NWW1~~	~~0.570~~	~~0.000~~
~~Residential~~		
~~NWW2~~	~~0.000~~	~~0.235~~
~~NWW3~~	~~0.000~~	~~0.003~~
~~Golf Course Redesign~~		
~~NWW1~~	~~0.000~~	~~0.000~~
~~NWW5~~	~~0.000~~	~~0.051~~
~~Fuel Modification Zone~~		
~~NWW5~~	~~0.005~~	~~0.000~~
~~Total~~	~~0.575~~	~~0.289~~

~~Notes: NWW = non-wetland waters.~~

~~1 A *permanent impact to an aquatic feature* is defined as a permanent discharge of fill material (e.g., riprap), but one that allows the feature to retain some aquatic function.~~

~~2 A permanent loss was designated to an aquatic feature where it would be converted to concrete or uplands, thereby eliminating any aquatic function and creating no impacts on wetland waters.~~**Table 3.3-15. Permanent and Temporary Impacts to USACE Jurisdictional Aquatic Resources (acres)**

Feature[1]	Permanent	Temporary			
		Railcar Crossing	Dewatering	Spillway Repair	Total
NWW 1	0.26	0.03	2.74	0.07	2.84
NWW 3	<0.01	0	0	0	0
NWW 5	0.09	0	0	0	0
Total	**0.35**	**0.03**	**2.74**	**0.07**	**2.84**

Notes: Table describes the project's impacts to USACE aquatic resources and additional areas within the site under USACE jurisdiction included in Table 3.3-3 would be avoided by the project.
NWW = non-wetland water.
1 ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both non-wetland waters and wetlands.

Table 3.3-16. Permanent and Temporary Impacts to RWQCB Jurisdictional Aquatic Resources (acres)

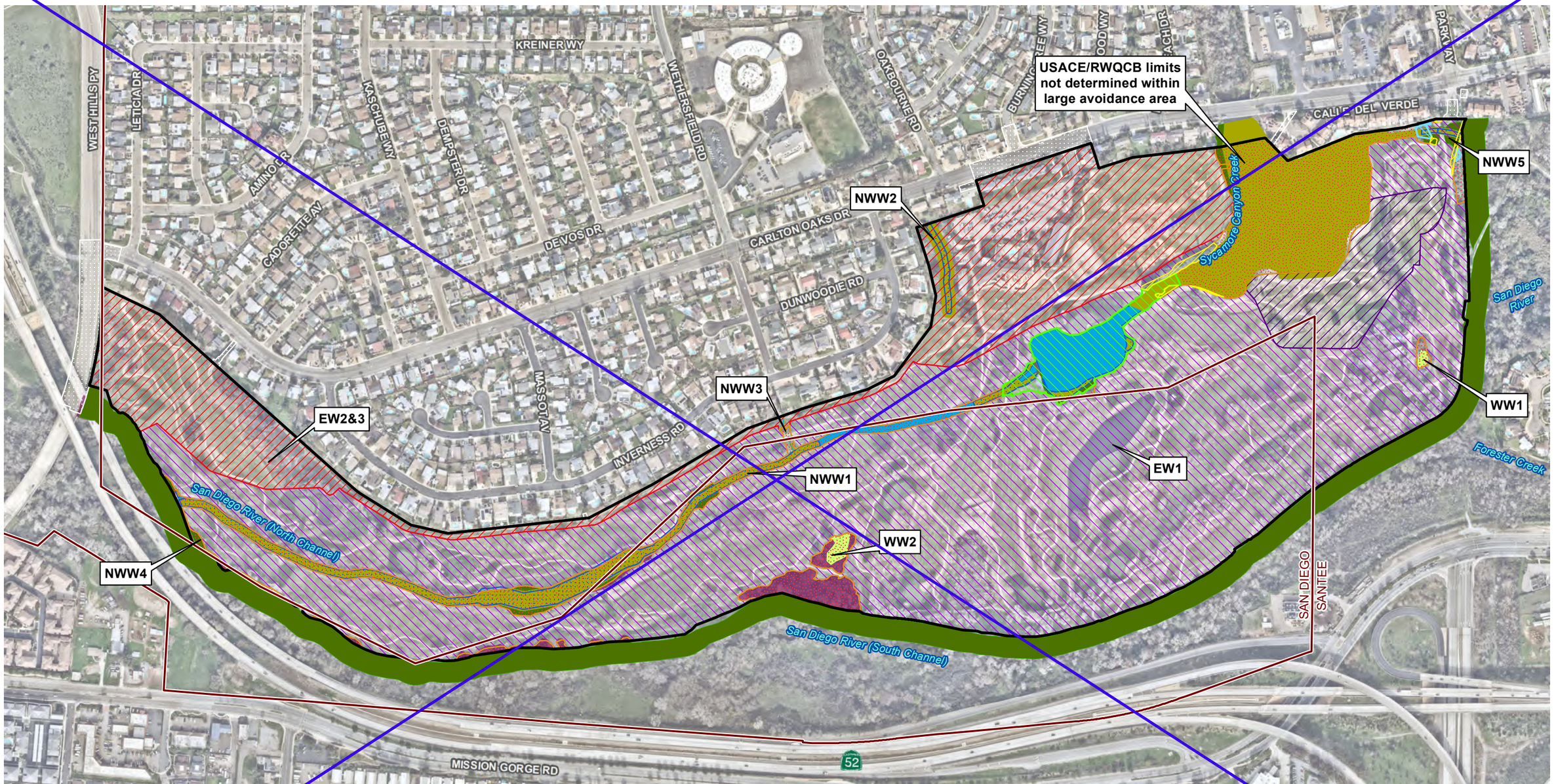
Feature[1]	Permanent	Temporary			
		Railcar Crossing	Dewatering	Spillway Repair	Total
NWW 1	0.26	0.03	2.74	0.07	2.84
NWW 2	0.23	0	0	0	0
NWW 3	<0.01	0	0	0	0
NWW 5	0.09	0	0	0	0
WW 3	0.01	0	0	0	0
WW 4	0.01	0	0	0	0
Total	**0.60**	**0.03**	**2.74**	**0.07**	**2.84**

Notes: Table describes the project's impacts to RWQCB aquatic resources and additional areas within the site under RWQCB jurisdiction included in Table 3.3-4 would be avoided by the project.
NWW = non-wetland water; WW = wetland water.
[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both non-wetland waters and wetlands.

Table 3.3-17. Permanent and Temporary Impacts to CDFW Jurisdictional Aquatic Resources (acres)

Feature[1]	Permanent	Temporary			
		Railcar Crossing	Dewatering	Spillway Repair	Total
NWW 1	0.91	0.03	3.00	0.09	3.13
NWW 2	0.61	0	0	0	0
NWW 3	0.01	0	0	0	0
NWW 4	0.45	0	0	0	0
NWW 5	0.51	0	0	0	0
NWW 6	0.07	0	0	0	0
RIP 1	1.18	0	0	0	0
WW 3	0.01	0	0	0	0
WW 4	0.01	0	0	0	0
Total	**3.75**	**0.03**	**3.00**	**0.09**	**3.13**

Notes: Table describes the project's impacts to CDFW aquatic resources and additional areas within the site under CDFW jurisdiction included in Table 3.3-5 would be avoided by the project.
NWW = non-wetland water; WW = wetland water; RIP = riparian.
[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both streambeds and riparian habitat.



Project Site

City of Santee/San Diego Municipal Boundary

Permanent Impact: Clubhouse/Hotel/Other

Permanent Impact: Residential

Permanent Impact: Golf Course Redesign

Permanent Impact for Fuel Modification Zone

Temporary Impacts Along Sycamore Creek

Temporary Impacts Within Golf Course

Avoidance Areas

Offsite Areas

Waters of the U.S. and State

Nonwetland Water

Nonwetland Water (Riprap-lined)

Wetland Waters

Wetland Waters Within OHWM

CDFW Waters

Unvegetated Streambed

Vegetated Streambed

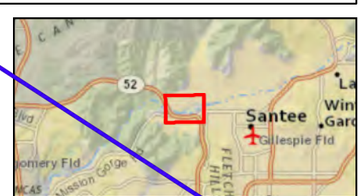
Riparian

*Within the City of San Diego, these areas are also ESL Wetlands.

City of San Diego ESL Wetland

Southern Cottonwood-Willow Riparian Forest (61330)

Southern Cottonwood-Willow Riparian Forest-disturbed (61330)



Source: Jurisdictional Resources-ICF (2022); Hunsaker & Associates (2023); Imagery-SANGIS (2023)

DUDEK

N

0 225 450 Feet

1 in = 450 feet

Figure 3.3-8

Potential Impacts on Jurisdictional Waters and Wetlands

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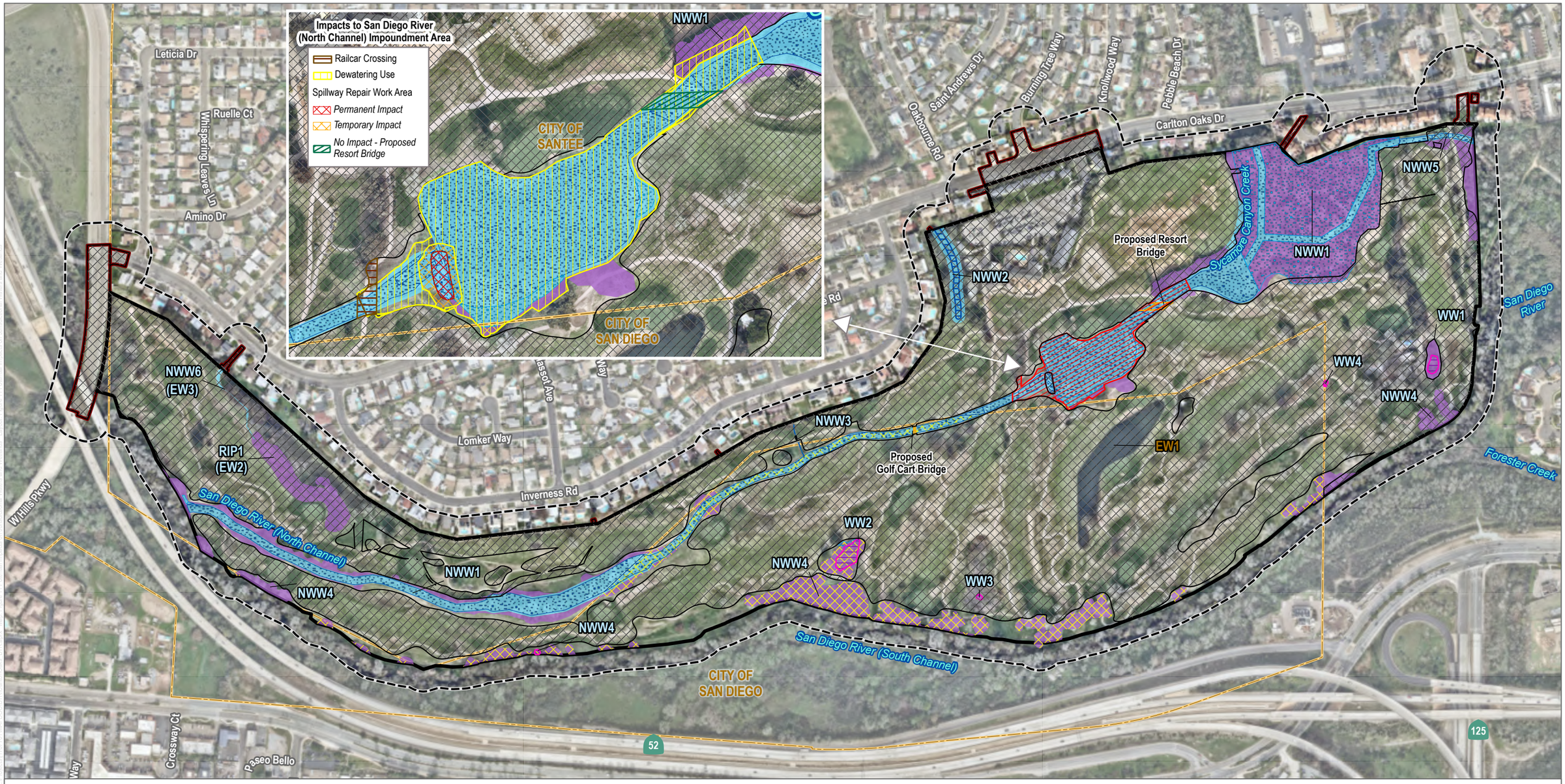

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

N

0 220 440 Feet

FIGURE 3.3-8

Potential Impacts on Jurisdictional Waters and Wetlands

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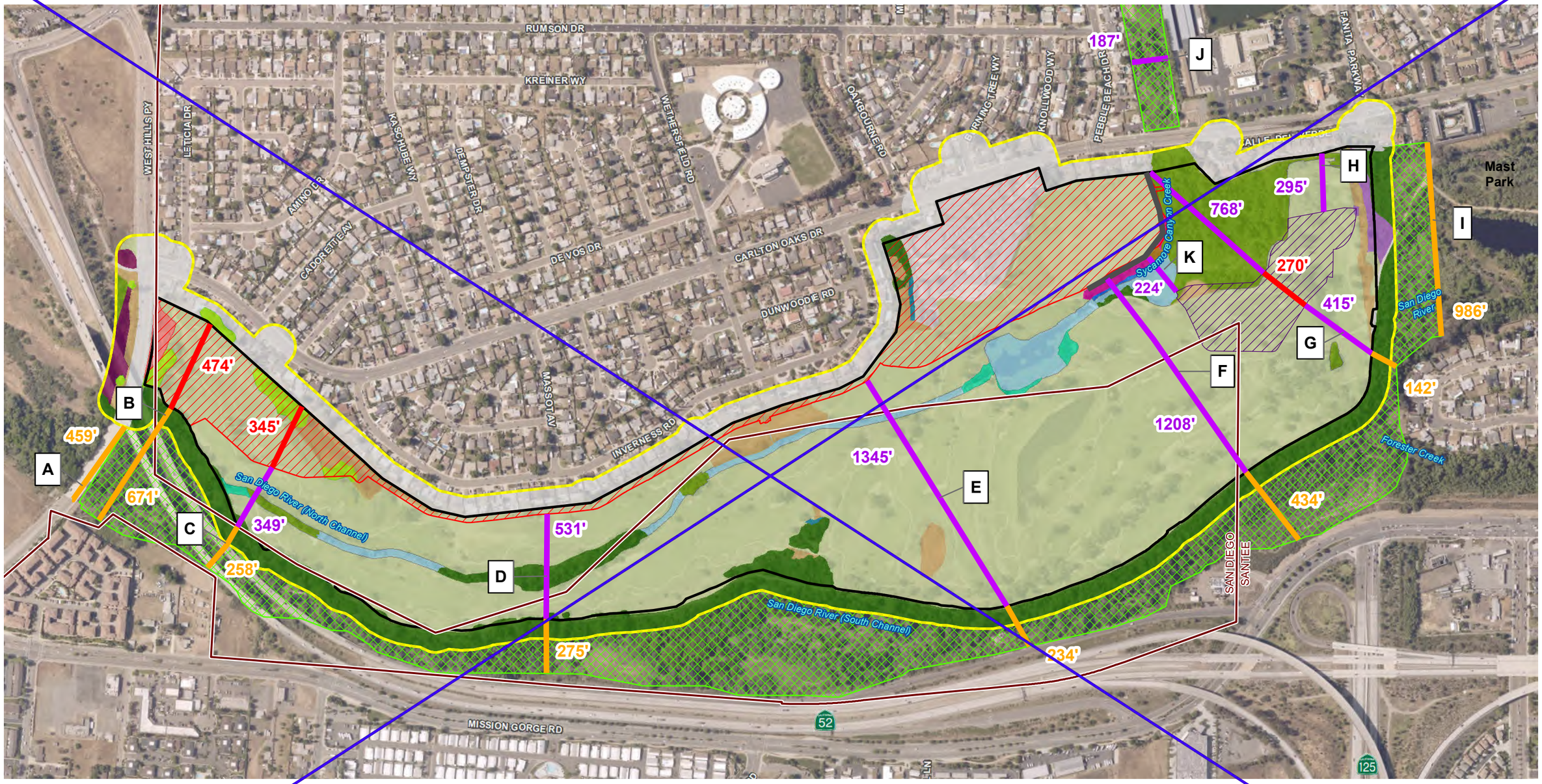

Project Site
Biological Study Area
City of Santee/San Diego Municipal Boundary

Source: Biological Resources-ICF (2022); Hunsaker & Associates (2023); Imagery-SANGIS (2023)

Wildlife Corridor
- Primary Movement Corridor
- Secondary Movement Corridor
- Proposed Project Development in Secondary Corridor
- Existing Fence at Driving Range

- Permanent Impact: Clubhouse/Hotel/Other
- Permanent Impact: Residential

Vegetation Classification (Holland Code)

Riparian
- Mule Fat Scrub-disturbed (63310)
- Non-Native Riparian (65000)
- Southern Cottonwood-Willow Riparian Forest (61330)
- Southern Cottonwood-Willow Riparian Forest-disturbed (61330)
- Southern Riparian Scrub (63320)

Wetlands
- Coastal and Valley Freshwater Marsh (52410)
- Disturbed Wetland (11200)
- Fresh Water (64140)

Upland
- Diegan Coastal Sage Scrub-disturbed (32500)
- Non-Native Grassland (42200)
- Non-Native Woodland (79000)

Developed/Disturbed
- Developed (12000)
- Developed-Golf Course
- Disturbed Habitat (11000)
- Eucalyptus Woodland (79100)
- Unmapped Riparian Corridor

DUDEK

N

0 225 450 Feet

1 in = 450 feet

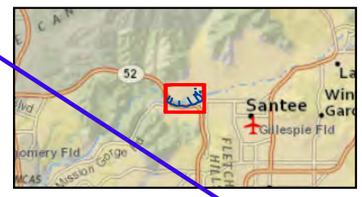

Figure 3.3-9
Wildlife Corridor Analysis
Carlton Oaks Country Club and Resort

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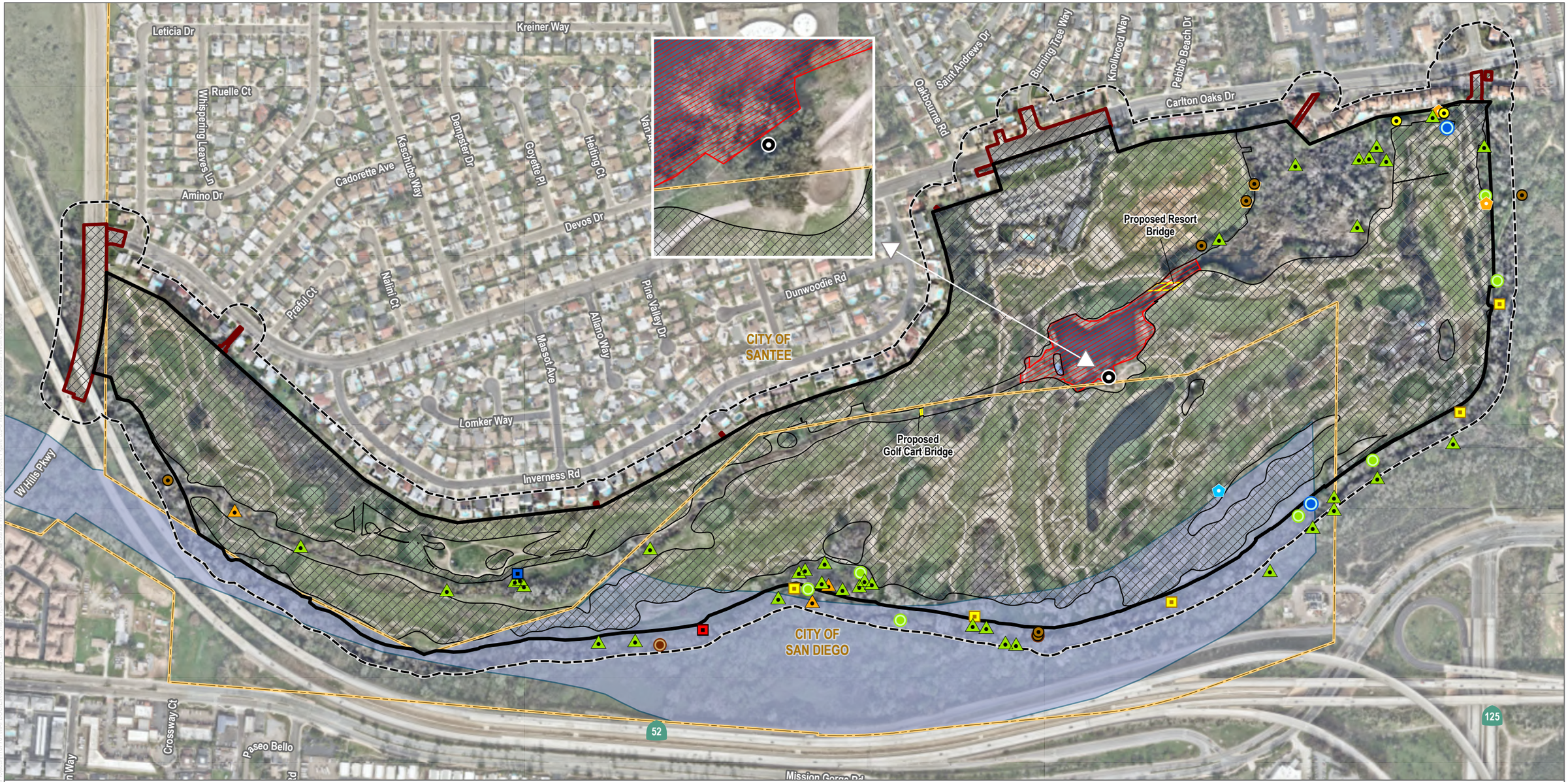

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 220 440 Feet

FIGURE 3.3-9

Impacts to Special-Status Wildlife Species

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Indirect Impacts

Water and sediment runoff from the construction area has the potential to temporarily impact local water quality, and sediment deposition can negatively affect wetlands. Erosion of sediments during rain events during construction could deposit into waterways or wetlands and negatively affect the hydrology and associated ecology of the system. Temporary indirect impacts on wetlands would be a potentially significant impact. Therefore, the project would implement measures **MM-BIO-7,** which requires construction monitoring, **MM-BIO-8,** which requires delineation of environmentally sensitive areas, **MM-BIO-9,** which requires a stormwater pollution prevention plan, and **MM-BIO-10**, which requires speed limits, to reduce impacts from dust during construction, to reduce impacts to water quality during construction to less than significant.

The vegetation palette of the proposed project would not include invasive plant species, and no invasive plant species would be planted in or adjacent to the MHPA as directed by **MM-BIO-20**. All stream courses within the redeveloped golf course will include a 10-foot-wide strip of planted native vegetation in the Landscape Plans as directed by **MM-BIO-20**. This strip will have an emphasis on saltgrass (*Distichlis spicata*), a native, wetland tolerant grass species. **MM-BIO-20** would ensure that there would be no potentially significant indirect impacts from invasive plants.

Implementation of **MM-BIO-19**, which requires incorporation of signage, where appropriate, to inform residents of the importance of preservation of native flora and fauna and to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in proposed open space areas and/or suitable habitat for special-status wildlife would reduce indirect impact to jurisdictional aquatic resources from human activity to less than significant.

Water Quality and Hydrology

The project incorporates several design features intended to protect the proposed structures and preserve the integrity of the overall river corridor, ensuring that stream functions, flood risk, erosion potential, flow velocity, and sediment transport are not adversely impacted or altered by the proposed improvements. Therefore, long-term indirect impacts to water quality and hydrology are not anticipated. The project would also be consistent with the City of Santee General Plan principles related to water quality and hydrology as detailed below.

As stated in Section 3.3.3.3, the City of Santee's Land Use Element of the General Plan includes guiding principles that would apply to the proposed project as they relate to the protection of the San Diego River:

- Guiding Principle #5: Development should respect the river environment, including protection of the riparian habitat and protected species.

Hydrology modeling, as summarized in Appendix O to Appendix E of this Draft EIR, was conducted to evaluate potential changes in water surface elevation and flow velocity associated with the proposed project, with particular focus on small storm events and the wetland areas located both downstream and upstream of the project boundary. The study also assessed whether it was necessary to extend the analysis farther upstream and downstream to ensure that any potential effects on adjacent parcels and sensitive habitat areas were fully captured. The modeling was extended 0.28 miles upstream and 0.22 miles downstream of the project limits, confirming that the project does not cause any hydraulically significant changes in water surface elevations or flow velocities within or adjacent to sensitive habitat areas that could negatively affect inundation patterns, sediment transport, or erosion

processes. The project's grading and golf course layout were specifically designed and confirmed by the hydrology modeling to maintain river capacity and avoid adverse changes to the portion of Sycamore Canyon Creek and the San Diego River within the project site as well as the upstream or downstream reaches of Sycamore Canyon Creek and the San Diego River and their associated riparian vegetation communities. Additionally, potential re-establishment mitigation areas within project site (refer to Appendix K, Proposed On-Site Mitigation Overview, of Appendix E, Revised Biological Survey Report) were also evaluated in Appendix O for changes to base flood elevations and surface water elevations. Based on the hydraulic modeling summarized in Appendix O, the re-establishment areas would provide beneficial flood storage and would not measurably influence flood conveyance or water surface elevations, and flow paths would remain unchanged. Therefore, the project would be consistent with this guiding principle related to the San Diego River environment of the Land Use Element (City of Santee 2003) because the overall function and value of Sycamore Canyon Creek and the San Diego River will be maintained after project implementation.

- Guiding Principle #6: Development should protect natural drainage and ensure protection of water quality.

Water runoff from urban development has potential to permanently impact local water quality and the ecological systems associated with riparian and wetland vegetation communities. The development of the project is required by state laws to comply with current regulations promulgated by the RWQCB for water quality. Proprietary water quality systems have been included within the project design to collect runoff and stormwater to allow on-site treatment of water flows. Implementation of project design features are expected to prevent a permanent impact on local water quality. As required by **MM-BIO-9,** a SWPPP would include best management practices (BMPs) to reduce runoff into the river and reduce impacts to surface water quality. The proposed updates to the golf course have been designed to follow the contours of the existing natural topographical features of the San Diego River valley. Twelve of the new golf holes would maintain the original contours, and all 18 holes would maintain the characteristics of the existing contours, drainage, and floodway and, most importantly, protect natural drainage patterns. Additionally, these contours would respect the interior Sycamore Canyon Creek area that flows through the center of the golf course. Most of the proposed grading for the golf course has been designed around the San Diego River (North Channel). Only a few limited areas of the San Diego River (North Channel) would be permanently or temporarily affected by the construction of the golf course; however, the project proposes to not only restore and enhance these areas but also widen the natural drainage. Therefore, the project would be consistent with this guiding principle related to water quality of the Land Use Element (City of Santee 2003).

City of San Diego Wetlands

No significant or permanent impacts on City of San Diego ESL wetlands would occur. Within the project site, potential ESL wetlands are designated avoidance areas and will not be impacted or redeveloped by the proposed project (Figure 3.3-8). The project's temporary dewatering footprint overlaps 0.02 acres of sensitive riparian vegetation communities (i.e., coastal and valley freshwater marsh and southern cottonwood-willow riparian forest) associated with the impounded portion of the San Diego River (North Channel). Dewatering activities are proposed only during the project's construction phase, and the ponded area would be rehydrated after removal of the dewatering weirs. No vegetation or tree removal, fill, or grading would occur as part of the temporary dewatering activities. The pond is an intermittent feature, drying up when water is not coming from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing variation in hydrology. Therefore, the vegetation communities located within the impounded portion of the San Diego River (North Channel) would not be significantly impacted by dewatering activities. However, these areas would be passively restored as directed by **MM-BIO-4** and included in the project's HMMP as directed by **MM-BIO-5**. It should

be noted that based on project-specific discussions with the City of San Diego, dewatering activities would not require a wetland deviation from the City of San Diego ESL wetland regulations.

Impact Determination

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~~CDFW Jurisdictional~~ Impact BIO-3. Potential Impacts to Wetlands

Implementation of the proposed project would have a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means. Potentially significant impacts to wetlands would occur with project implementation prior to implementation of mitigation measures.

Mitigation Measures

~~The proposed project would have permanent direct impacts on up to 0.929 acres of CDFW-jurisdictional vegetated streambed and 0.148 acres of CDFW jurisdictional riparian habitat (Table 3.3-17; Figure 3.3-1, Vegetation Communities). The proposed project would have temporary direct impacts on up to 0.758 acres of CDFW-jurisdictional vegetated streambed, 2.355 acres of unvegetated streambed, and 0.095 acres of riparian habitat (Table 3.3-18). Impacts on the CDFW jurisdictional resources (e.g., marsh, riparian), as detailed in Table 3.3-17 and Table 3.3-18, would result in a significant impact on state-protected wetlands (**Impact BIO-4**).~~

~~Table 3.3-17. Permanent Impacts on California Department of Fish and Wildlife Jurisdictional Resources (Acres)~~

~~Aquatic Resource~~	~~Riparian~~	~~Unvegetated Stream~~	~~Vegetated Stream~~
~~**Clubhouse/Hotel**~~			
~~NWW1~~	~~—~~	~~—~~	~~0.206~~
~~**Residential**~~			
~~NWW1~~	~~0.012~~	~~—~~	~~0.008~~
~~NWW2~~	~~—~~	~~—~~	~~0.606~~
~~NWW3~~	~~—~~	~~—~~	~~0.006~~
~~**Golf Course Redesign**~~			
~~NWW1~~	~~—~~	~~—~~	~~0.018~~
~~NWW5~~	~~0.101~~	~~—~~	~~0.077~~
~~**Fuel Modification Zone**~~			
~~NWW5~~	~~0.035~~	~~—~~	~~0.008~~
~~**Total**~~	~~**0.148**~~	~~**—**~~	~~**0.929**~~

~~**Notes:** NWW = non wetland waters.~~
~~No impacts would occur on NWW4.~~

~~Table 3.3-18. Temporary Impacts on California Department of Fish and Wildlife Jurisdictional Resources (Acres)~~

~~Aquatic Resource~~	~~Riparian~~	~~Unvegetated Stream~~	~~Vegetated Stream~~
~~**Golf Course Redesign**~~			
~~NWW5~~	~~0.013~~	~~—~~	~~0.014~~
~~**Temporary Impacts Along San Diego River (North Channel) (Dewatering)**~~			
~~NWW1~~	~~0.068~~	~~2.355~~	~~0.722~~

Table 3.3-18. Temporary Impacts on California Department of Fish and Wildlife Jurisdictional Resources (Acres)

Aquatic Resource	Riparian	Unvegetated Stream	Vegetated Stream
Temporary Impacts Within Golf Course			
NWW5	0.014	—	0.036
Total	0.095	2.355	0.758

Note: NWW = non wetland waters.

City of San Diego Wetlands

No impacts would occur on City of San Diego ESL) Wetlands. Within the project site, potential City of San Diego ESL Wetlands are all demarcated avoidance areas and would not be affected or redeveloped (Figure 3.3-1, Vegetation Communities).

Impact Determination

Impact BIO-4. Wetland Impacts.

Impacts on wetlands (e.g., marsh, riparian), as detailed in Table 3.3-17 and Table 3.3-18, would represent a significant impact on state-protected wetlands.

Mitigation Measures

Mitigation Measures **MM-BIO-3** through **MM-BIO-11** and **MM-BIO-19** through **MM-BIO-20**, would reduce potential direct and indirect impacts on wetlands to less-than-significant. Other than **MM-BIO-11**, these measures are all included under Threshold 1. In order to comply with federal and state regulations, waterways and wetlands will be avoided to the maximum extent practicable. For ~~unavoidable~~necessary impacts on waterways or wetlands, the following permit and agreements may be required:

- **CWA Section 401/404** permit issued by the California RWQCB and the USACE for all project-related disturbances of waters of the United States and/or associated wetlands.
- **Section 1602 Streambed Alteration Agreement** issued by the CDFW for all project-related disturbances of any streambed or CDFW-jurisdictional riparian habitat.

Prior to the issuance of grading permits, impacts on state wetlands areas will be mitigated by **MM-BIO-3 through MM-BIO-11** to below a level of significance. Ultimately, the jurisdictional waters/wetland mitigation will proceed in accordance with the permit and certification requirements of described in **MM-BIO-11**, which would ensure that any additional requirements from the resource agencies are met and would ensure that there would not be a significant adverse effect on state or federal wetlands.

MM-BIO-11. Wetland Permits.

Impacts on jurisdictional wetland and waterway resources and occupied least Bell's vireo critical habitat would require permits and authorizations by the USACE, RWQCB, and CDFW prior to impacts. Prior to the approval of the grading plans, the applicant will provide the City of Santee with permits and authorizations from each resource

~~agency, for project impacts related to aquatic resources and impacts on occupied least Bell's vireo riparian habitat, or provide evidence that no such permits are required. Impacts on sensitive wetland communities will be mitigated, at a minimum, as described in **MM-BIO-3** and **MM-BIO-4**. These resource agencies could require mitigation ratios higher than those described in **MM-BIO-3** and **MM-BIO-4**, but ratios will not be less than those described in **MM-BIO-3**.~~

Proposed Mitigation Measures

The following mitigation measure is necessary to reduce impacts to Impact BIO-3:

MM-BIO-11 Wetland Permits. Prior to the issuance of any grading permit or ground disturbance activity impacting aquatic resources, the applicant shall: (1) obtain a permit or authorization from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and/or California Department of Fish and Wildlife jurisdiction as applicable pursuant to the regulatory agencies' requirements and regulations, together with any permit/agreement conditions and mitigation measures imposed through the consultation process; (2) provide evidence to the City of Santee of the permit or authorization, or confirmation that no such permits or authorizations are required; and 3) mitigate for permanent impacts to aquatic resources and restoration of temporary impact areas within aquatic resources for each sensitive wetland vegetation type in accordance with measures MM-BIO-3 and MM-BIO-4, in addition to the permit requirements of the applicable resource agencies (i.e., USACE, CDFW, and RWQCB) imposed during the permitting process. Temporary impacts shall occur in-place and shall be restored to pre-project conditions. The monitoring and restoration requirements shall be identified in a Habitat Mitigation and Monitoring Plan (refer to MM-BIO-5) that complies with the mitigation strategy outlined in Appendix K, Proposed On-Site Mitigation Overview, of Appendix E, Revised Biological Survey Report and Resource Management Plan as directed by MM-BIO-6.

Level of Significance After Mitigation

~~Level of Significance After Mitigation~~

~~Direct permanent~~With implementation of **MM-BIO-3** through **MM-BIO-11** and ~~temporary~~**MM-BIO-19** through **MM-BIO-20**, potential direct and indirect impacts on ~~wetland vegetation communities (**Impact BIO-4**)~~wetlands would be ~~reduced to a~~ less-than-significant ~~level through implementation of **MM-BIO-3 through MM-BIO-11**, which would require mitigation and permits from the agencies that have jurisdiction over them (i.e., USACE, RWQCB, and CDFW).~~.

Threshold 4: Would implementation of the proposed project result in substantial interference with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Threshold 4 (City of San Diego): Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites?

~~Impact Thresholds~~

~~In accordance with the City of San Diego's Significance Determination Thresholds, the project would have a significant impact if it would:~~

- ~~Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites.~~

Impact Discussion

Direct Impacts

Wildlife Corridor

Wildlife corridors are intended to allow for genetic flow of microfauna and macrofauna at a landscape level. Currently, the project site functions as both live-in and foraging habitat for a wide variety of large and small wildlife and partial territory for larger mammals (i.e., mule deer). As discussed in Section 3.3.2.~~4~~6, Habitat Connectivity, Wildlife Corridors, and Wildlife ~~Corridors~~Nursery Sites, the BSA is situated directly adjacent to and parallel with a curve of the San Diego River and is part of the habitat connectivity that exists in this area. The San Diego River through the City of Santee is not identified in the MSCP Plan as a Habitat Linkage or in the California Essential Habitat Connectivity Project as an Essential Connectivity Area. The San Diego River (South Channel) is primarily within the City of San Diego MHPA, a Biological Core Area under the MSCP Plan (City of San Diego 1998), and is considered the primary wildlife corridor for this analysis, while the golf course and the San Diego River (North Channel) are considered a secondary movement corridor (Figure 3.3-~~9~~10, Wildlife Corridor Analysis).

Figure 3.3-~~9~~10 presents a depiction of the existing primary and secondary wildlife movement corridor widths through the San Diego River and Carlton Oaks Golf Course, and the widths of the secondary wildlife movement corridors that would result from the proposed project. The project would have no direct development of the primary wildlife movement corridor (the San Diego River [South Channel] riparian corridor). Figure 3.3-~~9~~10 depicts the proposed development boundaries of the clubhouse and hotel area, Residential North, and Residential West, as well as the approximate widths of the riparian corridor, the width of the golf course, and widths of associated development. Residential North is situated within the limits of the current clubhouse and driving range. The back of the existing driving range faces Sycamore Canyon Creek and the San Diego River (North Channel), with a 6-foot-tall chain-link fence against a ball fence, a net that varies from 15 to 30 feet tall. The existing fence is depicted on Figure 3.3-~~9~~10. Because of the height of the fences, it is considered an existing barrier to wildlife movement; therefore, representative corridor width "F" terminates at the fence.

At the proposed Residential West area, the existing conditions include the San Diego River to the south, existing residential development with backyard fences to the northeast, and West Hills Parkway to the west. West Hills Parkway includes a steep slope from the golf course to a highly trafficked four-lane, with chain link fences at portions of the top and bottom. While wildlife may utilize this area for nighttime movement, any existing east–west movement is expected to occur along the adjacent San Diego River riparian corridor. The proposed Residential West area would be tucked into this pocket between existing residential and West Hills Parkway embankment.

The primary wildlife corridor from Mission Trails toward the City of Santee constricts to approximately 459 feet as it passes under West Hills Parkway (Figure 3.3 ~~9, Wildlife Corridor Analysis;~~ 10, Cross-Section A). Cross-Section B is immediately downstream of the confluence of ~~the~~ San Diego River (South Channel) and San Diego River (North Channel~~),~~) and the width of the riparian corridor expands to ~~671~~670 feet. Under the proposed development, ~~although~~while the "secondary" wildlife movement corridor would reduce to zero at this location ~~(Cross Section B),~~ the primary wildlife movement corridor ~~would expand~~expands to the widest extent since Mast Park to the east (Cross-Section I). Cross-Section C shows the width of the primary wildlife corridor as 258 feet as it passes under the tall SR-52 bridges, ~~as well as the~~ a proposed width of the secondary corridor ~~as~~of 349 feet ~~(~~, including the San Diego River ~~[~~(North Channel~~])~~ ~~once the proposed~~) and development ~~is constructed, and~~ of approximately 345 feet ~~of~~ . The proposed west residential area is tucked into a pocket of the existing golf course, bounded to the west by West Hills Parkway (with existing, associated chain-link fencing over much of that length) and suburban residential development to the north, both of which restrict wildlife movement to the west or north.

Cross-Sections D and E show representative widths in the existing and proposed golf course area. Although the depicted widths of the secondary corridor stop at the "Permanent: Impact Residential" line, the development in this area is a maintenance-vehicles-only road, which would not constrain wildlife movement.

From the eastern side of the site, the river corridor and associated riparian areas are nearly 1,000 feet wide within Mast Park (Cross-Section I). Moving west from there, the main channel of the San Diego River turns south and the primary corridor constricts to 142 feet at Cross-Section G before widening to 434 feet downstream of the confluence with Forester Creek (Cross-Section F). Dirt trails in Mast Park feed into the trail along the northern edge of the primary wildlife corridor (following the berm), allowing for focused wildlife movement along this trail adjacent to the shelter of the riparian corridor. The secondary wildlife corridor would remain 415 feet wide at Cross-Section G, providing a wide buffer from the clubhouse and hotel to the trail and primary wildlife movement corridor. To the north of the clubhouse and hotel (Cross-Section H), a very narrow distributary of the San Diego River passes through an existing culvert, eventually meeting up with Sycamore Canyon Creek. The area north of the clubhouse and hotel would remain as golf course (putting green and a private emergency access road), allowing secondary movement of wildlife from Mast Park to the internal avoided riparian area and the narrow Sycamore Canyon Creek channel to the north. Downstream from the proposed clubhouse and hotel, the secondary movement corridor would remain more than 1,000 feet wide, with the golf course serving as a buffer area between the primary movement corridor and the proposed development.

Sycamore Canyon Creek to the north of the project, is constrained at generally less-than 200 feet wide (Cross-Section J), with residential areas to the west and a chain-link fence to the east separating the creek from Santee Lakes and is constrained for approximately 1.5 miles. Because of the distance of constraint, Sycamore Canyon Creek from Santee Lakes to Carlton Oaks provides potential for limited, constrained local wildlife movement, but is not considered a wildlife corridor. The MSCP Plan and the California Essential Habitat Connectivity Project determined that the main wildlife linkage from northern Santee is through the large upland open spaces of East Elliott into Mission Trails. The proposed project would allow for local wildlife movement out of Sycamore Canyon

Creek to the east through the golf course (Cross-Section H) and to the southeast along the San Diego River (South Channel) and into the golf course (Cross-Section K). With the proposed project, a road would be constructed in the golf course between Residential North and the clubhouse, with ~~a bridge~~the Proposed Resort Bridge over the San Diego River (North channel). The area under the ~~bridge~~Proposed Resort Bridge would vary between 5 and 12 feet, with 90% of the length being 8 feet or greater in height. Assuming a bridge deck length of 265 feet, deck width of 36 feet (30 feet of travel lanes and a 6-foot wide enhanced sidewalk), and a conservative average clearance of 8 feet, this would result in an openness ratio of 300:1, which would be tall and open enough to accommodate ~~wildlife crossings within the riparian zone and would also accommodate~~even the largest expected or potential species (i.e., mule deer, mountain lion, coyote), and certainly any smaller species (e.g., bobcat, gray fox). The structure will become inundated during 100-year flood flows, but it will still provide ample opportunity for wildlife movement.

Indirect Impacts

Wildlife Nursery Sites (Temporary Indirect Impacts)

A wildlife nursery site was identified within the golf course. ~~Trees~~The eucalyptus tree located adjacent to the pond on the San Diego River (North Channel) ~~serve~~serves as a rookery (i.e., breeding colony) for the native seabird double-crested cormorant. This site is one of the only known double-crested cormorant rookeries in San Diego County (Unitt 2004). Double-crested cormorant return to this site annually to raise their young; therefore, this site is considered a native wildlife nursery site. ~~These~~This pond-side ~~trees~~tree would not be removed during golf course redesign grading (Figure 3.3-9). Therefore, no direct permanent impacts to the rookery are anticipated. However, construction noise and activity associated with the regrading and redesign of the golf course and construction of the golf resort, if they were to occur during the breeding season, have the potential to disrupt the breeding activities of double-crested cormorants. Disruption or loss of breeding at this rookery would result in a ~~significant impact on a wildlife nursery site (**Impact BIO-11**).~~potentially significant impact prior to implementation of mitigation measures on the wildlife nursery site. Therefore, the project would implement **MM-BIO-12,** which would minimize indirect construction noise impacts on the double-crested cormorant rookery and **MM-BIO-7** and **MM-BIO-8,** which would ensure avoidance of direct impacts on or around the cormorant rookery trees.

Dewatering Activities on Wildlife Nursery Sites (Temporary Indirect Impacts)

No short-term indirect impacts are anticipated from the temporary dewatering activities associated with the project to wildlife nursery sites (i.e., double-crested cormorant rookery). The on-site ponds may support non-native fish of varying species and age classes, and additional fish occur nearby in other waters such as the Santee Lakes located approximately 2,000 feet northeast of the rookery. The distance between Santee Lakes and the rookery is well within the normal foraging range for cormorants (USFWS 2020). Santee Lakes as well as the Pacific Ocean will remain available during the entire nesting period; therefore, no short-term indirect impacts from dewatering activities are anticipated to this species.

Wildlife Movement and Nursery Sites (Permanent Indirect Impacts)

To prevent exclusion of the wildlife usage of the secondary movement corridor (golf course area), the project would include a wildlife-friendly fence design so that it is wildlife-permeable friendly while still performing hiker protection goals. This fencing design is outlined in measure **MM-BIO-21**, which would allow wildlife through the fence and through the secondary wildlife corridor, including deer with antlers that could crawl under the fence.

Long-term indirect impacts to the double-crested cormorant rookery from the redesign of the golf course and the addition of the hotel, clubhouse, and residential area are not anticipated. This species is known to be tolerant of proximate human activities, particularly in urban areas (Iguchi et al. 2015) and can occur in human-modified environments (USFWS 2020). Currently the rookery is located in the heart of the golf course near the central hub of activity, approximately 500 feet from the clubhouse and 650 feet from residences along Inverness Road. The tree and rookery are situated over a cart path and on the fairway. A large, roughly 1-foot by 2-foot upward-facing high-powered accent light sits at the base of the neighboring tree and currently illuminates this tree at night. It appears that the cormorants are accustomed to constant daytime human activity and nighttime illumination. After implementation of the project, the rookery would be approximately 450 feet from residences and equidistance between the new clubhouse and residences along Inverness Drive. Due to project-proposed protections from light and resident trespass, as well as maintenance of the existing food source, in addition to current tolerance of humans, activity, and light, long-term indirect impacts from the proposed project to the rookery are not anticipated.

Impact Determination

Impact ~~Determination~~

BIO-4. Potential Impacts to Wildlife ~~Corridor~~Movement and Nursery Sites

The proposed project has been positioned ~~with residential areas clustered near existing residential areas and positioned away from the~~ to avoid impacts to the primary wildlife ~~movement corridor. The clubhouse and hotel would be situated in the secondary movement corridor with a setback from the primary movement~~ corridor~~.~~ The and direct permanent impacts to the rookery (i.e. wildlife nursery) are not anticipated. Therefore, implementation of the proposed project would not have a ~~significant impact on~~ substantial interference with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Potentially significant direct and indirect impacts to secondary wildlife movement corridors and nursery sites could occur with project implementation prior to implementation of mitigation measures.

Mitigation Measures

Proposed Mitigation Measures

The following mitigation measures are necessary to reduce impacts to Impact BIO-4:

Mitigation Measures **MM-BIO-7, MM-BIO-8, MM-BIO-12** and **MM-BIO-21**, would reduce potential direct and indirect impacts on wildlife movement ~~corridors through the San Diego River Valley.~~and nurseries to less-than-significant. These measures are all included under Threshold 1.

Level of Significance After Mitigation

With implementation of **MM-BIO-7, MM-BIO-8, MM-BIO-12** and **MM-BIO-21**, potential direct and indirect impacts on wildlife movement and nurseries would be less-than-significant.

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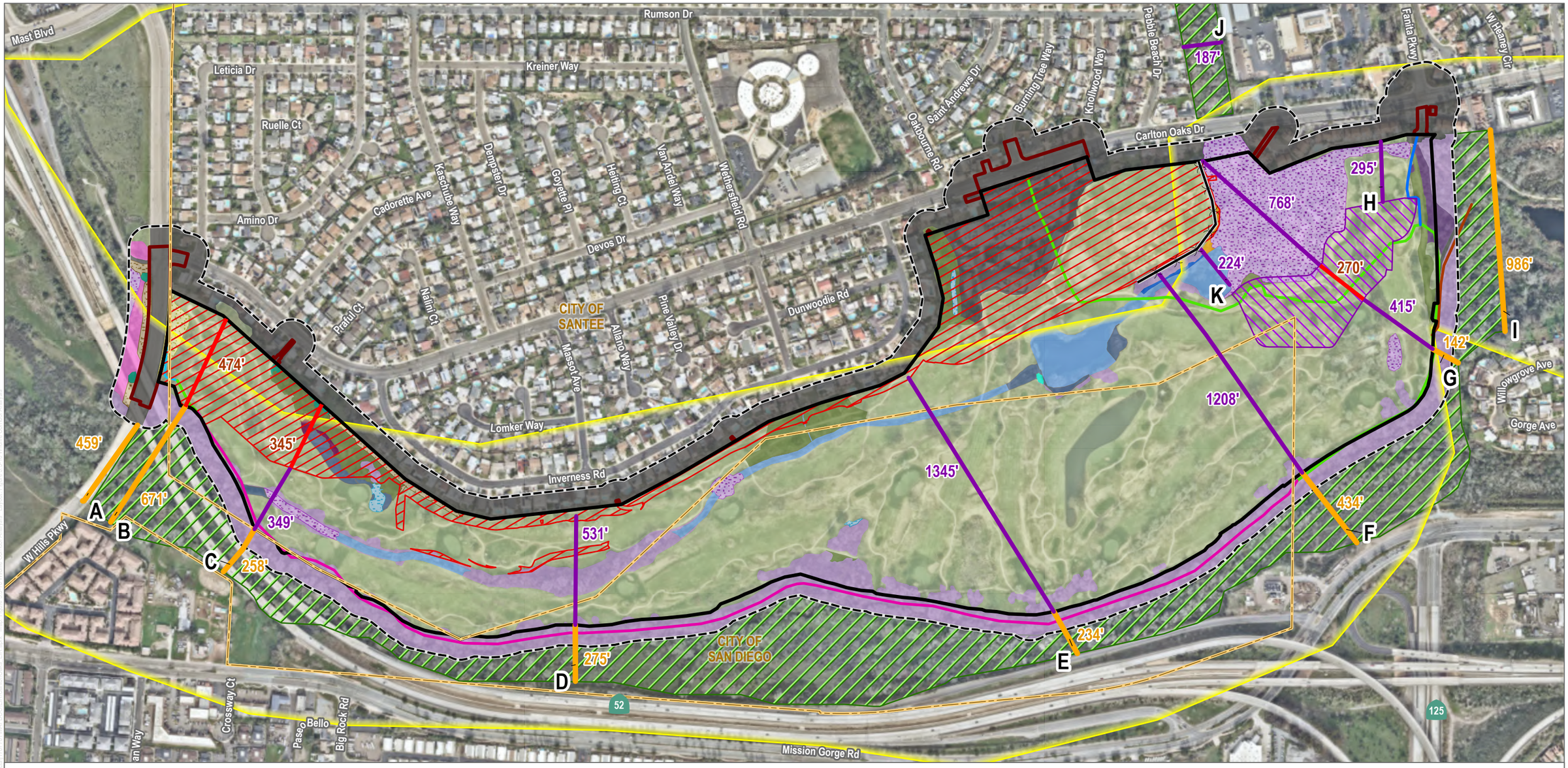

- Project Boundary
- Off-Site Work Area
- Biological Study Area
- City Boundary
- MSCP Biological Core
- Project Trail Segment (San Diego)
- Project Trail Segment (Santee)
- Future San Diego River Trail Carlton Oaks Segment
- Supplemental Trail Offer of Deduction (Santee)
- Existing Santee Trail
- Permanent Impact: Clubhouse/Hotel/Other
- Permanent Impact: Residential

Wildlife Corridor

- Primary Movement Corridor
- Secondary Movement Corridor
- Proposed Project Development in Secondary Corridor
- Existing Fence at Driving Range

Vegetation Communities and Land Cover Types

Riparian

- Mule Fat Scrub (Disturbed)
- Southern Cottonwood-Willow Riparian Forest
- Southern Cottonwood-Willow Riparian Forest (Disturbed)
- Southern Riparian Scrub
- Southern Willow Scrub
- Non-Native Riparian

Wetlands

- Coastal and Valley Freshwater Marsh
- Disturbed Wetland
- Fresh Water

Upland

- Diegan Coastal Sage Scrub (Disturbed)
- Non-Native Grassland
- Non-Native Woodland

Land Cover Types

- Developed
- Developed-Golf Course
- Developed Culvert
- Disturbed Habitat
- Eucalyptus Woodland
- Spillway
- Unmapped Riparian Corridor

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 237.5 475 Feet

FIGURE 3.3-10

Wildlife Corridor Analysis

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Wildlife Nursery Sites

The project would avoid direct impacts on the trees that are serving as a rookery for double crested cormorants. These pond side trees would not be removed during golf course redesign grading.

Impact BIO-11. Cormorant Rookery.

Construction noise and activity associated with the regrading and redesign of the golf course and construction of the golf resort, if they were to occur during the breeding season, have the potential to disrupt the breeding activities of double-crested cormorants. Disruption or loss of breeding at this rookery would have a significant impact on a wildlife nursery site.

Mitigation Measures

Potentially significant indirect impacts on habitat occupied by double-crested cormorants (**Impact BIO-11**) would be minimized through implementation of **MM BIO-12**, as described above. Implementation of this measure would result in a less-than-significant impact with mitigation incorporated under CEQA.

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~~Level of Significance After Mitigation~~

~~Indirect impacts on double crested cormorants through the disruption or loss of breeding at the rookery (**Impact BIO-11**) would be reduced to less than significant levels through implementation of **MM-BIO-12**, which would minimize indirect construction noise impacts, and **MM-BIO-7** and **MM-BIO-8,** which would ensure avoidance of direct impacts on or around the cormorant rookery trees.~~

Threshold 5: Would implementation of the proposed project conflict with any applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance or with the provisions of an applicable adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

Threshold 5 (City of San Diego): Would the project result in a conflict with provisions of adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan, either within the MSCP plan area or in the surrounding region?

~~Threshold 6 (City of San Diego): Would the project introduce a land use within an area adjacent to the MHPA that would result in adverse edge effects?~~

Threshold 7 (City of San Diego): A conflict with any local policies or ordinances protecting biological resources?

~~Impact Thresholds~~

~~In accordance with the City of San Diego's Significance Determination Thresholds, the project would have a significant impact if it would:~~

- ~~Result in a conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region;~~
- ~~Introduce land use within an area adjacent to the MHPA that would result in adverse edge effects.~~
- ~~Result in a conflict with any local policies or ordinances protecting biological resources.~~

Impact Discussion

~~City of Santee~~

~~As discussed in Section 3.3.3.3, Local, the City of Santee's *General Plan* requires that all development proposals affecting biological resources be consistent with the provisions of the City of Santee's future MSCP Subarea Plan and Implementing Agreement, as well as applicable federal and state regulations. Although the Draft Santee MSCP Subarea Plan has not yet been approved, it is used as a guidance document for development within the City of Santee. As discussed previously, the proposed project has been identified as NAP of the Draft Santee MSCP Subarea Plan; however, the proposed project is adjacent to City of Santee owned preserve lands (i.e., Mast Park West) and must comply with the Draft Santee MSCP Subarea Plan's Land Use Adjacency Guidelines to reduce potential impacts from development on adjacent preserves.~~

City of San Diego

For the City of San Diego, the applicable local land use plans, policies, ordinances, or regulations adopted for the purpose of protecting biological resources are the regional San Diego MSCP, the ESL regulations, the City of San

Diego MSCP Subarea Plan, and the City of San Diego MHPA Adjacency Guidelines. The animal species covered under the City of San Diego MSCP Subarea Plan that were observed within the BSA include least Bell's vireo, Cooper's hawk, mule deer, and western bluebird. Belding's orange-throated whiptail is also MSCP-covered and was determined to have a high potential to occur. Therefore, this species has been treated as if it were observed. No other MSCP-covered species were observed or determined to have a high potential to occur.

Least Bell's vireo is the only one of these MSCP species that has specific conditions of coverage under the City of San Diego MSCP Subarea Plan (City of San Diego 1997). The conditions of coverage in the City of San Diego MSCP Subarea Plan are as follows:

> Jurisdictions will require surveys (using appropriate protocols) during the CEQA review process in suitable habitat proposed to be affected and incorporate mitigation measures consistent with the 404(b)1 guidelines into the project. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. Jurisdictions must require new developments adjacent to preserve areas that create conditions attractive to brown-headed cowbirds to monitor and control cowbirds. Area specific management directives must include measures to provide appropriate successional habitat, upland buffers for all known populations, cowbird control, and specific measures to protect against detrimental edge effects to this species. Any clearing of occupied habitat must occur between September 15 and March 15 (i.e., outside of the nesting period).

Cowbirds prefer habitats with scattered trees among grassland vegetation–woodland edges, including prairies, fields, pastures, and orchards, and is often associated with cows and agriculture (Unitt 2004; Lowther 2020). Cowbirds are widespread in San Diego County (Unitt 2004) and were observed during least Bell's vireo surveys in 2019 and 2022 (Appendix E). Consistent with the conditions of coverage in the City of San Diego MSCP Subarea Plan, surveys were conducted using appropriate protocols, and mitigation measures were designed consistently with the CWA 404(b)1 guidelines to reduce impacts on protected species. The proposed project would not create new development adjacent to preserve areas that are more attractive to brown-headed cowbirds than the existing golf course conditions. No other specific local policies or ordinances are applicable to the proposed project.

In addition to the City of San Diego MSCP, the City of San Diego MHPA delineates core biological resource areas and corridors targeted for conservation. Within the MHPA, limited development may occur. The MHPA represents a "hard line" preserve, in which boundaries have been specifically determined. As discussed previously, the City of San Diego MHPA is present along and within the southern boundary of the BSA, and portions of the existing golf course are designated as MHPA.

The golf course was established in 1958, and the 1959 Lease was entered into by the City of San Diego and the then-current golf course operator for the operation and maintenance of the golf course. The golf course has been in existence since that time under the 1959 Lease, until it was superseded by the 2012 Lease. The golf course was renovated in 1989, long before the original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. Moreover, the City of San Diego subsequently entered into the 2012 Lease that allowed for the site's continued use as a golf course after the MSCP was established by the City. The project has been reviewed in accordance with the MSCP, specifically Sections 1.4.1, 1.4.2, 1.4.3, 1.5.2 and 1.5.6 (~~see Appendix E, Section 4.5~~refer to analysis included below).

The proposed development would not change any of the current uses that have been under continued existence since 1959 within the portions of the site that overlap with the MHPA boundary. The golf course would continue to exist in its current state as allowed pursuant to the 2012 Lease. Moreover, the project would not impact the 0.33 acres of MHPA riparian habitat. Because the proposed project would not result in any impacts to the MHPA, and all uses within the MHPA will remain the same, the project is considered a compatible land use per Section 1.4.1 of the MSCP and the golf course land use is what was envisioned by the City of San Diego prior to the adoption of the MHPA. Because the uses are allowed by the 2012 Lease and the golf course has been in existence since before the adoption of the MSCP, the proposed project is consistent with the MSCP and would be considered a compatible land use per Section 1.4.1 of the MSCP. Section 1.4.2 of the MSCP, General Planning Policies and Design Guidelines, includes general planning policies and design guidelines related to roads and utilities; fencing; lighting and signage; materials storage; and mining, extraction, and processing facilities that should be applied in the review and approval of development projects within or adjacent to the MHPA. Because the proposed project would not create any new roads within or adjacent to the MHPA, the design guidelines listed in Section 1.4.2 of the MSCP do not apply. Fencing, lighting and signage, and materials storage are addressed as a part of Section 1.4.3 of the MSCP. The project does not include any mining and therefore the guidelines related to mining, extraction, and processing facilities do not apply. Section 1.5.2 includes general management directives for all areas covered by the MSCP, while Section 1.5.6 includes specific guidelines for the Eastern Area of the MSCP. The project has been designed to comply with the general management directives outlined in Section 1.5.2. The guidelines for the Eastern Area of the MSCP apply specifically to East Elliott and Mission Trails Regional Park. The project would not affect these areas.

~~Impact Determination~~

~~Implementation of the proposed project would not conflict with the provisions of an adopted HCP, NCCP, or other approved state, regional, or local HCP, either within the MSCP, VPHCP, or in the surrounding region. In addition, the proposed project would be consistent with the City of Santee Preserve Land Use Adjacency Guidelines and the City of San Diego Land Use Adjacency Guidelines, and would not introduce a land use within an area adjacent to the MHPA that would result in adverse edge effects. Therefore, impacts would be less than significant.~~

MSCP San Diego Subarea Plan Consistency

The City of San Diego Land Development Biology Guidelines (City of San Diego 2018) outlines the methods for analyzing impacts to biological resources, one of which is ensuring that a project is consistent with the MSCP (Appendix II, Guidelines for Conducting Biology Surveys in City of San Diego 2018). The following criteria are established in Section VI.G of the Guidelines for Conducting Biology Surveys and describe how a project should be analyzed against the MSCP to determine if the project will provide for the long-term viability of wildlife and sensitive habitats.

Appendix II, Guidelines for Conducting Biology Surveys in City of San Diego, Section VI.G:

G. Discuss the following consistency issues with the MSCP (Discuss how the project will provide for the long-term viability of wildlife and sensitive habitats):

1. Whether or not the project lies within or adjacent to the MHPA (see interactive mapping feature on the following web site: www.sangis.org; Page 12, MSCP).

- *Project Analysis:* MHPA occurs within the proposed project site. The original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. MHPA was designated over the existing golf course along the southern edge of the project site. Within the project site, permanent impacts to the MHPA total 6.96 acres of developed-golf course. The golf course was established in 1958 and renovated in 1989, long before the original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. The proposed development will not change any of the current uses within the portions of the site that overlap with the MHPA boundary. The golf course will continue to exist in its current state and the project will not impact the 1.80 acres of MHPA riparian habitat. Therefore, the proposed project is consistent with the MSCP and would be considered a compatible land use (passive recreation) per Section 1.4.1 of the MSCP.

1. Describe any relevant MHPA Guidelines (map notes).

- *Project Analysis:* No relevant MHPA Guidelines in the map notes.

2. Assess compliance with the planning policies and guidelines (is the project an allowed use within the MHPA ?).

- *Project Analysis:* Any redevelopment of golf course within the MHPA would occur within existing developed areas; no sensitive habitat would be impacted within the MHPA by the project.

3. Address, if applicable, the land use adjacency guidelines (as shown on Page 48, the MSCP Subarea Plan).

- *Project Analysis:* Land Use Adjacency Guidelines are addressed in **MM-BIO-20**.

4. Identify any appropriate management issues per Section 1.5, MSCP Subarea Plan.

- *Project Analysis:* Section 1.5.6 of MSCP San Diego Subarea Plan details specific management directives for the Eastern Area. The project site is within the Eastern Area (Mission Trails and East Elliott). No specific management directives are applicable to the project site.

5. Assess whether any special conditions of coverage apply to the species affected by the project (per Covered Species list, Appendix A, MSCP Subarea Plan).

- *Project Analysis:* Special conditions of coverage for MSCP-covered least Bell's vireo are addressed in the section above.

6. Discuss any boundary adjustments to the MHPA. If proposed, evaluate for functional equivalency per Sections 1.1.1 and 5.4.2 of the MSCP Subarea Plan.

- *Project Analysis:* The project is located within the least sensitive portion of the site. The project would not impact any sensitive habitat within the MHPA. The only impacts to sensitive habitat within the City of San Diego are 0.19 acre of impacts to roadside Diegan coastal sage scrub (disturbed) associated with the entrance to the Residential West area.

7. Discuss whether or not the project is located on the least sensitive portion of the site (see Page 5, Biology Guidelines).

- *Project Analysis:* Any redevelopment of golf course within the MHPA would occur within existing developed areas; no sensitive habitat would be impacted within the MHPA by the project and the project is located on the least sensitive portion of the site.

MSCP Subarea Plan Section 1.4.1 Compatible Land Uses

The following land uses are considered conditionally compatible with the biological objectives of the MSCP and thus will be allowed within the City's MHPA:

- Passive recreation
- Utility lines and roads in compliance with policies 1.4.2 below
- Limited water facilities and other essential public facilities
- Limited low density residential uses
- Brush Management (Zone 2)
- Limited agriculture

Under the proposed revised environmental land use regulations, development on private property in the MHPA will not exceed 25 percent of the parcel, with 75 percent remaining as open space. When combined with the 100 percent preservation in negotiated areas on private lands, the approximately 94 percent preservation on publicly owned lands in the MHPA, and strategic acquisitions, the overall 90 percent preservation goal within the City's MHPA can be met.

Some disturbed lands within the MHPA may be targeted for enhancement and restoration in order to more fully contribute to the functioning of the MHPA. Existing development within the MHPA such as single-family residences on A-1-10 lots are considered conditionally compatible. Expansion of existing permitted uses within the MHPA would need to be in compliance with applicable land use regulations and should provide measures to minimize impacts on the MHPA including lighting, noise, or uncontrolled access. Expansion of uses should be generally restricted to the existing approved development areas. Other existing uses within the MHPA which are not listed above may be managed for compatibility or phased out in the long term.

Project Analysis: The golf course was established in 1958, and the 1959 Lease was entered into by the City of San Diego and the then current golf course operator for the operation and maintenance of the golf course. The golf course has been in existence since that time under the 1959 Lease until it was superseded by the 2012 Lease. The golf course was renovated in 1989, long before the original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. Moreover, the City of San Diego subsequently entered into the 2012 Lease that allowed for the continued use as a golf course after the MSCP was established by the City. The project has been reviewed in accordance with the MSCP, specifically sections 1.4.1, 1.4.2, 1.4.3, 1.5.2 and 1.5.6 of the MSCP.

The proposed development within the portions of the site that overlap with the MHPA boundary will not change any of the current uses that have been under continued existence since 1959 . The golf course will continue to exist in its current state as allowed pursuant to the 2012 Lease. Moreover, the project will not impact the 1.80 acres of MHPA riparian habitat. Since the proposed project will not result in any impacts to the MHPA, and all uses within the MHPA will remain the same, the project is considered a compatible land use per Section 1.4.1 of the MSCP and the golf course land use is what was envisioned by the city prior to the adoption of the MHPA.

Since the portions of the site that overlap with the MHPA boundary will not result in any impacts to the MHPA, and all uses within the adjacent to the MHPA will remain the same, the golf course is considered a compatible land use

per Section 1.4.1 of the MSCP. The existing and redesigned golf course does not require any brush management zones within or adjacent to the MHPA.

MSCP Subarea Plan Section 1.4.2 General Planning Policies and Design Guidelines

The following general planning policies and design guidelines should be applied in the review and approval of development projects within or adjacent to the MHPA. More specific policies and guidelines which are unique to individual MHPA areas, and management policies and directives are address in this Threshold.

Roads and Utilities – Construction and Maintenance Policies:

1. All proposed utility lines (e.g., sewer, water, etc.) should be designed to avoid or minimize intrusion into the MHPA. These facilities should be routed through developed or developing areas rather than the MHPA, where possible. If no other routing is feasible, then the lines should follow previously existing roads, easements, rights-of-way and disturbed areas, minimizing habitat fragmentation.
   - *Project Analysis*: Since the proposed project will not place utility lines within or adjacent to the MHPA, these design guidelines do not apply.
2. All new development for utilities and facilities within or crossing the MHPA shall be planned, designed, located and constructed to minimize environmental impacts. All such activities must avoid disturbing the habitat of MSCP covered species, and wetlands. If avoidance is infeasible, mitigation will be required.
   - *Project Analysis*: The proposed project will not place any utilities or associated facilities within the MHPA.
3. Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat unless determined to be unavoidable. All such activities must occur on existing agricultural lands or in other disturbed areas rather than in habitat. If temporary habitat disturbance is unavoidable, then restoration of, and/or mitigation for, the disturbed area after project completion will be required.
   - *Project Analysis*: The proposed project will not result in the permanent loss or temporary loss of habitat within the MHPA.
4. Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage. Environmental documents and mitigation monitoring and reporting programs covering such development must clearly specify how this will be achieved, and construction plans must contain all the pertinent information and be readily available to crews in the field. Training of construction crews and field workers must be conducted to ensure that all conditions are met. A responsible party must be specified.
   - *Project Analysis*: As discussed, the project would have no direct development of the primary wildlife movement corridor (The San Diego River [South Channel] riparian corridor). The existing Carlton Oaks Golf Course is functionally a savanna, with expansive 'lawns' of golf course features, with scattered ornamental trees throughout. The golf course provides for active recreation during the day, but is essentially unoccupied by humans at night, allowing for easy, additional wildlife movement through this savanna-like community. Post construction, the portions of the golf course within the MHPA will continue to function as this "savanna" habitat.
5. Roads in the MHPA will be limited to those identified in Community Plan Circulation Elements, collector streets essential for area circulation, and necessary maintenance/emergency access roads. Local streets should not cross the MHPA except where needed to access isolated development areas.

- *Project Analysis*: The proposed project does not include roads within or adjacent to the MHPA and therefore these design guidelines do not apply.

6. Development of roads in canyon bottoms should be avoided whenever feasible. If an alternative location outside the MHPA is not feasible, then the road must be designed to cross the shortest length possible of the MHPA in order to minimize impacts and fragmentation of sensitive species and habitat. If roads cross the MHPA, they should provide for fully-functional wildlife movement capability. Bridges are the preferred method of providing for movement, although culverts in selected locations may be acceptable. Fencing, grading and plant cover should be provided where needed to protect and shield animals, and guide them away from roads to appropriate crossings.
   - *Project Analysis*: The proposed project does not include roads within or adjacent to the MHPA and therefore these design guidelines do not apply.
7. Where possible, roads within the MHPA should be narrowed from existing design standards to minimize habitat fragmentation and disruption of wildlife movement and breeding areas. Roads must be located in lower quality habitat or disturbed areas to the extent possible.
   - *Project Analysis*: The proposed project does not include roads within or adjacent to the MHPA and therefore these design guidelines do not apply.
8. For the most part, existing roads and utility lines are considered a compatible use within the MHPA and therefore will be maintained. Exceptions may occur where underutilized or duplicative road systems are determined not to be necessary as identified in the Framework Management Section 1.5.
   - *Project Analysis*: The proposed project does not include roads within or adjacent to the MHPA and therefore these design guidelines do not apply.

Fencing, Lighting, and Signage:

1. Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent to land uses incompatible with the MHPA. For example, use chain link or cattle wire to direct wildlife to appropriate corridor crossings, natural rocks/boulders or split rail fencing to direct public access to appropriate locations, and chain link to provide added protection of certain sensitive species or habitats (e.g., vernal pools).
   - *Project Analysis*: Fencing, lighting and signage and materials storage are addressed as a part of section 1.4.3 of the MSCP.
2. Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife. Lighting in areas of wildlife crossings should be of low-sodium or similar lighting. Signage will be limited to access and litter control and educational purposes.
   - *Project Analysis*: Fencing, lighting and signage and materials storage are addressed as a part of section 1.4.3 of the MSCP.

Materials Storage

1. Prohibit storage of materials (e.g., hazardous or toxic, chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, especially due to potential leakage.
   - *Project Analysis*: Fencing, lighting and signage and materials storage are addressed as a part of section 1.4.3 of the MSCP.

Mining, Extraction and Processing Facilities

- *Project Analysis*: The project does not include any mining and therefore the guidelines related to mining, extraction, and processing facilities do not apply.

Flood Control

1. Flood control should generally be limited to existing agreements with resource agencies unless demonstrated to be needed based on a cost benefit analysis and pursuant to a restoration plan. Floodplains within the MHPA, and upstream from the MHPA if feasible, should remain in a natural condition and configuration in order to allow for the ecological, geological, hydrological, and other natural processes to remain or be restored.
   - *Project Analysis*: A Flood Study (Draft CLOMR) has been completed for the proposed project. The analysis demonstrates that the remapping of the floodplain and floodway preserves or rebalances flood conveyance and volume, with no adverse impact on base flood elevations upstream or downstream of the project area. The project's grading and golf course layout are specifically designed to maintain river capacity and avoid adverse changes in flood risk, erosion, velocity, and sediment transport for the project site, upstream areas, or downstream communities, in compliance with FEMA, City of Santee, and City of San Diego standards. The Flood Study (Draft CLOMR) would need to be approved by FEMA, the City of Santee, and the City of San Diego prior to the issuance of a grading permit for the project. The majority of the MHPA within the floodplain is currently golf course and will remain golf course after construction. The small portion of MHPA that consists of native riparian habitat will not be impacted by the proposed project.
2. No berming, channelization, or man-made constraints or barriers to creek, tributary, or river flows should be allowed in any floodplain within the MHPA unless reviewed by all appropriate agencies, and adequately mitigated. Review must include impacts to upstream and downstream habitats, flood flow volumes, velocities and configurations, water availability, and changes to the water table level.
   - *Project Analysis*: The proposed project will not require any berming, channelization, or man-made constraints or barriers to a creek, tributary, or river within the MHPA and therefore this design criteria does not apply.
3. No riprap, concrete, or other unnatural material shall be used to stabilize river, creek, tributary, and channel banks within the MHPA. River, stream, and channel banks shall be natural, and stabilized where necessary with willows and other appropriate native plantings. Rock gabions may be used where necessary to dissipate flows and should incorporate design features to ensure wildlife movement.
   - *Project Analysis*: The proposed project will not impact any river, creek, tributary, and channel banks within the MHPA and therefore this design criteria does not apply.

MSCP Subarea Plan Section 1.4.3 Land Use Adjacency Guidelines

The MSCP City of San Diego Subarea Plan addresses potential direct and indirect impacts on preserve areas from adjacent development in Section 1.4.3, Land Use Adjacency Guidelines (City of San Diego 1997). The Land Use Adjacency Guidelines provide requirements for land uses adjacent to the habitat preserve in order to minimize indirect impacts to the sensitive resources. City of San Diego MHPA exists along the southern boundary of the site. The redesign of the golf course within and adjacent to MHPA considers the guidelines to ensure consistency with them.

The project would redesign the existing active recreation use (existing golf course) within and adjacent to the City of San Diego Multi-Habitat Preserve Area (MHPA). The existing golf course contains approximately 14 acres of land designated as MHPA and is adjacent to MHPA along the southern boundary of the site, within the City of San Diego. The MSCP San Diego Subarea Plan includes land use adjacency guidelines, addressed on a project-by-project basis, to minimize impacts and maintain function of the MHPA (City of San Diego 1997). The City of San Diego MSCP Land Use Adjacency Guidelines include the following topics: drainage, toxics, lighting, noise, barriers, invasives, brush management, and grading/land development (See Section 1.5.3 of the MSCP). The following list describes how these guidelines relate to the portions of the proposed project within the City of San Diego.

Drainage/Toxics. No parking lots or developed areas are proposed in or adjacent to the MHPA. Developed areas within the project site are designed to drain to water quality detention basins.

Lighting. No lighting is proposed in the golf course in or adjacent to the MHPA.

Noise/Barriers. No land use changes are proposed in or adjacent to the MHPA. There will be a continuation of golf course uses along the southern boundary of the site. No changes in operational noise are expected as a result of the operation of the golf course. Golf course uses will continue along the southern boundary similar to present uses on the site. Construction activities adjacent to the MHPA could result in temporary increases in noise. Implementation of **MM-BIO-12** would avoid or substantially lessen indirect impacts on nesting birds due to construction noise, to below a level of significance.

Brush Management. The existing and redesigned golf course does not require any brush management zones within or adjacent to the MHPA.

Grading/land development. No slopes are proposed within or adjacent to the City of San Diego MHPA. All project grading will be contained within the project site.

Invasive species. Invasive species shall not be introduced into areas immediately adjacent to the preserve areas. All open space slopes immediately adjacent to the preserve should be planted with native species that reflect the adjacent native habitat.

Conformance with the City of San Diego Land Use Adjacency Guidelines listed above shall be made a condition of project approval and shall be included in applicable Covenants, Permit Conditions, and Restrictions. With implementation of **MM-BIO-12** and conformance with the MSCP Land Use Adjacency Guidelines, the project would not conflict with local policies (i.e., the MSCP) and the project would result in a less than significant impact with mitigation.

MSCP Subarea Plan Section 1.5.2 General Management Directives

The following general management directives apply to all areas of the City of San Diego's MSCP Subarea Plan, as appropriate.

Mitigation

Mitigation, when required as part of project approvals, shall be performed in accordance with the City of San Diego Environmentally Sensitive Lands Ordinance and Biology Guidelines.

- *Project Analysis:* All mitigation proposed for the project is discussed in this section. Mitigation has been developed in accordance with the City of San Diego Environmentally Sensitive Lands Ordinance and Biology Guidelines.

Restoration

Restoration or revegetation undertaken in the MHPA shall be performed in a manner acceptable to the City. Where covered species status identifies the need for reintroduction and/or increasing the population, the covered species will be included in restoration/revegetation plans, as appropriate. Restoration or revegetation proposals will be required to prepare a plan that includes elements addressing financial responsibility, site preparation, planting specifications, maintenance, monitoring and success criteria, and remediation and contingency measures. Wetland restoration/revegetation proposals are subject to permit authorization by federal and state agencies.

- *Project Analysis:* The proposed project does not require any restoration or revegetation within the MHPA.

Public Access, Trails, and Recreation

Priority 1

1) Provide sufficient signage to clearly identify public access to the MHPA. Barriers such as vegetation, rocks/boulders or fencing may be necessary to protect highly sensitive areas. Use appropriate type of barrier based on location, setting and use. For example, use chain link or cattle wire to direct wildlife movement, and natural rocks/boulders or split rail fencing to direct public access away from sensitive areas. Lands acquired through mitigation may preclude public access in order to satisfy mitigation requirements.

- *Project Analysis:* A portion of the golf course is located within the MHPA and will remain as an operating golf course following construction. An existing manufactured berm is located along most of the southern and eastern boundary, generally outside the project site and separates the golf course from native habitat.

2) Locate trails, view overlooks, and staging areas in the least sensitive areas of the MHPA. Locate trails along the edges of urban land uses adjacent to the MHPA, or the seam between land uses (e.g., agriculture/habitat), and follow existing dirt roads as much as possible rather than entering habitat or wildlife movement areas. Avoid locating trails between two different habitat types (ecotones) for longer than necessary due to the typically heightened resource sensitivity in those locations.

- *Project Analysis:* The proposed project does not propose any new trails within the MHPA.

3) In general, avoid paving trails unless management and monitoring evidence shows otherwise. Clearly demarcate and monitor trails for degradation and off-trail access and use. Provide trail repair/maintenance as needed. Undertake measures to counter the effects of trail erosion including the use of stone or wood crossjoints, edge plantings of native grasses, and mulching of the trail.

- *Project Analysis:* The proposed project does not propose any new trails within the MHPA.

4) Minimize trail widths to reduce impacts to critical resources. For the most part, do not locate trails wider than four feet in core areas or wildlife corridors. Exceptions are in the San Pasqual Valley

where other agreements have been made, in Mission Trails Regional Park, where appropriate, and in other areas where necessary to safely accommodate multiple uses or disabled access. Provide trail fences or other barriers at strategic locations when protection of sensitive resources is required.

- *Project Analysis:* The proposed project does not propose any new trails within the MHPA.

5) Limit the extent and location of equestrian trails to the less sensitive areas of the MHPA. Locate staging areas for equestrian uses at a sufficient distance (e.g., 300-500 feet) from areas with riparian and coastal sage scrub habitats to ensure that the biological values are not impaired.

- *Project Analysis:* The proposed project does not include any equestrian trails within the MHPA.

6) Off-road or cross-country vehicle activity is an incompatible use in the MHPA, except for law enforcement, preserve management or emergency purposes. Restore disturbed areas to native habitat where possible or critical, or allow to regenerate.

- *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction. No off-road or cross-country vehicle activity will occur within the proposed project boundaries, and specifically the MHPA.

7) Limit recreational uses to passive uses such as birdwatching, photography and trail use. Locate developed picnic areas near MHPA edges or specific areas within the MHPA, in order to minimize littering, feeding of wildlife, and attracting or increasing populations of exotic or nuisance wildlife (opossums, raccoons, skunks). Where permitted, restrain pets on leashes.

- *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction.

8) Remove homeless and itinerant worker camps in habitat areas as soon as found pursuant to existing enforcement procedures.

- *Project Analysis:* A small portion of native riparian habitat associated with the north channel of the San Diego River overlaps with the MHPA. This area is surrounded by existing golf course, and it is unlikely that homeless and itinerant worker camps will occur within the project, and specifically this portion of the project. However, should these camps become established, they will be removed in accordance with this general management directive.

9) Maintain equestrian trails on a regular basis to remove manure (and other pet feces) from the trails and preserve system in order to control cowbird invasion and predation. Design and maintain trails where possible to drain into a gravel bottom or vegetated (e.g., grass-lined) swale or basin to detain runoff and remove pollutants.

- *Project Analysis:* The proposed project does not propose any equestrian trails within the MHPA.

Litter/Trash and Materials Storage

Priority 1

1. Remove litter and trash on a regular basis. Post signage to prevent and report littering in trail and road access areas. Provide and maintain trash cans and bins at trail access points.

2. Impose penalties for littering and dumping. Fines should be sufficient to prevent recurrence and also cover reimbursement of costs to remove and dispose of debris, restore the area if needed, and to pay for enforcement staff time.

3. Prohibit permanent storage of materials (e.g., hazardous and toxic chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, due to potential leakage.

4. Keep wildlife corridor under-crossings free of debris, trash, homeless encampments, and all other obstructions to wildlife movement.

- *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction. The 0.33 acre of riparian habitat within the MHPA will not be impacted by the proposed project. Therefore, these priorities related to trails, trash, material storage and wildlife corridors do not apply to the proposed project.

Priority 2

1. Evaluate areas where dumping recurs for the need for barriers. Provide additional monitoring as needed (possibly by local and recreational groups on a "Neighborhood Watch" type program), and/or enforcement.
    - *Project Analysis:* The project site is not subject to dumping issues and therefore this priority does not apply.

Adjacency Management Issues

The following management directives are in addition to those outlined in Section 1.4.3 of the MSCP, and refer more specifically to management and monitoring requirements.

Priority 1:

1. Enforce, prevent and remove illegal intrusions into the MHPA (e.g., orchards, decks, etc.) on an annual basis, in addition to complaint basis.
2. Disseminate educational information to residents adjacent to and inside the MHPA to heighten environmental awareness, and inform residents of access, appropriate plantings, construction or disturbance within MHPA boundaries, pet intrusion, fire management, and other adjacency issues.
3. Install barriers (fencing, rocks/boulders, vegetation) and/or signage where necessary to direct public access to appropriate locations.
    - *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction. Houses will not be located within or adjacent to the MHPA. An existing manufactured berm is located along most of the southern and eastern boundary of the golf course, generally outside the project site and separates the golf course from native habitat and therefore additional barriers are not needed.

Invasive Exotics Control and Removal

Priority 1

1. Do not introduce invasive non-native species into the MHPA. Provide information on invasive plants and animals harmful to the MHPA, and prevention methods, to visitors and adjacent residents. Encourage residents to voluntarily remove invasive exotics from their landscaping.
   - *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction.
2. Remove giant reed, tamarisk, pampas grass, castor bean, artichoke thistle, and other exotic invasive species from creek and river systems, canyons and slopes, and elsewhere within the MHPA as funding or other assistance becomes available. If possible, it is recommended that removal begin upstream and/or upwind and move downstream/downwind to control reinvasion. Priorities for removal should be based on invasive species' biology (time of flowering, reproductive capacity, etc.), the immediate need of a specific area, and where removal could increase the habitat available for use by covered species such as the least Bell's vireo. Avoid removal activities during the reproductive seasons of sensitive species and avoid/ minimize impacts to sensitive species or native habitats. Monitor the areas and provide additional removal and apply herbicides if necessary. If herbicides are necessary, all safety and environmental regulations must be observed. The use of heavy equipment, and any other potentially harmful or impact-causing methodologies, to remove the plants may require some level of environmental or biological review and/or supervision to ensure against impacts to sensitive species.
   - *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction. There are no areas of MHPA within the project site that would benefit from invasive removal.

Priority 2

1. If funding permits, initiate a baseline survey with regular follow-up monitoring to assess invasion or re-invasion by exotics, and to schedule removal. Utilize trained volunteers to monitor and remove exotic species as part of a neighborhood, community, school, or other organization's activities program (such as Friends of Peñasquitos Preserve has done). If done on a volunteer basis, prepare and provide information on methods and timing of removal to staff and the public if requested. For giant reed removal, the Riverside County multi-jurisdictional management effort and experience should be investigated and relevant techniques used. Similarly, tamarisk removal should use the Nature Conservancy's experience in the Southern California desert regions, while artichoke thistle removal should reference the Nature Conservancy's experience in Irvine. Other relevant knowledge and experience is available from the California Exotic Pest Plant Council and the Friends of Los Peñasquitos Canyon Preserve.
2. Conduct an assessment of the need for cowbird trapping in each area of the MHPA where cattle, horses, or other animals are kept, as recommended by the habitat management technical committee in coordination with the wildlife agencies.
3. If eucalyptus trees die or are removed from the MHPA area, replace with appropriate native species. Ensure that eucalyptus trees do not spread into new areas, nor increase substantially in numbers over the years. Eventual replacement by native species is preferred.

4. On a case by case basis some limited trapping of non-native predators may be necessary at strategic locations, and where determined feasible to protect ground and shrub-nesting birds, lizards, and other sensitive species from excessive predation. This management directive may be considered a Priority 1 if necessary to meet the conditions for species coverage. If implemented, the program would only be on a temporary basis and where a significant problem has been identified and therefore needed to maintain balance of wildlife in the MHPA. The program would be operated in a humane manner, providing adequate shade and water, and checking all traps twice daily. A domestic animals release component would be incorporated into the program. Provide signage at access points and noticing of adjacent residents to inform people that trapping occurs, and how to retrieve and contain their pets.

   - *Project Analysis:* Not applicable.

Flood Control

The following management directives are in addition to the general planning policies and guidelines outlined in Section 1.4.2 of the MSCP.

Priority 1

1. Perform standard maintenance, such as clearing and dredging of existing flood channels, during the non-breeding or nesting season of sensitive bird or wildlife species utilizing the riparian habitat. For the least Bell's vireo, the non-breeding season generally includes mid-September through mid-March.

   - *Project Analysis: Not applicable.*

Priority 2

1. Review existing flood control channels within the MHPA periodically (every five to ten years) to determine the need for their retention and maintenance, and to assess alternatives, such as restoration of natural rivers and floodplains.

   - *Project Analysis: Not applicable.*

MSCP Subarea Plan Section 1.5.6 Specific Management Policies and Directives for the Eastern Area

Mission Trails Regional Park

Priority 1

A Natural Resource Management Plan (NRMP) will be prepared for the park to preserve and protect natural resources while encouraging public use and implementation of the Master Development Plan. Coordinate the preparation of the NRMP with MSCP planners.

1. Maintain and clearly demarcate trails around the visitors center and other areas of high public use to minimize habitat destruction.
2. Limit future equestrian trails to specified trails which minimize trail edge disturbances and are no greater than 25 percent gradient.

3. Seasonally restrict, if necessary, areas along the San Diego River, including riparian restoration areas (except along established trails) to prevent disturbance of breeding areas.
4. As envisioned by the Master Development Plan, revegetate areas with erosion or denuded slopes.
5. Incorporate adequate setbacks into future plans to develop an equestrian center near the San Diego River to minimize impacts associated with cowbird parasitism. Establish a cowbird trapping program to minimize effects on the least Bell's vireo and other songbirds.
6. Minimize lighting for the campground and collect garbage frequently to reduce nuisance wildlife (raccoons, opossums, skunks).
7. Establish signs to direct access and provide educational information at the periphery of sensitive resource areas and at points of access. Post signs to prohibit campfires, pets, firearms and camping (except where allowed). Also post road signs to identify wildlife corridors to help reduce road kills. Priority 2: 1. Reclaim active and abandoned mineral extraction areas as required by the State's Surface Mining and Reclamation Act of 1975.

   - *Project Analysis:* Not applicable.

East Elliott

Priority 1:

1. Protect the remaining populations of San Diego ambrosia in the private property area immediately to the east of the Kumeyaay Lake campground. Explore methods to protect and enhance the San Diego ambrosia population in the area such as transplanting to more remote areas, or the use of split rail fencing and signage.
2. If the eastern area develops with urban uses, implement programs to educate future adjacent landowners pursuant to the general adjacency management guidelines in Section 1.5.2.

   - *Project Analysis:* Not applicable.

City of Santee

Although the proposed project is NAP of the draft Santee MSCP Subarea Plan, the project is consistent with the draft Santee MSCP Subarea Plan to the greatest extent feasible. The project would not compromise future implementation of the Draft Santee MSCP Subarea Plan because the City of Santee's MSCP Subarea Plan is not reliant on the golf course to meet its objectives. However, the project will conform to the Preserve Land Use Adjacency Guidelines developed in the draft plan to ensure that there are no conflicts with establishment of the subarea plan as described below, as well as all applicable Policy Objectives of the City of Santee's General Plan also described below. In addition, the City of Santee's Land Use Element includes guiding principles that would apply to the proposed project as they relate to the protection of the San Diego River. Refer to the analysis below for project consistency with the applicable guiding principles of the City's Land Use Element.

City of Santee Land Use Adjacency Guidelines

Although the draft Santee MSCP Subarea Plan has not been approved, this project will conform to the Preserve Land Use Adjacency Guidelines developed in the draft plan to ensure that there are no conflicts with establishment of the subarea plan. The proposed project would introduce residential development as an accessory use to the area

near West Hills Parkway that is adjacent to open space in the City of Santee. The proposed project would introduce the emergency access road and parking lot associated with the golf resort adjacent to the Mast Park West habitat preserve in Santee, in an area that is currently a golf course. The proposed project conforms and is consistent with the following guidelines:

Drainage. The new development areas have been designed to drain into on-site water detention basins and not flow directly into the habitat preserves.

Fuel modification zones. Santee Municipal Code Chapter 49 Section 4905.2 requires that all new development within the Wildland Urban Interface Area has fuel modified defensible space. A fire protection plan has been prepared to address impacts from Wildland Urban Interface. Potential impacts from fuel modification zones have been incorporated into the impact footprint of the project.

Noise. Noise generated during construction of the proposed project could affect nesting birds if construction occurs during the avian breeding season. **MM-BIO-12** requires a measure to reduce noise impacts on nesting birds in adjacent habitat to less than significant.

Project lighting. Project lighting will be shielded and directed away from the San Diego River to avoid spillover into the adjacent riparian habitat. Low-pressure sodium lighting shall be used whenever possible and incorporated into project design features and engineering site plan. The City of Santee will provide project oversight to ensure that the project lighting is consistent with Preserve Land Use Adjacency Guidelines.

Invasive species. Invasive species shall not be introduced into areas immediately adjacent to the preserve areas. All open space slopes immediately adjacent to the preserve should be planted with native species that reflect the adjacent native habitat. Invasive species will not be introduced from the project into the adjacent preserve lands. The City of Santee will approve the project's landscaping plans to ensure that the applicable parts of the landscaping plant palette are consistent with Preserve Land Use Adjacency Guidelines.

Conformance with the City of Santee Land Use Adjacency Guidelines listed above are primarily project design features. In addition, implementation of **MM-BIO-12** would avoid or substantially lessen indirect impacts on nesting birds due to construction to below a level of significance. With implementation of MM-BIO-12 and conformance with the MSCP Land Use Adjacency Guidelines, the project would not conflict with local policies (i.e., the MSCP) and impacts would be less than significant with mitigation.

City of Santee General Plan

The Conservation Element of the City of Santee's General Plan contains policies related to protection and preservation of sensitive biological resources (City of Santee 2003). The Conservation Element of the City of Santee's General Plan states that "all development proposals impacting biological resources should be consistent with the provisions of the City's future Multiple Species Conservation Program Subarea Plan and Implementing Agreement, and applicable State and Federal Regulations." The project is consistent with the applicable objectives and policies of the Santee General Plan Conservation Element (City of Santee 2003):

Objective 1.0: Protect areas of unique topography or environmental significance to the greatest extent possible.

- *Project Analysis:* The project site is an existing golf course and the proposed impacts would be primarily situated in areas currently mapped as developed or developed-golf course. Both the San Diego River

south of the project and the Sycamore Canyon Creek/San Diego River (North Channel) bisecting the project site are being avoided to the greatest extent feasible (95% of these features within the project site would be avoided and 5% would be impacted by the proposed project).

Objective 2.0: Protect floodways to reduce flood hazards, protect biological resources and preserve the aesthetic quality along water corridors.

- *Project Analysis:* As directed by **MM-BIO-9**, runoff, sedimentation, and erosion shall be minimized through the use of BMPs such as water bars, silt fences, staked straw bales, wattles, and mulching and seeding of all disturbed areas. These measures shall be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water, and to preserve roadways and adjacent properties. Both the San Diego River south of the project and the Sycamore Canyon Creek/San Diego River (North Channel) bisecting the project site are being avoided to the greatest extent feasible (95% of these features within the project site would be avoided and 5% would be impacted by the proposed project). Hydrology modeling, as summarized in Appendix O in Appendix E, Biological Survey Report, was conducted to evaluate potential changes in water surface elevation and flow velocity associated with the proposed project, with particular focus on small storm events and the wetland areas located both downstream and upstream of the project boundary. The project's grading and golf course layout were specifically designed and confirmed by the hydrology modeling to maintain river capacity and avoid adverse changes to the portion of Sycamore Canyon Creek and the San Diego River within the project site as well as the upstream or downstream reaches of Sycamore Canyon Creek and the San Diego River and their associated riparian vegetation communities. Therefore, the overall function and value of these areas will be maintained after project implementation. As discussed further in Draft EIR Section 3.1, Aesthetics and Visual Resources, the renovation of the golf course and construction of the country club and hotel would not significantly affect public scenic views or resources. Impacts to public views would result in less-than-significant impacts because visibility of the project from public vantage points is generally brief, intermittent, and often screened by existing vegetation, topography, or intervening development, thereby limiting viewer exposure and sensitivity. In addition, where views are available, the project's scale, height, and design are compatible with the surrounding urbanized context and would not obstruct designated scenic vistas or conflict with applicable scenic quality policies and regulations, resulting in a minimal change to overall visual character.

Objective 7.0: Preserve significant biological resources.

- *Policy 7.1:* The City shall encourage the preservation and enhancement of significant biological resources in areas designated as permanent open space.
  - *Project Analysis:* The proposed project would not impact any Existing Protected Open Space or Conservation Lands within the City of Santee.
- *Policy 7.2:* The City shall require that all development proposals provide appropriate mitigation for identified significant biological resources including selective preservation, sensitive site planning techniques and in-kind mitigation for identified impacts.
  - *Project Analysis:* The proposed project would avoid or mitigate all impacts to less than significant through implementation of the mitigation measures outlined in Threshold 1. Permanent impacts on sensitive riparian and wetland vegetation communities are proposed to be mitigated through

on-site restoration (i.e., creation), enhancement, and/or preservation of habitat at the mitigation ratios referenced in **Tables 3.3-8, 3.3-9, and 3.3-11**.

- *Policy 7.3:* The City shall require that, for all development proposals involving the setting aside of land for permanent open space either on-site or off-site, provisions are in place to ensure the long term management of the open space and biological resources.
  - *Project Analysis:* The proposed project shall record a conservation easement over any mitigation sites required by the mitigation measures outlined in Section 5. An RMP for long-term management shall also be prepared as described in **MM-BIO-6** and approved by the City of Santee and/or City of San Diego, USFWS, and CDFW.
- *Policy 7.4:* The City shall complete a Multiple Species Conservation Program Subarea plan that conserves a minimum of 2,600 acres in the City as permanent open space for preservation of habitats and species.
  - *Project Analysis:* The proposed project would not compromise future implementation of the Draft Santee MSCP Subarea Plan because the City of Santee's MSCP Subarea Plan is not reliant on the golf course to meet its objectives for open space preservation.

Objective 10.0: Preserve significant natural resources, such as mineral deposits, biological resources, watercourses, groundwater, hills, canyons, and major rock outcroppings, as part of a Citywide open space system.

- *Policy 10.1:* The City should encourage the conservation of rare or unique plants and wildlife by identifying such resources through the environmental review process and by using open space preservation, where appropriate, to preserve the resources as a condition of a project approval, consistent with the City's future Multiple Species Conservation Program Subarea Plan.
  - *Project Analysis:* The project site is an existing golf course and the proposed impacts would be primarily situated in areas currently mapped as developed or developed-golf course. Both the San Diego River south of the project site and the Sycamore Canyon Creek/San Diego River (North Channel) bisecting the project site are being avoided to the greatest extent feasible (95% of these features within the project site would be avoided and 5% would be impacted by the proposed project). Furthermore, no special-status plant species would be directly impacted by project implementation and all impacts to special-status wildlife species would be avoided or reduced to less than significant. Because the project is NAP of the Draft Santee MSCP Subarea Plan, the project applicant will seek take authorization through Endangered Species Act (ESA) Section 7 or an individual Section 10 permit. The applicant will process all required permits and adhere to all relevant regulatory requirements. Impacts on listed species will utilize standard state and federal incidental take permit processes, with mitigation conducted in accordance with the permitting requirements of the applicable resource agencies (i.e., USFWS and CDFW) during the permitting process.

Impact Determination

Impact BIO-5. Potential Conflicts to Adopted Plans or Local Policies.

Implementation of the proposed project could have a conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance or with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan prior to implementation of mitigation measures.

Mitigation Measures

~~No~~Proposed Mitigation Measures

The following mitigation measures are ~~required.~~necessary to reduce impacts to Impact BIO-5:

Mitigation measures **MM-BIO-3, MM-BIO-6, MM-BIO-9, MM-BIO-12,** and **MM-BIO-20** would be implemented to prevent potential conflicts with approved plans or local policies protecting biological resources. These measures are included under Threshold 1.

Level of Significance After Mitigation

With implementation of **MM-BIO-3, MM-BIO-6, MM-BIO-9, MM-BIO-12,** and **MM-BIO-20,** the project would be fully consistent with the City of San Diego MSCP Subarea Plan, MHPA Adjacency Guidelines, ESL Regulations, and applicable local biological resource ordinances. Although draft Santee MSCP Subarea Plan is not yet approved and the proposed project is NAP of the Santee MSCP Subarea Plan, the project is consistent with the draft Santee MSCP Subarea Plan to the greatest extent feasible. The project would not compromise future implementation of the Draft Santee MSCP Subarea Plan because the City of Santee's MSCP Subarea Plan is not reliant on the golf course to meet its objectives. Because the project would not conflict with adopted conservation plans, impacts under CEQA Threshold 5 and City of San Diego Threshold 7 would be less than significant with mitigation incorporated.

Threshold 6 (City of San Diego): Would the project introduce a land use within an area adjacent to the MHPA that would result in adverse edge effects?

Impact Discussion

Edge effects are actions that are not a direct result of the proposed project but affect biological resources as the cause of degradation of a biological resource over time. The boundary for the MHPA occurs within the proposed project site. However, the golf course was developed before the original MHPA boundary for the site was established as part of the regional MSCP mapping efforts and the proposed development will not change any of the current uses within the portions of the site that overlap with the MHPA boundary (i.e., site will remain a golf course).

Implementation of **MM-BIO-20** ensures full compliance with MSCP and City biological policies by prohibiting the use of invasive plant species within landscaped areas, establishing native vegetative buffers between the golf course and riparian habitat, and preventing material storage, lighting spillover, or other adjacency related edge effects into MHPA lands. These requirements ensure that the project does not create new adverse conditions, does not introduce invasive plants into natural open space, and remains compatible with the MSCP Subarea Plan and ESL Regulations. With implementation of **MM-BIO-20,** the project would not conflict with the City of San Diego MSCP Subarea Plan, Draft Santee MSCP Subarea Plan, MHPA Adjacency Guidelines, ESL Regulations, and applicable local biological resource ordinances. Because the project would not create land uses that generate adverse edge effects and would not conflict with adopted conservation plans, impacts under Threshold 6 would remain less than significant with mitigation incorporated.

Impact Determination

Impact BIO-6. Potential Impacts to Biological Resources from Edge Effects.

Implementation of the proposed project could have a potentially significant impact on biological resources within or adjacent to the MHPA from edge effects prior to implementation of mitigation measures.

Mitigation Measures

Proposed Mitigation Measures

The following mitigation measures are necessary to reduce impacts to Impact BIO-6:

Mitigation measure **MM-BIO-20** would be implemented to reduce potential edge effects on biological resources within or adjacent to the MHPA to less-than-significant. This mitigation measure is included under Threshold 1.

Level of Significance After Mitigation

~~Level of Significance After Mitigation~~

~~Impacts would be less than significant.~~

With implementation of **MM-BIO-20**, the project would effectively reduce potential edge effects on biological resources within or adjacent to the MHPA to less-than-significant. As a result, impacts under City of San Diego Threshold 6 would be less than significant with mitigation incorporated.

Threshold 8 (City of San Diego): Would implementation of the proposed project result in an introduction of invasive species of plants into a natural open space area?

Impact Discussion

As discussed previously, invasive exotic (i.e., non-native) plant species can be introduced into adjacent habitat through several means. They can be planted as part of the ornamental landscaping of development or plantings of new residences, and weeds can be introduced through increased movement of people or domestic animals along native areas. Weeds can also be introduced from construction vehicles brought onto the site and tracking in soil containing weed seeds.

The proposed project would not introduce invasive plants that have the potential to affect natural vegetation communities. The proposed ~~project's~~project's vegetation palette would not include invasive plant species, nor would invasive plant species be planted in or adjacent to the MHPA. as directed by **MM-BIO-20.** Because the golf course would be planted with a hybrid Bermuda grass species per industry standards, a 10-foot-wide buffer would be established to separate all golf turf from riparian areas. The buffer zone would ~~be planted with~~have an emphasis on saltgrass, a native ~~bunch grasses, which would contain the Bermuda~~, wetland tolerant grass ~~within the playable golf boundary.~~species. The buffer zones are noted on the ~~Grassing~~Landscape Plan for the golf course. ~~The golf course redesign would remove existing ornamental trees, such as Brazilian peppertree, that are considered invasive.~~ Construction vehicles will not enter off-site areas of MHPA; any soil containing weed seeds would either be buried within construction grading or would be within landscaped areas which will be managed to support non-

invasive ornamental plantings. Therefore, implementation of ~~project design features~~MM-BIO-20 would ensure that ~~there would be no significant impact~~potential impacts from the introduction of invasive plant species ~~of plants~~ into a natural open space ~~area~~areas would be less than significant.

Impact Determination

Impact BIO-7. Potential Impacts to Natural Open Space Areas from Invasive Plant Species Introduction

Implementation of the proposed project ~~would not result in the~~ could have a potentially significant impact on natural open space areas from introduction of invasive species during construction and operation prior to implementation of ~~plants into a natural open space area. Impacts would be less than significant~~mitigation measures.

Mitigation Measures

~~No~~Proposed Mitigation Measures

The following mitigation measure is ~~required.~~necessary to reduce impacts to Impact BIO-7:

~~Level of Significance After Mitigation~~

~~Impacts~~Mitigation measure MM-BIO-20 would be implemented to prevent the spread of invasive plant species into natural open space areas to less than significant. This mitigation measure is included under Threshold 1.

Level of Significance After Mitigation

With implementation of MM-BIO-20, the project would effectively avoid the introduction of invasive plant species into natural open space areas. As a result, impacts under Threshold 8 would be less than significant with mitigation incorporated.

3.3.6 Cumulative Impacts and Mitigation Measures

The geographic area considered for analysis of biological resource cumulative impacts is the City of Santee and the City of San Diego, in which the proposed project is located. Present and reasonably foreseeable future projects that could contribute to cumulative impacts on biological resources include projects with grading, paving, landscaping, road, and building construction of undeveloped land, or with habitat otherwise present. ~~Untreated runoff from construction or operation activities on land into the San Diego River Watershed via storm drains or sheet runoff also has the potential to contribute to cumulative impacts.~~

~~Any present and reasonably foreseeable future projects within the City of San Diego would be required to be consistent with the City of San Diego MSCP subarea plan and VPHCP. The EIR for the San Diego MSCP addressed cumulative impacts. Impacts within the City of San Diego that are consistent with those considered in the MSCP may rely on the MSCP to determine that the project's impacts are not cumulatively considerable. Impacts within the City of San Diego would be mitigated following the requirements of the City of San Diego MSCP subarea plan; therefore, cumulative impacts from impacts within the City of San Diego would be less than significant.~~

~~Policy 10.1 of the City of Santee's *General Plan* encourages the conservation of rare or unique plants and wildlife by identifying such resources through the environmental review process and by using open space preservation,~~

~~where appropriate, to preserve the resources as a condition of a project approval, consistent with the future Santee MSCP Subarea Plan. As such, future projects within the City of Santee would be required to conserve rare or unique pants and wildlife for consistency with the Santee MSCP Subarea Plan, once that subarea plan is approved. There is potential for present and reasonably foreseeable future projects within the City of Santee to result in cumulative impacts before any approval of the Santee Subarea Plan since the Santee MSCP Subarea Plan is a guidance document.~~

Proposed cumulative projects listed in Table 3-2 in Chapter 3, ~~Impact~~Environmental Analysis, that are within close proximity to the project site include the Woodspring Suites Hotel (under construction) at 8707 Mission Gorge Road, the Ukrainian Catholic Church (under construction) at 9308 Carlton Oaks Drive, Soapy Joe's (approved but not built) at 9015 Mission Gorge Road, and the Shell Gas Station (under construction) at 7757 Mission Gorge Road.

The City of San Diego MSCP Subarea Plan (City of San Diego 1997), the MSCP Plan (City of San Diego 1998), the VPHCP (City of San Diego 2019), and the Draft Santee MSCP Subarea Plan (City of Santee 2025) all establish conservation goals and objectives to preserve critical biological resources at a sustainable level on a regional scale, and set mitigation standards to be applied at the project level to minimize the cumulative effects of projects in the MSCP planning area. A significant cumulative impact on biological resources would result if the proposed project contributed to cumulative impacts related to sensitive or special-status species, sensitive habitat/natural communities, federally protected wetlands, wildlife movement corridors, or invasive species.

Cumulative Threshold 1: Would implementation of the proposed project have a substantial cumulative adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW and USFWS?

Special-status species could be directly or indirectly impacted by the proposed project, but with applicable mitigation measures, all project-specific impacts to habitat modifications and species would be less than significant. All cumulative projects would be required to comply with applicable federal and/or state regulations that provide protection for special-status species, such as FESA or CESA. In addition, cumulative projects that affect special-status species may require approval from USFWS and/or CDFW. If significant impacts occur from a particular cumulative project, then project-specific mitigation measures are implemented to reduce impacts to the extent feasible in compliance with applicable federal and/or state regulations, as was completed for the project.

Generally, cumulative projects within the City of San Diego would be required to be consistent with the City of San Diego MSCP Subarea Plan (City of San Diego 1997), the MSCP Plan (City of San Diego 1998), and the VPHCP (City of San Diego 2019) through implementation of mitigation ratios, avoiding impacts to wetlands, and complying with other applicable policies of the City of San Diego MSCP Subarea Plan (City of San Diego 1997). The proposed development will not change any of the uses within the portions of the site that overlap with the MHPA boundary that were established before the original MHPA boundaries were established. The golf course will continue to exist in its current state, and the project will not impact any sensitive habitats within the MHPA. The EIR for the San Diego MSCP Subarea Plan addressed cumulative impacts. Impacts within the City of San Diego that are consistent with those considered in the MSCP may rely on the MSCP to determine that the project's impacts are not cumulatively considerable. ~~Construction of the proposed project has the potential to result in negative impacts on occupied least Bell's vireo breeding habitat and nesting special-status avian species, potential direct impacts on southern cottonwood–willow riparian forest (including disturbed), which is suitable breeding habitat for special-status species, potential disturbance or destruction of nests protected by the MBTA and CFGC, potential direct impacts on native or naturalized vegetation during the nesting bird breeding season, potential direct impacts on Crotch's~~

~~bumble bee nests, and potential indirect impacts from construction noise, human activity, nuisance animals, and nighttime lighting (**Impact BIO-5 through Impact BIO-16**). The proposed project would not result direct or indirect impacts on candidate, sensitive, or special status plant species, including species protected under the MSCP and the VPHCP.~~

~~Mitigation measures required for the proposed project would include habitat based compensatory mitigation and seasonal avoidance of least Bell's vireo habitat, ensure coordination with the applicable agencies, avoid impacts on the habitat of non-listed special-status species, require surveys for Crotch's bumble bees and avoid impacts on these sites through avoidance and/or monitoring prior to the start of construction activities, ensure compliance with the MBTA, avoid vegetation disturbance during the bird-nesting season (**MM-BIO-1 through MM-BIO-8**, **MM-BIO-13, MM-BIO-14,** and **MM-BIO-15**), and minimize noise impacts from the operation of construction equipment and construction activities during the breeding season of non-listed avian species (**MM-BIO-12**).~~

~~Within the City of San Diego, the proposed project would be consistent with the~~ Any project, including the proposed project, within the City of San Diego would be required to be consistent with the City of San Diego MSCP Subarea Plan, the MSCP Plan, and VPHCP. Because cumulative projects and the project would be required to meet or exceed MSCP requirements directed toward regional conservation, and project-specific mitigation measures would be implemented to reduce the project's impacts to special-status species to below a level of significance, the project would contribute to species recovery. Therefore, the project's contribution to adverse effects on special-status species within the MSCP would not be cumulatively considerable.

Cumulative projects within the City of Santee's MSCP Subarea Plan Area with~~City of San Diego~~ MSCP Subarea Plan, ~~including providing mitigation at the ratios described in the Plan, entirely avoiding impacts on wetlands, and complying with *Land Use Adjacency Guidelines*. Projects that conform to the MSCP and VPHCP would not result in significant cumulative impacts (City of San Diego 2017).~~

~~Within the City of Santee, the project would provide compensatory habitat based mitigation to ensure that the proposed project's contribution to effects on sensitive species would not be cumulatively considerable.~~

~~Similar to the proposed project, other reasonably foreseeable projects could result in a~~ potentially significant ~~impact~~impacts to special-status species~~.~~ would be required to be consistent with the Santee MSCP Subarea Plan, once that subarea plan is approved. Other ~~reasonably foreseeable~~ projects ~~within~~ that are not a part of the ~~City of~~ Santee ~~(see Table 3-2, Cumulative Projects, in Chapter 3, Impact Analysis), such as major use permits (e.g., gas stations, hotels) and tentative maps (i.e., residential developments),~~MSCP Subarea Plan would be required to comply with federal, state, and local laws and regulations ~~and would therefore also be required to mitigate any potential impacts to less-than-significant levels. No reasonably foreseeable projects within the City of Santee could be implemented without compliance with these laws. As such, the less than significant impacts with mitigation from the proposed project are not anticipated to combine with other reasonably foreseeable projects to substantially affect special-status species to a point where their survival in the region is threatened. Therefore, the proposed project's impacts~~ . Although the proposed project is NAP of the Draft Santee MSCP Subarea Plan, it is consistent with the City of Santee General Plan (City of Santee 2003) and the draft Santee MSCP Subarea Plan (City of Santee 2025) applicable policies in the following ways that will reduce potential cumulative impacts:

- This project will conform to the City of Santee's Preserve Land Use Adjacency Guidelines developed in the draft Subarea Plan to ensure that there are no conflicts with establishment of the subarea plan, no conflicts

with local policies (i.e., the MSCP), and the project would not result in potentially significant impacts to the MSCP Preserve System. Refer to Threshold 5, of Section 3.3.5, for details.

- The proposed project development was designed to be clustered near existing residential development, and the golf course would remain as a buffer in many areas between development and open space. Golf is generally considered a low-intensity activity typically involving quiet, dispersed human presence with minimal disruption to wildlife.
- The project site is an existing golf course and the proposed impacts would be primarily situated in areas currently mapped as developed or developed-golf course. Both the San Diego River south of the project site and the Sycamore Canyon Creek/San Diego River (North Channel) bisecting the project site are being avoided to the greatest extent feasible (95% of these features within the project site would be avoided and 5% would be impacted by the proposed project). Furthermore, no special-status plant species would be directly impacted by project implementation and all impacts to special-status wildlife species would be avoided or reduced to less than significant. Because the proposed project is NAP of the draft Santee MSCP Subarea Plan, it is therefore not afforded take authorizations for listed species, and as such, the project will seek take authorization through ESA Section 7 or an individual Section 10 permit and will process all required permits and adhere to all relevant regulatory requirements. Impacts on listed species will utilize standard state and federal incidental take permit processes, with mitigation conducted in accordance with the permitting requirements of the applicable resource agencies (i.e., USFWS and CDFW) during the permitting process.
- Proposed development would be situated to avoid impacting primary movement corridors. The MSCP Plan (City of San Diego 1998) and the City of Santee Subarea Plan (2025) identify a biological core area or wildlife movement corridor along the San Diego River between Mission Trails, through Santee, east toward the community of Lakeside as shown on Figure 3.3-10. The project would have no direct impacts to the primary wildlife movement corridor (i.e., the San Diego River [South Channel] riparian corridor).
- Project-specific mitigation measures (i.e., **MM-BIO-1** through **MM-BIO-21**) to reduce significant impacts on special-status species ~~would not be~~, consistency with the Santee General Plan (City of Santee 2003) and the Draft Santee MSCP Subarea Plan (City of Santee 2025) to the extent feasible, would reduce the project's contribution to adverse effects on special-status species within the City of Santee to less than cumulatively considerable.

Cumulative Threshold 2: Would implementation of the proposed project have a substantial cumulative adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS?

Cumulative projects located in the vicinity of the proposed project site have the potential to result in impacts associated with riparian habitat and other sensitive natural communities through direct and indirect loss or degradation of habitat. ~~The proposed project would develop and convert up to 0.19 acres of upland Diegan coastal sage scrub habitat within the City of San Diego (**Impact BIO-1**). The City of San Diego impacts are entirely within the MSCP, which addressed cumulative impacts in the EIR for the MSCP. Impacts within the City of San Diego may rely on the MSCP to determine that the project's impacts are not cumulatively considerable. Impacts within the City of San Diego would be mitigated following the requirements of the City of San Diego MSCP Subarea Plan; therefore, cumulative impacts within the City of San Diego would be less than significant~~All projects occurring within San Diego County would be required to comply with all applicable federal and/or state regulations, such as the California Lake and Streambed Alteration Program, CEQA (i.e., as determined by CDFW's Sensitive Natural Communities), and/or the California NCCP Act (for projects occurring within the MSCP). These programs provide protections for riparian

habitat and other sensitive natural communities. In addition, projects that affect riparian or other sensitive natural communities may require approval from USFWS and/or CDFW. If potentially significant impacts occur from a particular cumulative project, then mitigation measures would be implemented to reduce impacts to the extent feasible in compliance with state and/or federal regulations, if applicable.

~~Unmitigated permanent impacts on 1.72 acres~~Implementation of ~~native and sensitive naturalized (i.e. degraded wetlands) habitat and unmitigated temporary impacts 0.70 acres~~ the proposed project would impact sensitive natural communities within the City of ~~Santee~~ San Diego, but impacts would be ~~a cumulatively~~reduced to less than significant ~~impact (**Impact BIO-2** and **Impact BIO-3**). In addition, water, fugitive dust, and sediment runoff from the construction area has the potential to temporarily affect local water quality, and sediment deposition can negatively affect wetland vegetation communities (**Impact BIO-15** and **Impact BIO-16**). However,~~with applicable mitigation measures. Any project within the City of San Diego, including the proposed project, would be required to be consistent with the ~~mitigation ratios presented in~~ City of San Diego MSCP Subarea Plan, the MSCP ~~and would provide mitigation to avoid impacts on sensitive vegetation communities to compensate~~Plan, and VPHCP. The EIR for ~~sensitive vegetation community impacts that cannot feasibly be avoided (**MM-BIO-1 through MM-BIO-10**).~~

~~The proposed project would implement~~ the MSCP addressed cumulative impacts and has been prepared to meet NCCP criteria and reduce cumulative project impacts through participation in a regional habitat preservation program. Because cumulative projects located within the MSCP and the proposed project would be required to meet or exceed MSCP requirements directed toward regional conservation and project-specific mitigation measures ~~to reduce~~would mitigate the ~~proposed~~ project's impacts ~~on~~to riparian habitat or ~~other~~ sensitive natural communities to below a level of significance~~. Other reasonably foreseeable projects would also be required to comply with regulatory requirements and implement mitigation measures~~, the project would contribute to ~~reduce impacts on riparian~~ habitat ~~or other sensitive natural communities. As such, the less-than-significant impacts with mitigation from the proposed project are not anticipated to combine with other reasonably foreseeable projects to substantially impact riparian habitat or other sensitive natural communities.~~conservation of sensitive natural communities within the City of San Diego. Therefore, the ~~proposed~~ project's ~~impacts~~contribution to adverse effects on riparian habitat or other sensitive natural communities within the City of San Diego would not be cumulatively~~-~~considerable.

Cumulative projects within the City of Santee's MSCP Subarea Plan Area with potentially significant impacts to riparian habitat or other sensitive natural communities would be required to be consistent with the Santee MSCP Subarea Plan, once that subarea plan is approved. Other projects that are not a part of the Santee MSCP Subarea Plan would be required to comply with local or regional plans, policies, or regulations. Although the proposed project is NAP of the Draft Santee MSCP Subarea Plan, it is consistent with the applicable policies of the City of Santee General Plan (City of Santee 2003) and the draft Santee MSCP Subarea Plan (City of Santee 2025) in the following ways that will reduce potential cumulative impacts:

- This project will conform to the Preserve Land Use Adjacency Guidelines developed in the draft plan to ensure that there are no conflicts with establishment of the subarea plan, no conflicts with local policies, and the project would not result in potentially significant impacts to the MSCP Preserve System. Refer to Threshold 5 for details.
- The proposed development was designed to be clustered near existing residential development, and the golf course would remain as a buffer in many areas between development and open space.

- The project site is an existing golf course and the proposed impacts would be primarily situated in areas currently mapped as developed or developed-golf course. Both the San Diego River south of the project site and the Sycamore Canyon Creek/San Diego River (North Channel) bisecting the project site are being avoided to the greatest extent feasible (95% of these features within the project site would be avoided and 5% would be impacted by the proposed project).
- Project-specific mitigation measures (i.e., **MM-BIO-1** through **MM-BIO-10** and **MM-BIO-19** through **MM-BIO-20**) to reduce significant impacts on riparian habitat and other sensitive natural communities, consistency with the Santee General Plan (City of Santee 2003) and the Draft Santee MSCP Subarea Plan (City of Santee 2025) to the extent feasible, would reduce the project's contribution to adverse effects on riparian habitat and other sensitive natural communities within the City of Santee to less than cumulatively considerable.

Cumulative Threshold 3: Would implementation of the proposed project have a substantial cumulative adverse effect on federally or state-protected wetlands (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means?

~~As discussed under Threshold 3,~~ All projects, regardless of which local jurisdiction they occur in, would be required to comply with all applicable state and federal regulations, such as Sections 401 and 404 of the ~~proposed project would have~~CWA, the Porter–Cologne Act, and the California Lake and Streambed Alteration Program. These programs provide protections such as no ~~impact (temporary or permanent) on USACE/RWQCB~~ net loss for jurisdictional aquatic resources and habitat mitigation requirements. In addition, projects that affect jurisdictional aquatic resources would require approval from USACE, RWQCB, and/or CDFW. If potentially significant impacts occur from a particular cumulative project, then mitigation measures would be implemented to reduce impacts to the extent feasible in compliance with state and/or federal agencies.

Existing federal and state regulations would ensure that a significant cumulative impact associated with federally or state-protected waters or wetlands~~. The proposed~~ would not occur. If potentially significant impacts occur from a particular cumulative project ~~would result in permanent and temporary impacts on CDFW-jurisdictional vegetated streambed and riparian habitat, which would represent a significant impact (**Impact BIO-4**). The~~ , then mitigation measures would be implemented to reduce impacts as required to meet the no-net-loss standard. Similarly, the project would ~~implement a baseline of compensatory mitigation and require the acquisition of wetland permits and authorizations by USACE, RWQCB, and CDFW to reduce impacts to~~ mitigate its direct impacts to a less-than-significant level ~~(~~through implementation of **MM-BIO-3**, **MM-BIO-4**, **MM-BIO-5**, and **MM-BIO-11**. Therefore, the project's contribution to adverse effects on state- or federally protected wetlands would not be cumulatively considerable.

~~Reasonably foreseeable future projects in the project site are not anticipated to result in cumulatively significant impacts on federal or state wetlands because these projects would be required to be consistent with applicable federal, state, and local wetland regulations to reduce potential impacts. As such, the less than significant impacts with mitigation from the proposed project are not anticipated to combine with other reasonably foreseeable projects to substantially affect federally or state-protected wetlands. Therefore, the proposed project's contribution would not be cumulatively considerable.~~

Cumulative Threshold 4: Would implementation of the proposed project result in substantial interference with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

All projects would be required to comply with all applicable federal and/or state regulations, such as CEQA (i.e., as determined by CDFW's California Essential Habitat Connectivity Project, the Terrestrial Connectivity Dataset, or through a local jurisdiction's General Plan EIR), and/or the California NCCP Act (for projects occurring within the MSCP), which supports the continued provision of wildlife movement corridors. If potentially significant impacts occur from a particular cumulative project, then mitigation measures would be implemented to reduce impacts to the extent feasible in compliance with CEQA.

Proposed project development would be clustered near existing residential development~~, but~~ to avoid impacting primary movement corridors within undeveloped preserve areas of the MHPA, and the golf course would remain as a buffer in many areas between development and open space. ~~Development has been situated to minimize effects~~Golf is generally considered a low-intensity activity typically involving quiet, dispersed human presence with minimal disruption to wildlife. The MSCP Plan (City of San Diego 1998) and the City of Santee Subarea Plan (2025) identify a biological core area or wildlife movement corridor along the San Diego River between Mission Trails, through Santee, east toward the community of Lakeside as shown on ~~movement corridors and undeveloped preserve areas. However, despite the limited~~Figure 3.3-10. The project would have no direct impacts~~, indirect~~ to the primary wildlife movement corridor (i.e., the San Diego River [South Channel] riparian corridor). Indirect impacts on the cormorant rookery on the project site could result in impacts on this native wildlife nursery site ~~(**Impact BIO-11**).~~. The project proposes mitigation (**MM-BIO-12**) that would ~~minimize~~reduce impacts on the rookery ~~(**MM-BIO-12**), reducing project impacts~~ to ~~a~~ less~~-~~ than~~-~~ significant ~~level.~~

~~Other reasonably foreseeable future projects in the project site are not expected to significantly affect wildlife movement corridors, habitat linkages, or wildlife nursery sites because the existing area is characterized by a primarily urban environment, featuring a variety of commercial, industrial, and residential developments. As such, the less-than-significant impacts with mitigation from the proposed project are not anticipated to combine with other reasonably foreseeable projects to substantially affect wildlife movement corridors, habitat linkages, or wildlife nursery sites~~. Therefore, the proposed project's contribution would not be cumulatively considerable.

Cumulative Threshold 5: Would implementation of the proposed project conflict with any applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance or with the provisions of an applicable adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

~~As discussed under *Threshold 5*, the proposed project would be designed to meet City of Santee Preserve Land Use Adjacency Guidelines and the City of San Diego Land Use Adjacency Guidelines. Implementation of the proposed project would not conflict with the provisions of an adopted HCP, NCCP, or other approved state, regional, or local HCP, either within the MSCP or VPHCP plan area, or in the surrounding region.~~

~~As discussed previously, any reasonably foreseeable projects, including the proposed project, that are approved within the jurisdiction of the City of Santee or the City of San Diego would be required to be consistent with the City of San Diego MSCP Subarea Plan, the City of San Diego MHPA, and each MSCP's Land Use Adjacency Guidelines. The City of Santee would ensure that the project would not conflict with the preparation of the Santee Subarea Plan. Both the Draft Santee MSCP Subarea Plan and City of San Diego MSCP Subarea Plan are also intended to provide cumulative mitigation to ensure that biological resources are sufficiently conserved under the MSCP. In addition,~~

~~the other reasonably foreseeable future projects in the project site are not expected to significantly affect sensitive biological resources protected under regional or local HCPs because the existing area is characterized by a primarily urban environment, featuring a variety of commercial, industrial, and residential developments.~~

~~Because cumulative projects and the proposed project would be required to meet or exceed MSCP requirements, and project specific mitigation measures would reduce the proposed project's impacts to below a level of significance, the proposed project would comply with the conservation goals identified in regional or local HCPs. Therefore, the proposed project's contribution would not be cumulatively considerable.~~

~~Cumulative Threshold 6:~~All projects, regardless of which local jurisdiction they occur in, would be required to comply with all applicable regional or local tree preservation policies or ordinances and with the provisions of an applicable adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

The project has demonstrated consistency with the San Diego MSCP, the ESL regulations, the City of San Diego MSCP Subarea Plan, and the City of San Diego MHPA Adjacency Guidelines. Therefore, the project would not conflict with any regional or local tree preservation policies or ordinances and with the provisions of an applicable adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan within the City of San Diego.

Although the proposed project is NAP of the draft Santee MSCP Subarea Plan, the project is consistent with the draft Santee MSCP Subarea Plan to the greatest extent feasible. The project would not compromise future implementation of the Draft Santee MSCP Subarea Plan because the City of Santee's MSCP Subarea Plan is not reliant on the golf course to meet its objectives. However, the project will conform to the Preserve Land Use Adjacency Guidelines developed in the draft plan to ensure that there are no conflicts with establishment of the subarea plan as described in Threshold 5 of Section 3.3.5, as well as all applicable Policy Objectives of the City of Santee's General Plan as described in Threshold 5. In addition, the City of Santee's Land Use Element includes guiding principles that would apply to the proposed project as they relate to the protection of the San Diego River. Refer to Threshold 3 of Section 3.3.5 for project consistency with the applicable guiding principles of the City's Land Use Element. The project would not compromise continued implementation of the MSCP Plan within other cities across San Diego County or the City of Santee because their Subarea Plans do not rely on the project site to contribute to their preserve systems. Therefore, the project would not conflict with any regional or local tree preservation policies or ordinances and with the provisions of an applicable adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan within the City of Santee.

Cumulative Threshold 6 (City of San Diego): Would the project introduce a land use within an area adjacent to the MHPA that would result in adverse edge effects?

The project site is an existing golf course and the proposed impacts would be primarily situated in areas currently mapped as developed or developed-golf course. However, the MHPA occurs within the southern portion of the proposed project site. The golf course was established in 1958 and renovated in 1989, long before the original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. The proposed development will not change any of the current uses within the portions of the site that overlap with the MHPA boundary (i.e. the golf course will continue to exist in its current state). Therefore, the proposed project is consistent with the MSCP and would be considered a compatible land use (passive recreation) per Section 1.4.1 of the MSCP.

Implementation of **MM-BIO-20** ensures full compliance with MSCP and City of San Diego biological policies by prohibiting the use of invasive plant species within landscaped areas, establishing native vegetative buffers between the golf course and riparian habitat, and preventing material storage, lighting spillover, or other adjacency-related edge effects into MHPA lands. These requirements ensure that the project does not create new adverse conditions, does not introduce invasive plants into natural open space, and remains compatible with the MSCP Subarea Plan and ESL Regulations. With implementation of **MM-BIO-20,** the project would not conflict with MHPA Adjacency Guidelines. Any projects with the City of San Diego would also be required to comply the MHPA Adjacency Guidelines. Therefore, because the proposed project complies with the MHPA Adjacency Guidelines and because it's an existing golf course and would not introduce a new land use within the MHPA, the proposed project's contribution to MHPA edge effects would not be cumulatively considerable.

Cumulative Threshold 8 (City of San Diego) ***Would implementation of the proposed project result in an introduction of invasive species of plants into a natural open space area?*** ~~***(City of San Diego supplemental threshold)***~~

~~The proposed project would not indirectly affect natural vegetation communities by introducing invasive plants. The~~The project has demonstrated consistency with the City of San Diego MHPA Adjacency Guidelines and the vegetation palette of the proposed project would not include invasive plant species, and no invasive plant species would be planted in or adjacent to the MHPA~~. Because the golf course~~, as directed by **MM-BIO-20.** Any projects with the City of San Diego would be ~~planted with a hybrid Bermuda grass species per industry standards, a 10-foot-wide buffer would be established to separate all golf turf from riparian areas. The buffer zone would be planted with native bunch grasses, which would contain the Bermuda grass within the playable golf boundary. The buffer zones are noted on the Grassing Plan for the golf course. The golf course redesign would remove existing ornamental trees, such as Brazilian peppertree, that are considered invasive. Project design features would ensure that there would be no potentially significant indirect impacts from invasive plants.~~

~~Cumulative Threshold 6 applies to projects within the City of San Diego, which are~~ required to comply ~~with the MSCP and VPHCP; thus, they would not result in significant cumulative impacts (City of San Diego 2017). The less-than-significant impacts with mitigation from the proposed project are not anticipated to combine with other reasonably foreseeable projects to result in substantial impacts from the introduction of invasive species.~~the MHPA Adjacency Guidelines. Additionally, the City of Santee also includes restrictions on invasive species immediately adjacent to preserve areas and although the draft Santee MSCP subarea plan has not been approved, this project will conform to the Preserve Land Use Adjacency Guidelines developed in the draft plan to ensure that there are no conflicts with establishment of the subarea plan. The City of Santee requires approval of any future project's landscaping plans to ensure that the applicable parts of the landscaping plant palette are consistent with Preserve Land Use Adjacency Guidelines and conformance with the City of Santee Land Use Adjacency Guidelines would be made a condition of project approval. Therefore, the proposed project's contribution to introduction of invasive plant species into natural open space areas would not be cumulatively considerable.

3.3.7 Summary of Significant Impacts

Significant impacts that could occur as a result of implementation of the proposed project are summarized in Table 3.3-~~19~~18, along with their associated mitigation measures and the level of significance after mitigation.

Table 3.3-~~19~~18. Summary of Significant Biological Resource Impacts and Mitigation Measures

Summary of Potentially Significant Impacts	Summary of Mitigation Measures	Level of Significance After Mitigation	Rationale for Finding After Mitigation
~~**Impact BIO-1. Diegan Coastal Sage Scrub.** Direct impacts on disturbed Diegan coastal sage scrub would represent a significant impact on a sensitive natural community **(City of San Diego).**~~	~~**MM-BIO-1.** Mitigate Temporary and Permanent Impacts within City of San Diego on Sensitive Upland Vegetation Communities.~~ ~~**MM-BIO-7.** Qualified Biologist to Provide Construction Monitoring.~~ ~~**MM-BIO-8.** Delineate Environmentally Sensitive Areas.~~ ~~**MM-BIO-9.** Stormwater Pollution Prevention Plan.~~ ~~**MM-BIO-10.** Speed Limits During Construction.~~	~~Less than significant~~	~~The proposed project would impact disturbed Diegan coastal sage scrub, which is a sensitive natural community. Implementation of these measures would mitigate impacts on disturbed Diegan coastal sage scrub to less than significant.~~
Impact BIO-~~2. Permanent~~1: Potential Impacts ~~**on Sensitive Communities.**~~**to Special-Status Species.** Direct and indirect impacts on ~~sensitive natural or naturalized vegetation communities would represent a significant impact **(City of Santee).**~~special-status species	**MM-BIO-~~2. Mitigate~~1.** Permanent Impacts ~~Within~~within City of San Diego on Sensitive Upland Vegetation Communities. **MM-BIO-2.** Permanent Impacts within City of Santee on Sensitive Upland Vegetation Communities. **MM-BIO-3.** ~~Mitigate~~ Permanent Impacts and ~~Certain~~ Temporary Impacts ~~Within~~within City of Santee on Sensitive Riparian and Wetland Vegetation Communities. **MM-BIO-4.** Temporary Dewatering Impacts within City of Santee and City of San Diego on Sensitive Riparian and Wetland Vegetation Communities. **MM-BIO-5.** Habitat Mitigation and Monitoring Plan (HMMP). **MM-BIO-6.** Resource Management Plan (RMP). **MM-BIO-7.** Qualified Biologist to Provide Construction Monitoring. **MM-BIO-8.** Delineate Environmentally Sensitive Areas. **MM-BIO-9.** Stormwater Pollution Prevention Plan. **MM-BIO-10.** Speed Limits During Construction. **MM-BIO-12.** Indirect Noise Impacts on Non-Listed Riparian Birds and Raptors. **MM-BIO-13**. Disturbance of Vegetation During Bird Nesting Season.	Less than significant	The proposed project would impact ~~sensitive upland vegetation communities within the City of Santee.~~special-status species. Implementation of these measures would mitigate impacts on ~~the sensitive upland vegetation communities~~special-status species to less than significant.

Table 3.3-~~19~~18. Summary of Significant Biological Resource Impacts and Mitigation Measures

Summary of Potentially Significant Impacts	Summary of Mitigation Measures	Level of Significance After Mitigation	Rationale for Finding After Mitigation
	MM-BIO-14. Mitigation, Monitoring, and Reporting Conditions for Potential Impacts to Occupied Least Bell's Vireo Habitat. **MM-BIO-15.** Crotch's Bumble Bee Pre-Construction Surveys. **MM-BIO-16.** Western Spadefoot Pre-Construction Survey. **MM-BIO-17.** Western Burrowing Owl Pre-Construction Survey. **MM-BIO-18.** Avoidance of California Gnatcatcher Take. **MM-BIO-19**. Homeowner Education Program and Signage. **MM-BIO-20**. Adjacency Guidelines. **MM-BIO-21**. Wildlife-Friendly Fencing.		
Impact BIO-~~3. Temporary~~2. Potential Impacts ~~on Sensitive~~to Natural Vegetation Communities~~.~~ and Riparian Habitat. Direct ~~temporary~~and indirect impacts on sensitive natural ~~or naturalized vegetation~~ communities ~~would represent a significant impact (City of Santee).~~or riparian habitat	**MM-BIO-~~3. Mitigate~~1.** Permanent Impacts within City of San Diego on Sensitive Upland Vegetation Communities. **MM-BIO-2.** Permanent Impacts within City of Santee on Sensitive Upland Vegetation Communities. **MM-BIO-3.** Permanent Impacts and ~~Certain~~ Temporary Impacts ~~Within~~within City of Santee on Sensitive Riparian and Wetland Vegetation Communities. **MM-BIO-4.** ~~Mitigate~~ Temporary Dewatering Impacts ~~Within~~within City of Santee and City of San Diego on Sensitive Riparian and Wetland Vegetation Communities. **MM-BIO-5.** Habitat Mitigation and Monitoring Plan (HMMP). **MM-BIO-6.** Resource Management Plan (RMP). **MM-BIO-7.** Qualified Biologist to Provide Construction Monitoring. **MM-BIO-8.** Delineate Environmentally Sensitive Areas. **MM-BIO-9.** Stormwater Pollution Prevention Plan. **MM-BIO-10.** Speed Limits During Construction. **MM-BIO-19**. Homeowner Education Program and Signage. **MM-BIO-20**. Adjacency Guidelines.	Less than ~~significant~~Significant	The proposed project would ~~affect~~impact sensitive ~~riparian and wetland vegetation~~natural communities ~~within the City of Santee.~~ and riparian habitat. Implementation of ~~**MM-BIO-3, MM-BIO-4, MM-BIO-5**~~these measures would ~~provide compensatory habitat based mitigation for~~mitigate impacts~~. **MM-BIO-6** would ensure that the long-term management of mitigation would occur. **MM-BIO-7** through **MM-BIO-10** would ensure that the~~

Table 3.3-~~19~~18. Summary of Significant Biological Resource Impacts and Mitigation Measures

Summary of Potentially Significant Impacts	Summary of Mitigation Measures	Level of Significance After Mitigation	Rationale for Finding After Mitigation
			~~project minimizes impacts on this resource. This would ensure impacts are reduced~~ to less- than-significant.
Impact BIO-~~4. Wetland~~3. Potential Impacts~~. Impacts~~ to Wetlands. Direct and indirect impacts on wetlands ~~(e.g., marsh, riparian) would represent a significant impact on state-jurisdictional wetlands.~~	**MM-BIO-3.** ~~Mitigate~~ Permanent Impacts and ~~Certain~~ Temporary Impacts ~~Within~~within City of Santee on Sensitive Riparian and Wetland Vegetation Communities. **MM-BIO-4.** ~~Mitigate~~ Temporary Dewatering Impacts ~~Within~~within City of Santee and City of San Diego on Sensitive Riparian and Wetland Vegetation Communities. **MM-BIO-5.** Habitat Mitigation and Monitoring Plan (HMMP). **MM-BIO-6.** Resource Management Plan (RMP). **MM-BIO-7.** Qualified Biologist to Provide Construction Monitoring. **MM-BIO-8.** Delineate Environmentally Sensitive Areas. **MM-BIO-9.** Stormwater Pollution Prevention Plan. **MM-BIO-10.** Speed Limits During Construction. **MM-BIO-11.** Wetland Permits. MM-BIO-19. Homeowner Education Program and Signage. MM-BIO-20. Adjacency Guidelines.	Less than significant	The proposed project would ~~affect state~~impact wetlands. Implementation of ~~MM-BIO-3, MM-BIO-4, MM-BIO-5~~these measures would ~~provide compensatory habitat based mitigation for impacts. MM-BIO-6 would ensure that the long-term management of mitigation would occur. MM-BIO-7 through MM-BIO-10 would ensure that the project minimizes impacts on this resource. Implementation of MM-BIO-11 would require the developer to obtain necessary permits and authorizations to~~ mitigate impacts on

Table 3.3-~~19~~18. Summary of Significant Biological Resource Impacts and Mitigation Measures

Summary of Potentially Significant Impacts	Summary of Mitigation Measures	Level of Significance After Mitigation	Rationale for Finding After Mitigation
			wetlands to less- than-significant ~~levels.~~.
~~**Impact BIO-5. Least Bell's Vireo Breeding Habitat.** The proposed project would have permanent direct impacts on least Bell's vireo breeding habitat (City of Santee).~~**Impact BIO-4. Potential Impacts to Wildlife Movement and Nursery Sites**. Direct and indirect impacts to wildlife movement and nursery sites	~~**MM-BIO-3.** Mitigate Permanent and Certain Temporary Impacts Within City of Santee on Sensitive Riparian and Wetland Vegetation Communities.~~ ~~**MM-BIO-4.** Mitigate Temporary Dewatering Impacts Within City of Santee on Sensitive Riparian and Wetland Vegetation Communities.~~ ~~**MM-BIO-5.** Habitat Mitigation and Monitoring Plan (HMMP).~~ ~~**MM-BIO-6.** Resource Management Plan (RMP).~~ **MM-BIO-7.** Qualified Biologist to Provide Construction Monitoring. **MM-BIO-8.** Delineate Environmentally Sensitive Areas. **MM-BIO-12.** Indirect Noise Impacts on Non-Listed Riparian Birds and Raptors. MM-BIO-~~9.~~ Stormwater Pollution Prevention Plan. ~~**MM-BIO-10.** Speed Limits During Construction.~~ ~~**MM-BIO-14.** Mitigation, Monitoring, and Reporting Conditions for Potential Impacts to Occupied Least Bell's Vireo Habitat.~~ **21**. Wildlife-Friendly Fencing	Less than significant	The proposed project would affect nurseries. Implementation of these mitigation measures would reduce ~~potentially significant direct and indirect~~ impacts ~~on habitat occupied by least Bell's vireo~~ to less-than-significant levels.
~~**Impact BIO-6. Non-listed Special Status Species Habitat.** The project would have permanent direct impacts on potentially suitable breeding habitat for special status species. The loss of habitat for these species would have a~~	~~**MM-BIO-1.** Mitigate Temporary and Permanent Impacts Within City of San Diego on Sensitive Upland Vegetation Communities.~~ ~~**MM-BIO-2.** Mitigate Permanent Impacts Within City of Santee on Sensitive Upland Vegetation Communities.~~ **MM-BIO-3.** ~~Mitigate~~ Permanent and Certain Temporary Impacts Within City of Santee on Sensitive Riparian and Wetland Vegetation Communities.	Less than significant	Implementation of these mitigation measures would reduce potentially significant ~~impacts on the habitat of non-listed special status species~~conflicts to ~~a~~ less-than-significant

Table 3.3-~~19~~18. Summary of Significant Biological Resource Impacts and Mitigation Measures

Summary of Potentially Significant Impacts	Summary of Mitigation Measures	Level of Significance After Mitigation	Rationale for Finding After Mitigation
~~potentially significant impact.~~**Impact BIO-5. Potential Conflicts to Adopted Plans or Local Policies.** Conflicts with adopted plans or local policies	MM-BIO-~~4. Mitigate Temporary Dewatering Impacts Within City of Santee on Sensitive Riparian and Wetland Vegetation Communities.~~ ~~**MM-BIO-5.** Habitat Mitigation and Monitoring Plan (HMMP).~~ ~~**MM-BIO-**~~6. Resource Management Plan (RMP). ~~**MM-BIO-7.** Qualified Biologist to Provide Construction Monitoring.~~ ~~**MM-BIO-8.** Delineate Environmentally Sensitive Areas.~~ MM-BIO-9. Stormwater Pollution Prevention Plan. ~~**MM-BIO-10.** Speed Limits During Construction.~~**MM-BIO-12.** Indirect Noise Impacts on Non-Listed Riparian Birds and Raptors. **MM-BIO-20.** Adjacency Guidelines.		~~level through implementation of habitat based mitigation and avoidance.~~ levels.
~~**Impact BIO-7. Nesting Birds.** Impacts on native or naturalized vegetation during the bird breeding season would have the potential to affect nesting birds. Any project-related activities that result in the death of nesting birds could be a violation of federal and state laws and would be a significant impact.~~ **Impact BIO-6. Potential Impacts to Biological Resources from Edge Effects.** Direct and indirect impacts to biological resources within or adjacent to the MHPA	~~**MM-BIO-12.** Minimize Indirect Noise Impacts on Non-listed Riparian Birds and Raptors.~~ ~~**MM-BIO-13.** Avoid Disturbance of Vegetation During Bird-Nesting Season.~~ ~~**MM-BIO-18.** Homeowner Education Program.~~**MM-BIO-20**. Adjacency Guidelines.	Less than significant	Implementation of ~~these~~this mitigation ~~measures~~measure would reduce potentially significant edge impacts ~~during construction activities on native vegetation and nesting birds~~ to a less-than-significant level.
~~**Impact BIO-8. Crotch's Bumble Bee.** If Crotch's~~	~~**MM-BIO-15.** Crotch's Bumble Bee Preconstruction Surveys.~~	~~Less than significant~~	~~The proposed project has the potential to~~

Table 3.3-~~19~~18. Summary of Significant Biological Resource Impacts and Mitigation Measures

Summary of Potentially Significant Impacts	Summary of Mitigation Measures	Level of Significance After Mitigation	Rationale for Finding After Mitigation
~~bumble bee were present underground during site grading, the impacts would be significant.~~			~~affect Crotch's bumble bee habitat. Implementation of **MM BIO-15** would require the developer to conduct pre-construction surveys prior to ground disturbance to mitigate impacts to a less than significant level.~~
~~**Impact BIO-9: Western Spadefoot.** If western spadefoot were present underground during site grading, the impacts would be significant.~~	~~**MM BIO-16.** Western Spadefoot Pre-construction Survey.~~	~~Less than significant~~	~~The proposed project has the potential to affect western spadefoot habitat. Implementation of **MM BIO-16** would require the developer to conduct pre-construction surveys prior to ground disturbance to mitigate impacts to less than significant.~~
~~**Impact BIO-10: Western Burrowing Owl.** If Western burrowing owl were present underground during site grading, the impacts would be significant.~~	~~**MM BIO-17.** Western Burrowing Owl Pre-construction Survey.~~	~~Less than significant~~	~~The proposed project has the potential to affect Western burrowing owl habitat. Implementation of **MM BIO-17** would~~

Table 3.3-~~19~~18. Summary of Significant Biological Resource Impacts and Mitigation Measures

Summary of Potentially Significant Impacts	Summary of Mitigation Measures	Level of Significance After Mitigation	Rationale for Finding After Mitigation
			~~require the developer to conduct pre-construction surveys prior to ground disturbance to mitigate impacts to less than significant.~~
~~**Impact BIO-11. Cormorant Rookery.** Construction activities, if they were to occur during the breeding season, would have potential to disrupt the breeding activities of double crested cormorants. Disruption or loss of breeding at this rookery would be a significant impact on a wildlife nursery site.~~	~~**MM-BIO-7.** Qualified Biologist to Provide Construction Monitoring.~~ ~~**MM-BIO-8.** Delineate Environmentally Sensitive Areas.~~ ~~**MM-BIO-12.** Minimize Indirect Noise Impacts on Non-listed Riparian Birds and Raptors.~~	~~Less than significant~~	~~The proposed project has the potential to affect a cormorant rookery, which is a wildlife nursery site. Implementation of **MM-BIO-7, MM-BIO-8,** and **MM-BIO-12** would require the developer to mitigate impacts during construction activities to the cormorant rookery to a less-than-significant level.~~
~~**Impact BIO-12. Construction Noise.** Indirect, temporary impacts on special status animal species could occur due to construction-related noise that can impact special-status animal species. These indirect, temporary impacts from noise could be~~	~~**MM-BIO-12.** Minimize Indirect Noise Impacts on Non-listed Riparian Birds and Raptors.~~ ~~**MM-BIO-13.** Avoid Disturbance of Vegetation During Bird Nesting Season.~~ MM-BIO-20. Adjacency Guidelines.	Less than significant	Implementation of ~~these~~this mitigation ~~measures~~measure would reduce potentially significant impacts ~~during construction activities on special-status animal~~to natural open

Table 3.3-~~19~~18. Summary of Significant Biological Resource Impacts and Mitigation Measures

Summary of Potentially Significant Impacts	Summary of Mitigation Measures	Level of Significance After Mitigation	Rationale for Finding After Mitigation
~~potentially significant.~~**Impact BIO-7. Potential Impacts to Natural Open Space Areas from Invasive Plant Species Introduction.** Direct and indirect impacts to natural open space areas from introduction of invasive species			space areas from invasive plant species introduction to a less-than-significant level.
~~**Impact BIO-13. Indirect Human Activity.** The proposed project would increase human activity in the vicinity of sensitive habitat. Project design features and additional measures would be needed to reduce indirect human activity impacts to a less-than-significant level.~~	~~**MM-BIO-18.** Homeowner Education Program.~~	~~Less than significant~~	~~Implementation of these mitigation measures would reduce potentially significant impacts from human activity in the vicinity of sensitive habitat during construction activities to a less than significant level.~~
~~**Impact BIO-14. Domestic Animals.** Animals associated with residential development can have a significant impact on wildlife due to increased predation. Homeowner education will be required to reduce the potential increase of domestic pets.~~	~~**MM-BIO-18.** Homeowner Education Program.~~	~~Less than significant~~	~~Implementation of this mitigation measure would help ensure the control of domestic pets and reduce this impact to a less than significant level.~~
~~**Impact BIO-15. Water Quality.** Water and sediment~~	~~**MM-BIO-9.** Stormwater Pollution Prevention Plan.~~	~~Less than significant~~	~~Implementation of this mitigation measure~~

Table 3.3-~~19~~18. Summary of Significant Biological Resource Impacts and Mitigation Measures

Summary of Potentially Significant Impacts	Summary of Mitigation Measures	Level of Significance After Mitigation	Rationale for Finding After Mitigation
~~runoff from the construction area has the potential to temporarily affect local water quality, and sediment deposition can negatively affect wetland vegetation communities. Temporary indirect impacts on sensitive wetland vegetation communities would be a potentially significant impact.~~			~~would reduce potentially significant impacts during construction activities on water quality and sensitive vegetation to a less-than-significant level.~~
~~**Impact BIO-16. Fugitive Dust.** Dust resulting from heavy equipment grading the project could settle on nearby vegetation and interfere with the photosynthetic process of native vegetation, which could be a potentially significant impact on sensitive vegetation communities.~~	~~**MM-BIO-9.** Stormwater Pollution Prevention Plan.~~ ~~**MM-BIO-10.** Speed Limits During Construction.~~	~~Less than significant~~	~~Implementation of these mitigation measures would reduce potentially significant fugitive dust impacts during construction activities on sensitive vegetation to a less-than-significant level.~~

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Appendix A1
NOP and Comment Letters

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix A2

City of Santee Environmental Checklist

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix B1
Air Quality Assessment

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix B2

Driving Range Remediation Air Quality Assessment

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Appendix B3

Intersection Operations Worksheets

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Appendix C1

Greenhouse Gas Assessment

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https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix C2
Energy Usage Analysis

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Appendix C3
Residential Solar Memo

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix D

Sustainable Santee Action Plan Project Consistency Checklist

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix E

Revised Biological Survey Report

REVISED BIOLOGICAL SURVEY REPORT
CARLTON OAKS COUNTRY CLUB AND RESORT

CITY OF SANTEE PROJECT #~~'s~~S: TM2019-1; R2019-1; DR2019-5
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ICF. 2025. *Biological Survey Report for the Carlton Oaks Country Club and Resort*. February. Amended by Dudek in July 2026. Prepared for Lennar Homes, San Diego, CA.

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Acronyms and Abbreviations

BMPs	best management practices
BSA	biological study area
CCR	Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CLOMR	Conditional Letter of Map Revision
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dBA	A-weighted decibels
ESA	Endangered Species Act
ESL	Environmentally Sensitive Lands
FEMA	Federal Emergency Management Agency
FGC	California Fish and Game Code
FR	Federal Register
GIS	geographic information system
HUC	Hydrologic Unit Code
LOMR	Letter of Map Revision
MBTA	Migratory Bird Treaty Act
MCAS	Marine Corps Air Station
MHPA	Multi-Habitat Preserve Area
MND	Mitigated Negative Declaration
MSCP	Multiple Species Conservation Program
NAP	Not a Part
NCCP	Natural Community Conservation Planning
NHD	national hydrography dataset
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHWM	Ordinary High Water Mark
PDMWD	Padre Dam Municipal Water District
project	Carlton Oaks Country Club and Resort Project
RMP	Resource Management Plan
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SCP	Scientific Collection Permit
SR-52	State Route 52
SSURGO	Soil Survey Geographic
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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Summary

Lennar Homes and Carlton Oaks Golf Course, as joint project proponents, are proposing to redevelop the Carlton Oaks Country Club into a resort with residential accessory uses. The proposed Carlton Oaks Country Club and Resort Project (project) would include a redesign of the existing Carlton Oaks golf course, construction of residential accessory uses consisting of two residential neighborhoods; redevelopment of the hotel and clubhouse features, including a pro shop; and learning center; and related roadway and utility infrastructure improvements.

The proposed project is located at 9200 Inwood Drive, which is on the south side of Carlton Oaks Drive and the east side of West Hills Parkway and is within the City of Santee and City of San Diego, in San Diego County, California. The City of Santee is the Lead Agency under the California Environmental Quality Act (CEQA) for the proposed project.

The proposed project has been identified as Not a Part (NAP) of the Santee Multiple Species Conservation Plan Subarea Plan (Subarea Plan) Area. ~~The~~Therefore, take authorization under the Subarea Plan is not available for projects occurring in the NAP areas. The applicant will seek take authorization through Endangered Species Act (ESA) Section 7 or an individual Section 10 permit. The applicant will process all required permits and adhere to all relevant regulatory requirements. Impacts on listed species will utilize standard state and federal incidental take permit processes, as applicable~~.~~, with mitigation conducted in accordance with the permitting requirements of the applicable wildlife resource agencies (i.e., USFWS and CDFW) during the permitting process. Mitigation recommendations will follow federal, state, and local rules and regulations, including ~~the California Environmental Quality Act (~~CEQA~~) and the 2018 Wildlife Agency Draft Santee MSCP Subarea Plan. For lands within the City of San Diego,~~. Project consistency with the Final Multiple Species Conservation Program Subregional Plan (MSCP~~)~~ Plan) (City of San Diego ~~Subarea~~1998), the Santee General Plan (City of ~~San Diego 1997) will apply. The format and content of this Biological Survey Report~~Santee 2003), and the draft Santee MSCP Subarea Plan (City of Santee 2025) is ~~based upon the City of San Diego Biological Guidelines~~summarized in Sections 4.5 and 4.6.

Within the City of San Diego's jurisdiction the MSCP Plan (City of San Diego 1998) and the City of San Diego MSCP Subarea Plan (City of San Diego 1997) will be adhered to with respect to impacts located within the City of San Diego as summarized in Section 4.4.

The format and content of this Revised Biological Survey Report is based upon the City of San Diego Biological Guidelines (City of San Diego 2018). Biological surveys were conducted throughout the proposed project site, within 100 feet of the proposed project site and off-site improvement areas, collectively referred to as the biological study area (BSA), covering approximately ~~212~~213 acres. The proposed project site includes the proposed hardscape development as well as the redesigned golf course and avoided wetlands. Vegetation mapping, habitat assessments, and a jurisdictional delineation were conducted within the proposed project site in 2019~~.~~ by ICF and in 2025 by Dudek. Within the BSA, focused biological surveys were conducted for the following resources: rare plants (2019 and 2022), Southwestern pond turtle (*Actinemys pallida*; trapping 2019, visual 2022), Southwestern willow flycatcher (*Empidonax traillii extimus*; 2019), coastal California gnatcatcher (*Polioptila californica californica*; 2019 and 2022), least Bell's vireo (*Vireo bellii pusillus*; 2019 and 2022), Crotch's bumble bee (*Bombus crotchii*; 2024), and western spadefoot (*Spea hammondii*; 2025). A summary of the results of these biological surveys is provided below.

The San Diego River (South Channel) is located adjacent to the southern side of the project site and within the City of San Diego's Multi-Habitat Preserve Area (MHPA). The MHPA is also designated over a small portion of the existing golf course in the southern section of lands within the City of San- Diego. Within the project site, permanent impacts to the MHPA ~~covers 12.86 acres~~cover a total of 6.96 acres of developed golf course ~~and 0.33 acres of avoided riparian habitat~~. No sensitive vegetation communities within the MHPA would be impacted as a result of the proposed project, and the overall use of the site will remain a golf course. An existing manufactured berm is also located along most of the southern and eastern boundary, generally outside the project site and within the 100-foot buffer area. No alterations are being made to the berm.

Results

Vegetation Community Results

~~Thirteen~~Eighteen vegetation communities were observed within the BSA: coastal and valley freshwater marsh, developed (including golf course), Diegan coastal sage scrub – disturbed, disturbed habitat, disturbed wetland, eucalyptus woodland, fresh water (open water), mule fat scrub – disturbed, non-native grassland, non-native riparian, non-native woodland, southern riparian scrub, southern willow scrub, spillway, and southern cottonwood-willow riparian forest (including disturbed). ~~Nine~~Ten of these are considered sensitive vegetation communities. All of the aforementioned communities were present within the City of Santee. Within the BSA within the City of San Diego, the following vegetation communities were observed: coastal and valley freshwater marsh, developed (including golf course), Diegan coastal sage scrub – disturbed, disturbed habitat, eucalyptus woodland, fresh water (open water), southern riparian scrub, and southern cottonwood-willow riparian forest (including disturbed).

Wetland Results

USACE/RWQCB/CDFW

~~Ten aquatic~~Aquatic resources within the ~~delineation area~~BSA were identified and mapped for potential USACE, RWQCB, and California Department of Fish and Wildlife (CDFW) jurisdiction. ~~At least 8.07~~Approximately 15.70 acres of non-wetland and wetland aquatic resources likely subject to USACE and 16.20 acres of RWQCB regulatory jurisdiction (i.e., are waters of the State/U.S.) occur within the delineation area (the project site~~); the full extent of USACE/). RWQCB jurisdiction was not determined within sections of NWW1 within Avoidance Areas in the northeast side of the project site, because these areas will not be affected by the project development.~~

~~*California Department of Fish and Wildlife*~~

~~There are 18.175 acres (8,012 linear feet) of streambed and riparian resources that would be subject to CDFW jurisdiction pursuant to Sections 1600–1616 of the California Fish and Game Code~~

City of San Diego Wetlands

~~All CDFW~~ The majority of the jurisdictional ~~habitat~~habitats within the BSA within City of San Diego are considered City of San Diego Environmentally Sensitive Lands (ESL) wetlands~~.~~, which total 5.76 acres. The San Diego River (North and South Channels) and adjacent riparian habitat are considered City of San Diego ESL wetlands.

Rare Plant Results

City of San Diego

Four special-status plant species were observed within the BSA within the City of San Diego: Palmer's sagewort (*Artemisia palmeri*), San Diego marsh-elder (*Iva hayesiana*), southern California black walnut (*Juglans californica* var. *californica*), and southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*). No MSCP San Diego Subarea Plan covered plant species were observed within the BSA. Specifically, no federally listed endangered San Diego ambrosia (*Ambrosia pumila*) were observed during focused surveys within the BSA in 2019 or 2022.

City of Santee

One special-status plant species, southwestern spiny rush, was observed within the BSA within City of Santee. No San Diego ambrosia were observed during focused surveys within the BSA in 2019 or 2022.

Sensitive Wildlife Species Results

City of San Diego

Potentially suitable habitat for southwestern pond turtle, California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, Crotch's bumble bee, and western spadefoot was identified within the BSA within the City of San Diego. No suitable habitat for Quino checkerspot butterfly or western burrowing owl was observed during a focused habitat assessment. No suitable breeding habitat was observed for tricolored blackbird (*Agelaius tricolor*). No suitable breeding or overwintering habitat was observed for Monarch butterfly (*Danaus plexippus*).

Focused surveys were conducted for least Bell's vireo in 2019 and 2022 and nesting least Bell's vireo determined to be present within the BSA. All suitable habitat within the BSA within the City of San Diego is considered occupied. Further, critical habitat for least Bell's vireo occurs within the San Diego River portions of the BSA.

Other focused surveys were conducted for southwestern pond turtle and coastal California gnatcatcher and these species were determined to be absent in 2019 and 2022. Focused surveys conducted for southwestern willow flycatcher determined this species to be absent from suitable habitat in the BSA in 2019. Revisions to the project footprint have avoided impacts to potential habitat for southwestern willow flycatcher. Since the project would not impact habitat for this species, surveys were not conducted during updates in 2022. Focused surveys were conducted for Crotch's bumble bee in 2024; this species was not observed in the BSA.

Five non-listed special-status and/or MSCP-covered species birds were incidentally detected during focused surveys or other biological surveys within the BSA in or adjacent to the City of San Diego: Cooper's hawk (*Accipiter cooperi*), vermilion flycatcher (*Pyrocephalus rubinus*), western bluebird (*Sialia mexicana*), yellow warbler (*Setophaga petechia*), and yellow-breasted chat (*Icteria virens*). One MSCP-covered species—southern mule deer—was observed.

Monarch butterfly (*Danaus Plexippus*) was incidentally observed foraging on site during surveys for Crotch's bumble bee in August 2024. Monarch is proposed threatened under the federal ESA. This species breeds exclusively on milkweeds (*Asclepias* spp.) and in California, may overwinter in protected groves of large trees generally within 1 mile of the Pacific coast. The proposed project site does not contain milkweed for reproduction, and does not contain suitable overwintering habitat, as

the site is in an inland valley subject to occasional winter frosts. No proposed critical habitat for this species is present on the proposed project site or anywhere in San Diego County (89 FR 100662).

Two special-status reptile and one special-status avian species were determined to have high potential to occur within the BSA within the City of San Diego but were not detected incidentally during other biological surveys. These include Belding's orange-throated whiptail (*Aspidocelis hyperythra hyperythra*), two-striped garter snake (*Thamnophis hammondii*), and white-tailed kite (*Elanus leucurus*). These represent locally common species that occur in limited ranges or species that have been affected by development. Although focused surveys were not conducted to determine the presence/absence of these species, there is a reasonable assumption that these species would periodically to frequently utilize the habitats within the BSA due to the suitability of the habitat and the local distribution of these species. Western spadefoot, a federal candidate for listing, was determined to have low potential to occur. However, because marginal habitat for western spadefoot was located, a focal survey for egg clusters and larvae was performed in 2025; the survey was negative.

City of Santee

Potentially suitable habitat for southwestern pond turtle, California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and Crotch's bumble bee was identified within the BSA within the City of Santee and focused surveys were conducted. Southwestern pond turtle, California gnatcatcher, and southwestern willow flycatcher were determined to be absent as a result of negative results from focused surveys. No suitable habitat for Quino checkerspot butterfly or western burrowing owl was observed during a focused habitat assessment. No suitable breeding habitat was observed for tricolored blackbird. No suitable breeding or overwintering habitat was observed for Monarch butterfly.

Focused surveys were conducted for least Bell's vireo in 2019 and 2022 and nesting least Bell's vireo determined to be present within the BSA. All suitable habitat within the BSA within the City of Santee, ~~except the riparian area on the west side of Residential North,~~ is considered occupied least Bell's vireo habitat. Further, critical habitat for least Bell's vireo occurs within the San Diego River portions of the BSA.

Other focused surveys were conducted for southwestern pond turtle and coastal California gnatcatcher, and these species were determined to be absent in 2019 and 2022. Focused surveys conducted for southwestern willow flycatcher determined this species to be absent from suitable habitat in the BSA in 2019. Revisions to the project footprint have avoided impacts to potential habitat for southwestern willow flycatcher. Since the project does not have potential habitat for this species, surveys were not conducted during updates in 2022. Focused surveys were conducted for Crotch's bumble bee in 2024; this species was not observed in the BSA.

Five non-listed special-status species birds were incidentally detected during focused surveys or other biological surveys within the BSA in or adjacent to the City of Santee: Cooper's hawk, vermilion flycatcher, western bluebird, yellow warbler, and yellow-breasted chat. One MSCP-covered mammal species—southern mule deer—was observed. Two special-status reptile and one special-status avian species were determined to have high potential to occur within the BSA within the City of Santee but were not detected incidentally during other biological surveys. These include Belding's orange-throated whiptail, two-striped garter snake, and white-tailed kite. Monarch butterfly was incidentally observed foraging on ornamental and wildflowers during surveys for Crotch's bumble bee; no suitable milkweed breeding habitat was observed, and this site is

unsuitable as breeding habitat. Western spadefoot, a federal candidate for listing, was determined to have low potential to occur.

Impacts and Significance

Sensitive Vegetation Communities

City of San Diego

The proposed project would impact 0.19 acres of Diegan coastal sage scrub within the City of San- Diego. All impacts would occur along the eastern shoulder of West Hills Parkway and are not within or adjacent to City of San Diego Multi-habitat Preserve Area (MHPA). ~~The proposed project would have no other impacts on~~ The project's temporary dewatering footprint overlaps 0.02 acres of sensitive ~~upland or wetland~~riparian vegetation communities (i.e. coastal and valley freshwater marsh and southern cottonwood-willow riparian) associated with the impounded portion of the San Diego River (North Channel). Dewatering activities are proposed only during the project's construction phase, and the ponded area would be rehydrated after removal of the dewatering weirs. No vegetation or tree removal, fill, or grading would occur as part of the temporary dewatering activities. The pond is an intermittent feature, drying up when water is not coming from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing variation in hydrology. Therefore, the vegetation communities located within the ~~City of San Diego.~~impounded portion of the San Diego River (North Channel) would not be significantly impacted by dewatering activities. These areas would be passively restored as directed by the project's mitigation program.

City of Santee

The proposed project would impact 0.41 acres of Diegan coastal sage scrub within the City of Santee, for a project total of 0.~~60~~61 acres of Diegan coastal sage scrub impacts. The proposed project would impact 0.~~01~~13 acres of non-native grassland (entirely within the City of Santee).

The proposed project would have a total of ~~1.30~~2.86 acres of permanent impacts on sensitive wetland and riparian vegetation communities within the City of Santee, as follows: 0.~~12~~55 acres of coastal and valley freshwater marsh, 0.29 acres of disturbed wetland, 0.~~34~~02 acres of fresh water, 0.29 acres of mule-fat scrub – disturbed, 0.~~04~~17 acres of ~~non-native riparian, 0.50~~southern willow scrub, 1.19 acres of southern cottonwood-willow riparian forest, and 0.~~30~~34 acres of southern cottonwood-willow riparian forest – disturbed.

The proposed project would temporarily impact a total of 3.~~05~~11 acres of sensitive wetland and riparian vegetation communities within the City of Santee, associated with temporary dewatering of a stretch of San Diego River (~~north channel).~~North Channel) (2.98 acres), spillway repair (0.09 acres), and the golf course rail crossing (0.03 acres). This includes 0.~~56~~54 acres of coastal and valley freshwater marsh, 2.~~43~~41 acres of fresh water, 0.05 acres of non-native riparian, and 0.~~01~~11 acres of southern cottonwood-willow riparian forest.

~~The proposed project would temporarily impact a total of 0.08 acres of sensitive riparian vegetation communities within the City of Santee associated with expansion of culvert facilities for a channel crossing. This includes 0.02 acres of mule-fat scrub, 0.01 acres of southern cottonwood-willow riparian forest, and 0.06 acres of southern cottonwood-willow riparian forest – disturbed.~~

Water and sediment runoff from the construction area has the potential to temporarily impact local water quality, and sediment deposition can negatively affect wetland vegetation communities. Erosion of sediments during rain events during construction could deposit into waterways or wetlands and negatively affect the hydrology and associated ecology of the system. Temporary indirect impacts on sensitive wetland vegetation communities would be a potentially significant impact.

Dust resulting from heavy equipment grading the project could settle on nearby vegetation and interfere with the photosynthetic process of native vegetation, which could be a potentially significant impact on sensitive vegetation communities.

Wetlands

USACE/RWQCB/CDFW

The proposed project would ~~have no impact (~~result in direct permanent impacts to 0.35 acres and temporary ~~or permanent) on~~impacts to 2.84 of USACE~~/RWQCB~~ jurisdictional ~~wetlands~~aquatic resources. The proposed project would result in direct permanent ~~loss~~impacts to 0.60 acres and temporary impacts to 2.84 acres of ~~0.289acres of USACE/~~RWQCB jurisdictional ~~non-wetland waters and 0.570 acres of permanent impact on USACE/RWQCB jurisdictional non-wetland waters.~~aquatic resources. The proposed project would result in direct ~~temporary~~permanent impacts ~~on 2.373~~to 3.75 acres ~~of USACE/RWQCB non-wetland waters.~~

~~*California Department of Fish and Wildlife*~~

~~The proposed project would have permanent direct impacts on up to 0.929 acres of CDFW vegetated streambed,~~ and ~~0.148 acres of CDFW jurisdictional riparian habitat. The proposed project would have~~ temporary ~~direct~~ impacts ~~on up to 0.758~~3.13 acres of CDFW jurisdictional ~~vegetated streambed, 2.355 acres of unvegetated streambed~~aquatic resources. The totals presented for each aquatic resource agency should not be summed due to overlap between resources. The manner in which the mitigation will be met determined during the permitting process in accordance with permitting requirements of the applicable resource agencies (i.e., USACE, CDFW, and ~~0.095 acres of CDFW riparian habitat. Impacts on wetlands would represent a significant adverse effect on state wetlands.~~RWQCB).

City of San Diego Wetlands

The proposed project would not permanently impact any ~~wetlands, including~~ City of San Diego ESL ~~Wetlands, within the~~ wetlands. The project's temporary dewatering footprint overlaps 0.02 acres of sensitive riparian vegetation communities (i.e. coastal and valley freshwater marsh and southern cottonwood-willow riparian forest) associated with the impounded portion of the San Diego River (North Channel). Dewatering activities are proposed only during the project's construction phase, and the ponded area would be rehydrated after removal of the dewatering weirs.

Dewatering activities would not require a wetland deviation from the City of San Diego~~.~~ ESL wetland regulations. No vegetation or tree removal, fill, or grading would occur as part of the temporary dewatering activities. The pond is an intermittent feature, drying up when water is not coming from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing variation in hydrology. Therefore, the vegetation communities located within the impounded portion of the San Diego River (North Channel) would not be significantly impacted by dewatering activities. These areas would be passively restored as directed by the project's mitigation program.

Sensitive Plant Species Impacts

City of San Diego

The proposed project would not impact any special-status plant species within the City of San Diego.

City of Santee

The proposed project would not impact any special-status plant species within the City of Santee.

Sensitive Wildlife Species Impacts

City of San Diego

The proposed project would not directly impact any state or federally listed wildlife or their habitat within the City of San Diego. Construction of the project could have indirect noise effects on least Bell's vireo nesting in suitable habitat within MHPA along the San Diego River. Indirect effects on nesting least Bell's vireo nesting would be a potentially significant effect.

The proposed project would not directly impact nesting habitat for any of the sensitive and/or MSCP-covered bird species observed within the BSA: Cooper's hawk, least Bell's vireo, vermilion flycatcher, western bluebird, yellow warbler, or yellow-breasted chat. Construction of the project could have indirect noise effects on these species nesting in adjacent habitat. Indirect effects on the nesting of these species would be a potentially significant effect.

MSCP San Diego Subarea Plan covered animals observed within the BSA were Cooper's hawk, western bluebird, and southern mule deer (*Odocoileus hemionus* ssp*. fuliginatus*).

Diegan coastal sage scrub found within the project footprint has low abundance and diversity of nectar resources; however, although the project site ~~does not have high~~has low potential to support nesting or foraging Crotch's bumble bee, if the species is present underground during ground disturbance, impacts on a Crotch's bumble bee nest would be potentially significant. Similarly, although the project footprint only has low potential to support western spadefoot, impacts to possible breeding and aestivating spadefoot would be potentially significant.

City of Santee

The project would have permanent direct impacts ~~of up to 0.77~~1.96 acres of suitable occupied least Bell's vireo habitat within designated critical habitat within the City of Santee, including ~~0.43~~1.50 acres of southern cottonwood-willow riparian forest (including disturbed~~)~~), 0.17 acres of southern willow scrub, and 0.~~34~~29 acres of mule fat scrub-disturbed. Loss of ~~0.77~~1.96 acres of occupied habitat would be a potentially significant impact on least Bell's vireo.

The project would have permanent direct impacts on ~~up to 0.80 acres of southern cottonwood-willow riparian forest (including disturbed)~~ potentially suitable as breeding habitat for yellow warbler, yellow-breasted chat, western bluebird, Cooper's hawk, and white-tailed kite; suitable as habitat for two-striped garter snake; and suitable as habitat for mule deer ~~(Table 4-3).~~ The loss of ~~0.80 acres of~~potential suitable breeding habitat for these species would be a potentially significant impact on special-status species.

Impacts on native or naturalized vegetation during the breeding season have the potential to kill nesting birds or their eggs or young, including special-status birds such as least Bell's vireo, yellow warbler, yellow-breasted chat, western bluebird, Cooper's hawk, and white-tailed kite. Any project

related activities that result in the death of nesting birds could be a violation of state and federal laws and would be a significant impact under CEQA.

Construction noise and activity associated with the regrading and redesign of the golf course and construction of the golf resort, if they occur during the breeding season, have potential to disrupt the breeding activities of double-crested cormorants. Disruption or loss of breeding at this rookery would be a significant impact on a wildlife nursery site.

Indirect, temporary impacts on special-status animal species could occur during project construction due to construction-related noise from such sources as clearing, grubbing, and grading. These indirect, temporary impacts from construction. noise could be potentially significant, particularly if they occur during the breeding season of special-status avian species.

The proposed project would increase human activity in the vicinity of sensitive habitat, including occupied vireo habitat, on the western and northeastern sides of the project as the existing golf course land use adjacent to the San Diego River habitat is converted to residential and commercial land uses. Project design features such as fences and retaining walls would help reduce potential indirect impacts from human activity. However, additional measures such as signage would be needed to reduce indirect human activity impacts to a less than significant level.

Animals associated with residential development can have a negative effect on wildlife. Free-ranging cats and off-leash dogs can prey on wildlife and have potential to spread zoonotic diseases to wildlife and other domestic animals. Because least Bell's vireos normally construct nests at the low height of approximately 3 feet, there is the potential for increased predation of adult and nestling least Bell's vireo by an increased abundance of free-range cats. Increased predation of special-status bird species would represent a potentially significant impact. Homeowner education shall be required to reduce the potential increase of domestic pets generated from the due to the proposed residential homes adjacent to existing open space.

Diegan coastal sage scrub and disturbed habitat found within the project footprint have low abundance and diversity of nectar resources; however, although the project site ~~does not have high~~has low potential to support nesting or foraging Crotch's bumble bee, if the species is present underground during ground disturbance, impacts on a Crotch's bumble bee nest would be potentially significant. Similarly, although the project footprint only has low potential to support western spadefoot, impacts to possible breeding and aestivating spadefoots would be potentially significant.

Mitigation Summary

Vegetation

City of San Diego

Impacts on 0.19 acres of Diegan coastal sage scrub – disturbed within the City of San Diego would be mitigated ~~through contribution into City of San Diego Habitat Acquisition Fund, as~~ described in MM-BIO-1~~. Mitigation,~~ consistent with the Upland Mitigation Ratios in the City of San Diego Biological Guidelines. Implementation of this mitigation measure would reduce impacts to below a level of significance.

City of Santee

MM-BIO-2 through MM-BIO-10 have been identified to avoid impacts on sensitive vegetation communities to the extent feasible and compensate for sensitive vegetation community impacts that cannot feasibly be avoided. Implementation of these measures would ensure that permanent and temporary impacts on sensitive vegetation communities within the City of Santee are mitigated to below a level of significance.

MM-BIO-2 provides details on the compensatory mitigation requirement for permanent impacts within City of Santee on sensitive upland vegetation communities.

MM-BIO-3 provides details on the compensatory mitigation requirement for permanent impacts and restoration of temporary impacts within City of Santee on sensitive riparian and wetland vegetation- communities.

MM-BIO-4 provides details on the ~~mitigation requirement~~restoration requirements for temporary dewatering impacts within the City of San Diego and City of Santee on sensitive riparian and wetland vegetation- communities.

MM-BIO-5 requires a ~~Habitat Mitigation and Monitoring Plan (~~HMMP~~)~~ to provide details on the restoration and enhancement of sensitive riparian and wetland vegetation communities within the City of Santee.

MM-BIO-6 requires a Resource Management Plan (RMP) to provide for the long-term management of the mitigation sites.

MM-BIO-7 requires a qualified biologist to provide construction monitoring.

MM-BIO-8 requires the delineation of Environmentally Sensitive Areas.

MM-BIO-9 ensures that the project would obtain a Stormwater Pollution Prevention Plan to control erosion, sedimentation, and preserve water quality.

MM-BIO-10 requires speed limits during construction to reduce generation of dust.

Wetlands

USACE/RWQCB ~~and California Department of Fish and Wildlife~~/CDFW

MM-BIO-11 requires that the project obtain wetland permits and authorizations from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife prior to impacts. This would ensure that the project is in compliance with state and federal water laws and that there would be no significant impact to state or federal wetlands.

Special-Status Wildlife

City of San Diego

Minimization of indirect noise impacts on sensitive riparian birds generally (MM-BIO-12) and least Bell's vireo specifically (MM-BIO-14) would ensure that the construction of the project does not have significant indirect effect on special-status bird species. Pre-construction surveys for Crotch's bumble bee (MM-BIO-15), western spadefoot (MM-BIO-16), and western burrowing owl (MM-BIO-17) would ensure that any effects on other special-status animal species would be less than significant with mitigation.

City of Santee

Mitigation for permanent and temporary impacts on habitat for special-status animal species (MM-BIO-2 through MM-BIO-5), minimization of indirect noise impacts on riparian birds (MM-BIO-12), avoidance of disturbance of vegetation during bird nesting season (MM-BIO-13), pre-construction surveys for Crotch's bumble bee (MM-BIO-15), western spadefoot (MM-BIO-16), and western burrowing owl (MM-BIO-17) would ensure that any effects on other special-status animal species would be less than significant with mitigation.

Potentially significant direct and indirect impacts on habitat occupied by least Bell's vireo ~~(Impact BIO-5)~~ would be ~~minimized~~reduced to less than significant through implementation of MM-BIO-7 through MM-BIO-10, and mitigated through implementation of MM-BIO-14. The proposed project would not result in significant unmitigated impacts on sensitive biological resources under ~~the California Environmental Quality Act~~CEQA.

Chapter 1
Introduction

1.1 Purpose of Study

The purpose of this Revised Biological Survey Report is to (1) describe the existing conditions of biological resources within the Carlton Oaks Country Club and Resort Project (project) site in terms of vegetation, jurisdictional aquatic resources, flora, wildlife, and wildlife habitats; (2) analyze the proposed project's potential impacts on biological resources and explain their significance in view of federal, state, and local laws and policies; and (3) recommend mitigation measures for potential impacts on sensitive biological resources, if necessary. Mitigation recommendations would follow federal, state, and local rules and regulations, including the California Environmental Quality Act (CEQA), the draft Santee Subarea Plan of the San Diego Multiple Species Conservation Program (MSCP) (City of Santee ~~2018~~2025), and the City of San Diego MSCP Subarea Plan (City of San Diego 1997).

This Revised Biological Survey Report is being recirculated as part of the Draft EIR to document unmapped sensitive vegetation communities and updated mapping for jurisdictional aquatic resources occurring on the project site. The Revised Biological Survey Report now includes updated biological impact calculations, as well as revisions to the impact analysis and mitigation measures to reflect this new information. New impacts to jurisdictional aquatic resources within the City of Santee are included in the recirculated Draft Environmental Impact Report (EIR). For areas within the City of San Diego, the project applicant has redesigned the golf course to avoid all permanent impacts to wetlands, and these changes are reflected on the site plan changes for the golf course.

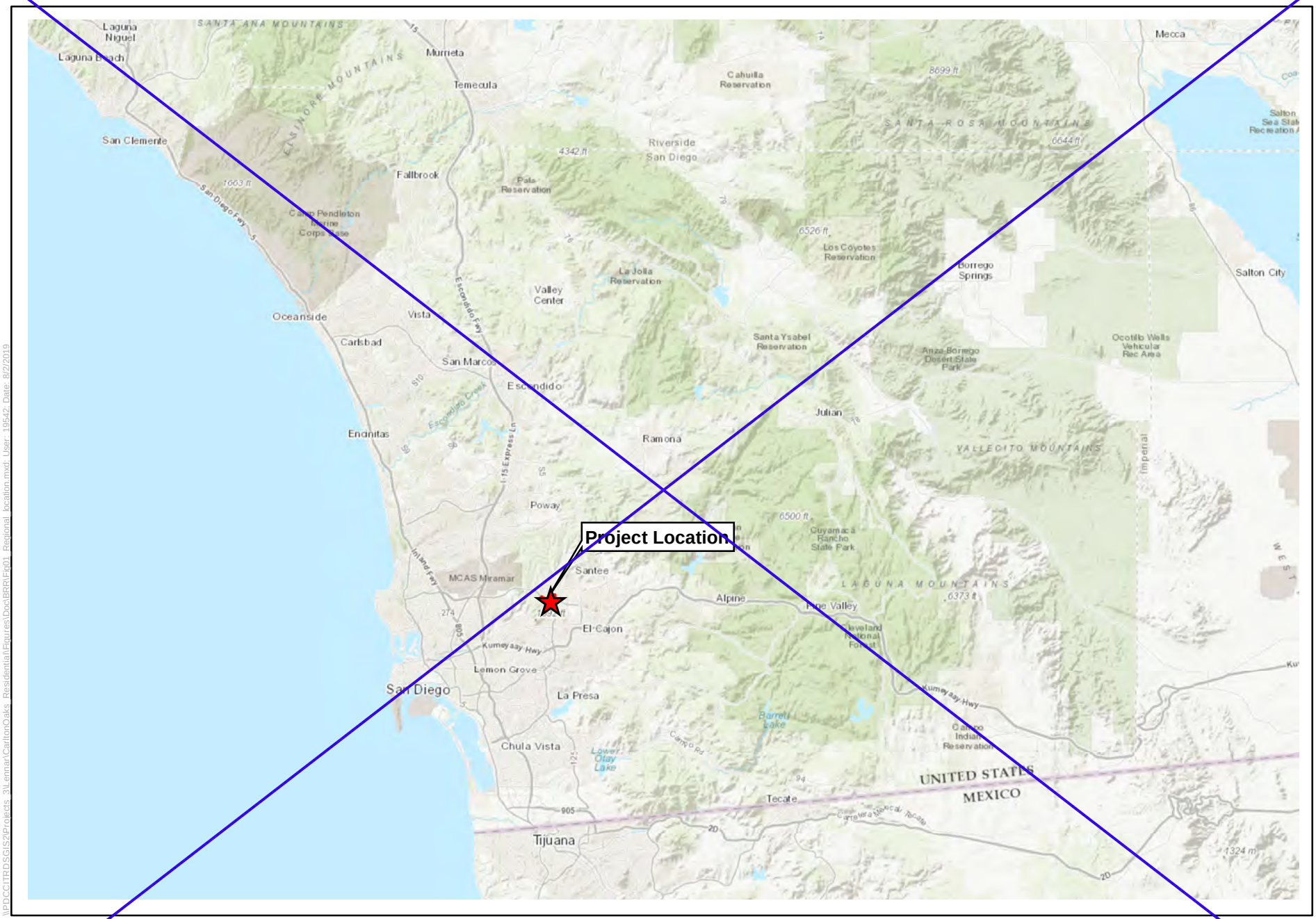
1.2 Project Location

The project site is located at 9200 Inwood Drive, which is on the south side of Carlton Oaks Drive and the east side of West Hills Parkway. The proposed project consists of approximately 165 acres of land located within the City of Santee and the City of San Diego (Figure 1). The proposed project is adjacent to State Route 52 and Carlton Oaks Drive. The project site is in Township 15S, Range 1W of the U.S. Geological Survey (USGS) "La Mesa" 7.5-minute quadrangle map (USGS 2018). The proposed project is located approximately at 32.839713°N, 117.010112 °W (Figure 2).

The biological study area (BSA) includes a 100-foot buffer around the approximately 165-acre project site and all off-site improvement areas (Figure ~~3~~3A). The project site includes the proposed hardscape development as well as the golf course redesign and avoided wetlands (Figure ~~3~~3A). The BSA is bound by residential housing to the north and by Carlton Oaks Drive on the northeast boundary. The 190-acre Santee Lakes Recreation Preserve is situated across Carlton Oaks Drive, consisting of several fish-stocked lakes, campgrounds, and semi-natural areas. Lands within the City of San Diego are covered by the MSCP San Diego Subarea Plan (City of San Diego 1997). The proposed project will not utilize the Santee MSCP Subarea Plan for Endangered Species Act (ESA)- coverage.

1.3 Existing Setting and Land Use

The project site is located along the boundary between the City of Santee and the City of San Diego, situated north of State Route 52 (SR-52) where it traverses in an east-west direction. The project site is designated as Park/Open Space (P/OS) and Planned Development (PD) by the City of Santee General Plan~~.~~ (City of Santee 2003). The area designated as Planned Development is in the northern portion of the project site, bordering the existing residential land uses. The Park/Open Space designation covers the rest of the golf course that occurs within the City of Santee immediately to the south of the Planned Development area. Per the City of San Diego General Plan~~,~~ (City of San Diego 2024), the southern portion of the project site is designated as Open Space.



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1 in= 12 miles

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Figure 1
Regional Location

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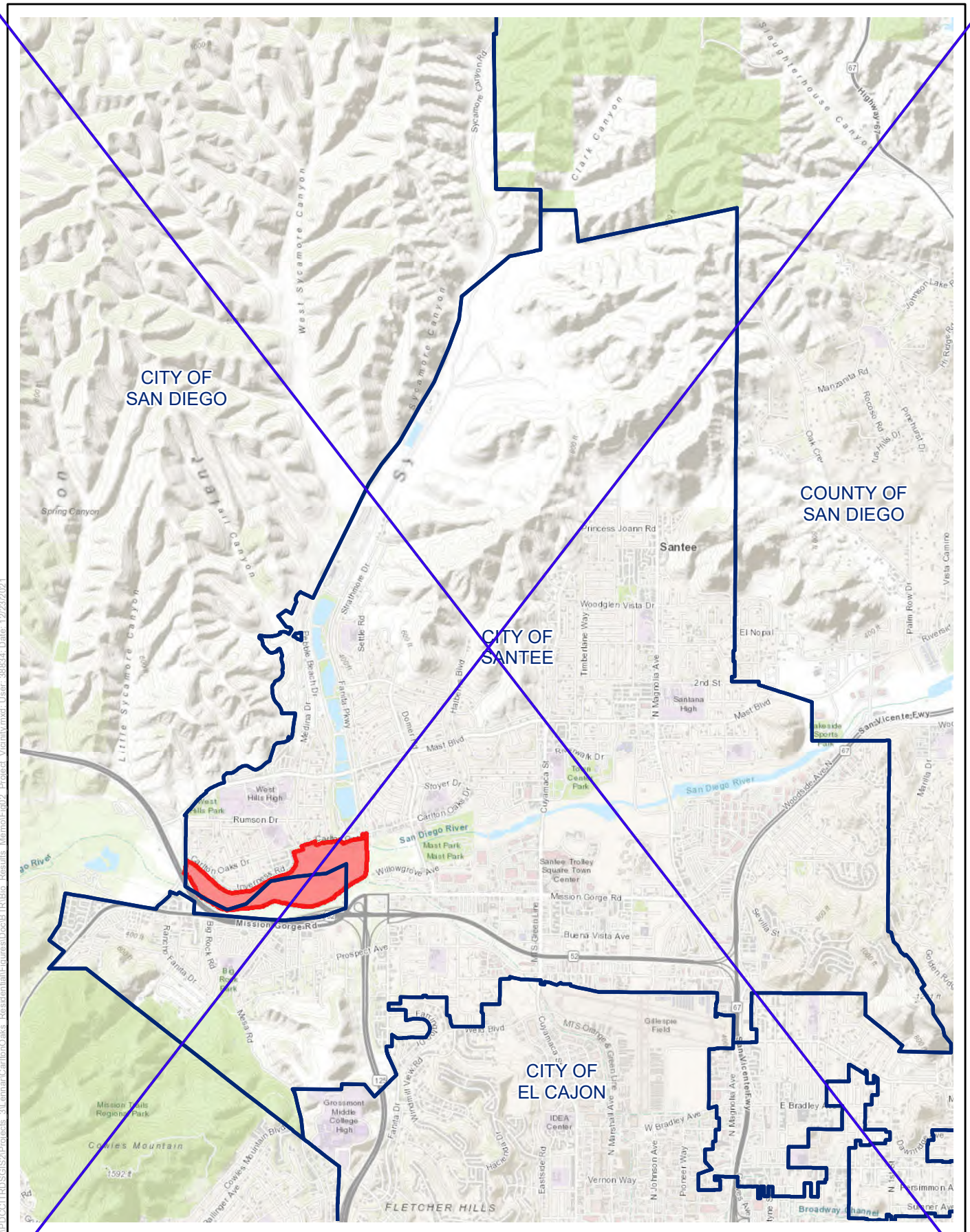

0 0.5 1 Miles

1 in = 1 mile

Figure 2
Project Vicinity

\\DOC\TRDSG\G2\Projects_3\Lennar\CarltonOaks_Residential\Figures\Doc\BTR\Bio_Results_Memo\Fig02_Project_Vicinity.mxd User: 38834 Date: 12/23/2021

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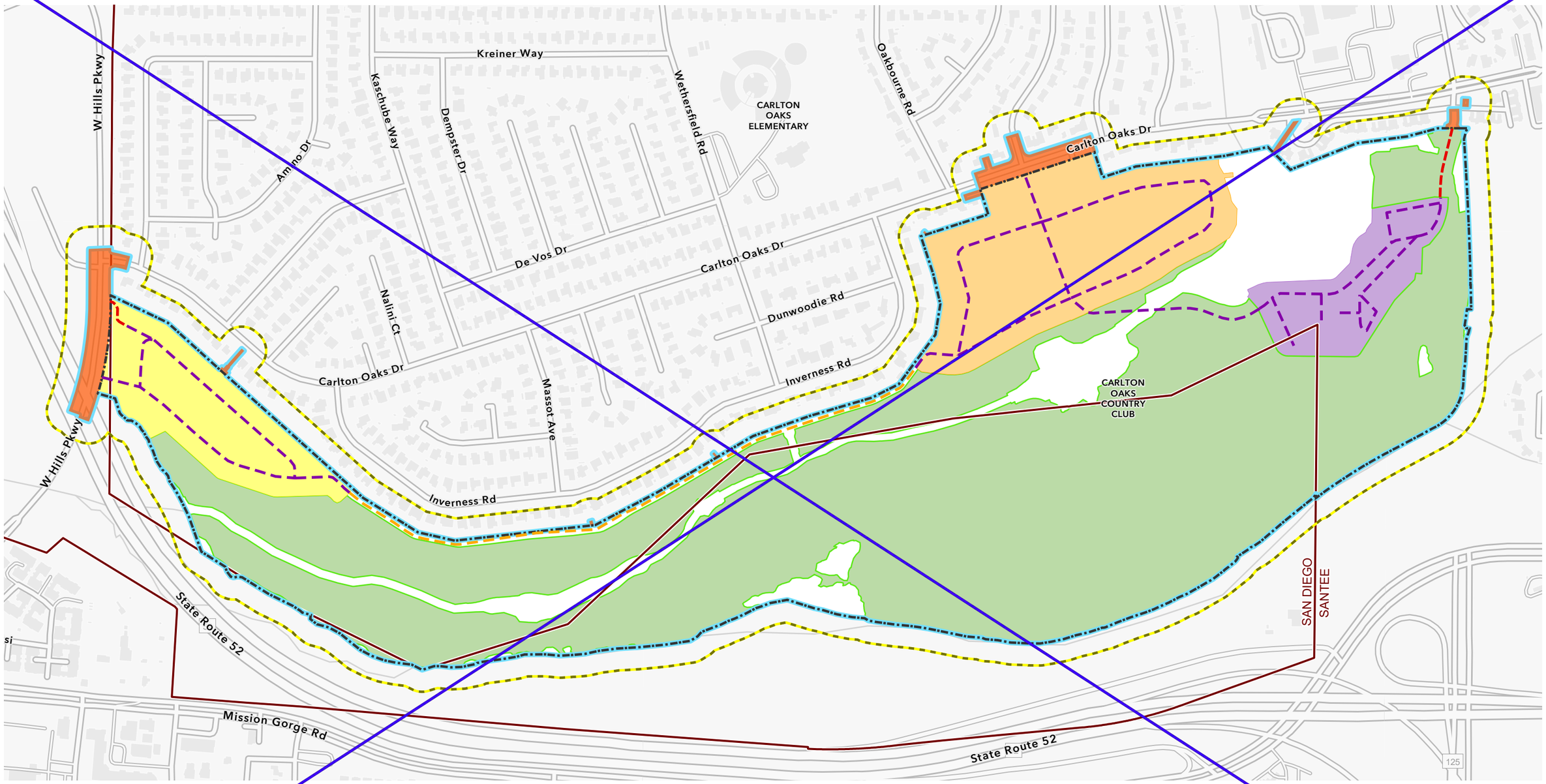

Figure 3
Proposed Project
Carlton Oaks Country Club and Resort

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The project site is currently operating as the Carlton Oaks Country Club with an existing golf course, golf driving range, clubhouse, and hotel. The golf course covers most of the project site, with the clubhouse and related structures located in the north-central portion of the project site. The golf course encompasses 145 acres, 18 holes, and has a total of 132 acres of turf irrigation with a block-type irrigation system. The golf course includes two man-made water features not associated with San Diego River (North Channel). The golf course was established in 1958 and renovated in 1989.

The developed portion of the project site currently consists of a clubhouse with a restaurant, bar, private rooms, outdoor pool, and pro shop. A 52-room hotel is located east of the clubhouse. There are also three auxiliary buildings on the project site, used for storage of golf carts and maintenance equipment. Two are in the vicinity of the clubhouse and hotel in the northern portion of the project site and one auxiliary building is in the eastern portion of the project site.

The surrounding land uses consist of a mix of residential and commercial development, transportation corridors, and open space, which contains undeveloped areas within the upstream and downstream segments of the San Diego River. The northern boundary of the project site is bound by single-family homes and condominiums. The southern and eastern boundaries of the existing golf course abut the San Diego River (South Channel) and Forester Creek. The southern boundary of the site consists of a 10- to 12-foot-tall berm that separates the river channel from the golf course and is occasionally used as an informal recreation path. The majority of the berm is outside the project area and there is a small portion of the berm that straddles the project boundary in the City of Santee. No alterations are being made to the berm and the berm will remain in place. To the west of the project site is West Hills Parkway and SR-52 with open space and general commercial west of these transportation corridors. In 2023, as part of the existing golf course's continued operations, soil extracted from another project was transported to the driving range location of the project site to create a berm to aid in golf ball retention. In total, approximately 1,000 cubic yards were moved to the existing driving range during a year-long period. A small bulldozer was used to spread the soil on the site's natural surface contours to create a berm along the outer edge of the driving range, adjacent to Sycamore Canyon Creek. No subsurface disturbance occurred as a result of the soil deposition.

Current activity at this location includes maintenance and ball catching activity. The driving range is vegetated with lawn grass; no native vegetation exists within the driving range. A 6- to 8-foot-tall chain link fence exists along the edge of the driving range, separating it from the vegetation adjacent to Sycamore Canyon Creek.

On August 19, 2024, the City of Santee issued a Notice of Violation to the landowner of the project site. The Notice of Violation identified the transportation of the dirt to the driving range without the required permit as a violation of the City of Santee's Municipal Code. The applicant was directed- to remove the transported dirt from the driving range and restore the area to preconstruction conditions to the satisfaction of the City Engineer. The appropriate regulatory agencies were also informed of the potential violation and requested that any restoration be completed prior to the raptor season of 2025.

By the end of 2024, the soil and berm were removed, and the soil was transported off site. The driving range at the project site was returned to its existing topographic contours prior to the soil deposition. The remediation work involved removing the soil and berm from the driving range to restore the site to its original condition. The 1,000 CY of soil was transported off site to a residential construction site located just north of Robertson Street and west of Day Street in the unincorporated

town of Ramona approximately 25 miles away. Equipment used for this effort involved a 966 loader, a D6 dozer, and a water equipment truck for dust control.

Although the transportation of the dirt to the driving range and the related remedial measures that were taken are not components of the currently proposed project, the City of Santee has requested that the EIR include information regarding any biological issues that may have resulted from the creation of the berm and the later removal of the soil, which is more particularly described in Appendix N.

Construction of the berm with a small dozer did not affect sensitive vegetation communities, did not appear to result in sedimentation into the riparian area, and is very unlikely to have had ~~significant~~substantial noise effects on adjacent least Bell's vireo during the nesting season~~. Nor~~, nor were there any effects from the soil removal activities. While no raptor nests are known within Carlton Oaks golf course or near to the driving range, the soil removal was completed prior to February 1, 2025, which is the beginning of the raptor nesting season, avoiding potential impacts on nesting raptor. These conclusions are discussed in Appendix N.

1.4 Project Description

Carlton Oaks Golf Course and Lennar Homes, as joint project proponents, are proposing to redevelop the existing Carlton Oaks Country Club into a resort with residential accessory uses. The proposed Carlton Oaks Country Club and Resort Project (project) would include the following components as shown on Figure 3A: (1) demolition of the existing Carlton Oaks Golf Course; (2) redesign of the golf course; (3) reconstruction of the clubhouse with a new pro shop, practice area, and learning center structure; (4) construction of a hotel and associated cottages; (5) construction of residential accessory uses consisting of two residential neighborhoods with open space areas; and (6) construction of related on-site infrastructure. ~~The project site is approximately 165~~ Additionally, the project would include: a new steel bridge, hereinafter called "Proposed Resort Bridge," over the San Diego River (North Channel) as described in detail in Section 1.4.5 and shown on Figure 3A; wildlife-friendly safety fencing around portions of the golf course (as described in Section 1.4.6); off-site improvements as described in Section 1.4.9; and on-site mitigation and restoration areas. The project site is approximately 165 acres, and approximately 3.5 acres would be associated with off-site improvement areas located in both the City of San Diego and City of Santee (off-site improvement areas). The off-site improvement areas and the project site make up the CEQA Study Area and ~~totals~~total approximately 169~~.~~ acres (Figure ~~3~~3A).

Residential homes are also planned as an accessory use to the golf course and the Carlton Oaks Country Club. The residential components of the would be constructed in the western and northern portions of the project site (Residential West and Residential North, respectively). Certain components of the proposed project, including the pro shop, cart barn, ~~bridge~~Proposed Resort Bridge, and northeastern emergency vehicle access road, would be constructed first and serve as an interim clubhouse. This would allow the golf course to be operational while the rest of the proposed project is being constructed.

Additionally trail segments are proposed to be constructed on the project site to provide connections to planned and existing trails. ~~There is an alternative segment for a portion of the San Diego River Trail that is proposed for City of Santee's consideration.~~

1.4.1 Golf Course Redesign

The proposed project would involve redesign of the existing 145-acre, 18-hole golf course to accommodate the proposed residential neighborhoods and provide an improved experience for the users of the Carlton Oaks Country Club and Resort. The redesigned 18-hole golf course would cover approximately 104 acres (approximately 64 acres within the City of San Diego and 40 acres within the City of Santee). To provide a more engaging golfing experience, the length of the golf course would be reduced from approximately 7,300 yards to 6,450 yards.

Under existing conditions, the golf course has approximately 132 acres of turf that is irrigated using an inefficient 30-year-old block-type irrigation system. The new course design would have approximately 66 acres of irrigated turf (i.e., a 50% reduction) that would use a modern, efficient irrigation system with individual head controls and native plantings, resulting in a decrease in water- usage.

Existing manufactured ponds on the golf course would be reshaped to update existing drainage patterns to improve the drainage flow and reduce the accumulation of surface water on the site during rain events. Additionally, the stream course would be widened and enhanced in some areas to increase the functionality of the river, and surrounding vegetation would be restored. Out-of-play areas around the golf course would be planted with native grasses and smaller shrubs that require little or no maintenance. A number of riparian areas within the project site would provide an environment for native birds, small animals, and aquatic plant and animal species. These areas would be avoided and retained in their current condition. The existing maintenance facility in the eastern portion of the project site would also remain in its current location.

1.4.2 Resort Facility

The clubhouse and hotel would consist of cottage-style hotel units, hotel rooms, a restaurant, event space, and other amenities. The outdoor space of the clubhouse would consist of an outdoor swimming pool and deck area, a patio, and a courtyard.

As amenities to the golf course, a 1,200-square-foot pro shop, 6,012-square-foot cart barn, 1,258-square-foot storage area, and a golf cart waiting area would be developed on the eastern end of the golf course, northeast of the golf resort. Golf carts would enter the golf course from an access ramp east of the cart barn/pro shop. In addition, a 1,258-square-foot golf learning center would be developed northeast of the pro shop. A shared surface parking lot would provide 293 parking spaces for users of the golf course, clubhouse, and hotel.

~~1.4.21.1.1 Resort Facility~~

~~The clubhouse and hotel would consist of cottage-style hotel units, hotel rooms, a restaurant, event space, and other amenities. The outdoor space of the clubhouse would consist of an outdoor swimming pool and deck area, a patio, and a courtyard.~~

1.4.3 Residential Component

The proposed residential development would be clustered into two areas: Residential West (multifamily detached homes) and Residential North (multifamily detached homes and six single-

family, single-story lots). All residential development would be accessible through privately maintained internal streets (collectively referred to as *residential development*).

1.4.3.1 Residential West

- 86 detached multifamily residential units (with a density of 9 units per acre).
- Approximately 0.25 acres of designated common usable open space.
- Flowering accent trees, community shade trees, shrubs, and groundcovers for private yards, as well as shrubs and groundcovers for public green space.

Also, a Padre Dam Municipal Water District public water main would be extended from West Hills Parkway into Residential West, crossing the proposed landscape easement.

1.4.3.2 Residential North

- 150 detached multifamily residential units (with a combined density of 8.~~1~~2 units per acre within the Planned Development zone, when including six single-family units, detailed below, that are also located within the Planned Development zone).
- Six single-family lots fronting Carlton Oaks Drive which will allow for single-story homes on minimum 6,000-square-foot lots. Five of the single-family homes within the Planned Development zone will have a minimum of 6,000-square-foot lots and one (existing) single-family home located within the R-2 zone will meet the requirements for the underlying R-2 zone.
- One existing home located at 9225 Inwood Drive has also been included within the project site to allow for minor driveway modifications. No changes to ~~this structure~~the dwelling unit are proposed.
- ~~Approximately 0.49 acres of designated common usable open space.~~
- Flowering accent trees, community shade trees, accent trees, shrubs and ground cover for slopes, private yards, and public green space.
- Potable water would be connected to an existing main line in Carlton Oaks Drive and extended into the Residential North area of the project site.

1.4.4 Landscaping

There would be a 0.439-acre landscape easement between West Hills Parkway and the western end of the Residential West development area, within the project boundary. The proposed landscaping would require an easement from the City of San Diego; the easement area falls within the jurisdiction of both City of San Diego and City of Santee.

1.4.5 Access Points

Access to Residential West would include ~~a~~two private ~~driveway~~driveways off the east side of West Hills Parkway that would require access easements across two parcels owned by the City of San Diego: these parcels cross both City of San Diego and City of Santee jurisdictions. The proposed easements would allow private and emergency access onto the proposed subdivision.

Residential North and the resort would be accessed from Carlton Oaks Drive at the intersection of Burning Tree Way, approximately 200 feet west of the existing hotel access road (Inwood Drive). Inwood Drive would be closed and replaced with curb and sidewalk. Additionally, six existing driveway aprons along the project frontage would be closed and replaced with curb and landscaping. All internal roadways would be a minimum of 26 feet wide, with the exception of the private streets that provide direct vehicular access to each of the cluster units of four units or fewer. These private cul-de-sac roads would be 20 feet wide, as allowed by the exceptions to California Fire Code (CFC) Section 503.2.1, which states the following:

> Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6,096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4,115 mm).

The City of Santee Fire Chief has determined that the 20-foot standards, as set forth in the Development Standards for access to the cluster of four units or fewer, would not impair or impede adequate emergency fire department access to the project site. The proposed project would also provide emergency access that meets current City requirements for the proposed development. A private utility maintenance road would be provided between Residential North and Residential West. Access to the golf course and resort would be provided by a private drive through Residential North from Carlton Oaks Drive southerly via ~~a new bridge~~ the Proposed Resort Bridge across the San Diego River (North Channel~~).~~), as shown on Figure 3A. The ~~bridge~~roadway is included in the permanent impact footprint and the bridge portion of the roadway would span the San Diego River (North Channel). The Proposed Resort Bridge would be 265 feet long by 36 feet wide. Under-bridge deck elevations would range from 321 to 323 feet above mean sea level, and the ground level underneath ~~ranges~~would range from 316 to 309 feet above mean sea level. At least 90% of the under-bridge clearance ~~is~~would be 8 feet or greater, with at least 30% equaling 12 feet or greater. The under-bridge area is expected to provide at least 238 linear feet of 8-foot clearance underneath during normal conditions, except when 100-year or greater flood events occur. While the ~~new bridge~~ Proposed Resort Bridge is under construction, a temporary ~~rail car~~railcar crossing (i.e., "Temporary Railcar Crossing") would be placed at an existing golf cart ~~path crossing~~bridge located west of the ~~new bridge~~Proposed Resort Bridge to provide vehicular access to the golf course~~. The~~ (Figure 3A). For the Temporary Railcar Crossing, temporary ~~rail car crossing~~steel beams and plates would be ~~replaced with a permanent~~placed on top of the existing golf cart ~~path crossing when~~bridge to allow for a road wide enough to provide access for construction equipment. The railcar, steel beams, and plates would be removed once construction is complete to allow for use of the existing golf cart bridge after construction.

Also, a 26-foot-wide private emergency access road would be provided through the existing Vista del Verde condominiums located in the northeastern corner of the project site. This emergency access would comply with the City of Santee Fire Department requirements and would be for the proposed project only and would not be open to the public. A new fence with an emergency access gate will also be erected between buildings of the existing adjacent condominium complexes. A private emergency access road would be provided in the northern corner of Residential West from West Hills Parkway.

1.4.6 Project Trail Segments

~~A multipurpose~~Multipurpose decomposed granite public ~~trail~~trails will be provided on the property on the north side of the San Diego River; it will link with existing and planned trails east and west of

the site (Project Trail ~~Segment).~~Segments on Figure 3A) within the City of San Diego and City of Santee. A portion of the Project Trail Segment ~~on the east side of the project site will begin at the entrance to Residential North at Carlton Oaks Drive, traverse through the resort and~~would be located along the southeastern border of the project, and end slightly west of the jurisdictional line between the City of Santee and the City of San Diego. This portion of the trail will link to the existing Mast Park West Trail as well as the future planned trail known as the Carlton Oaks Golf Course Segment. Safety fencing, approximately 10 feet tall, would be constructed along the Project Trail Segment adjacent to the golf course to protect hikers from errant golf balls.

A portion of the Project Trail Segment on the west side of the project site will begin at the Santee jurisdictional line and end at the property line (Station 38+60). This portion of the trail will link to the future planned trail known as the Future San Diego River Trail Carlton Oaks ~~Golf Course~~ Segment.

~~Along~~ Within the City of San Diego, outside of the Residential West boundary, a ~~graded bench (located within the Carlton Oaks Golf Course Segment~~14-foot-wide public trail (10-foot-wide decomposed granite path with 2-foot shoulders on each side) would also be provided within the easement areas that ~~will~~is proposed to be granted to the applicant by the City of San Diego as a part of this project.

~~In addition to the proposed trail alignment currently proposed through Residential North and the County Club and Resort Area, a supplemental trail offer of dedication is shown on the applicant's map should the City of Santee request this supplemental trail alignment. The supplemental trail offer of dedication starts from an area east of the Country Club and Resort parking lot to the property line of the Vista del Verde community. If the City of Santee were to request this supplemental segment, the applicant will agree to dedicate the trail alignment for potential future construction by others, at a later date, if the City of Santee determines that it desires to build this trail in the future.~~

1.4.7 100-Year Floodway Improvements

The project site is located within the regulatory limits of the San Diego River (floodplain and floodway) and receives runoff from Sycamore Canyon Creek channel, San Diego River (North Channel) as well as several storm drain outfalls from the existing developments along Carlton Oaks Drive and Mast Boulevard roadway corridors. (Figure 3B, Floodway Improvements). In addition, runoff from Forester Creek joins the San Diego River (South Channel) along the southeasterly limits of the property. Under existing conditions, the project site includes a vegetated earth berm along the southern and eastern boundaries, which directs low flows from the San Diego River and Forester Creek along the southern limits of the golf course (Appendix L of the Draft EIR). This berm will remain in place and unaltered under the proposed conditions, effectively isolating the project site from the upstream offsite areas during small storm events and ensuring that existing low-flow conditions remain unaffected by the proposed project.

The project incorporates several design features intended to protect the proposed structures and preserve the integrity of the overall river corridor, ensuring that stream functions, flood risk, erosion potential, flow velocity, and sediment transport are not adversely impacted or altered by the proposed improvements. These design features include the following: slope surface stabilization and reinforcement to prevent erosion and scour; storm drain facilities improvements within the golf course to improve drainage flow; an extension of the existing 27-inch-diamater diameter storm drain under the proposed vehicle access road located in the northeastern corner of the site, to a new

headwall and discharge onto the golf course; overflow structures for the biofiltration basins would connect to storm drain pipes and also discharge to the San Diego River; energy dissipation would be provided at all discharge locations; and post-development site drainage would be directed on site via overland flow, surface swales, curbs, gutters, and/or the private storm drain systems to modular wetland proprietary biofiltration units to address water quality requirements. All improvements would be constructed to maintain the existing flow capacity, drainage patterns, and associated natural resources, including riparian habitat (Appendix L of the Draft EIR).

The proposed grading for the clubhouse, hotel, and golf course would occur within the regulatory floodway. The golf course will be redesigned to allow greater flow conveyance during flooding events. The southeast portion of the course will be graded lower to provide additional flood storage volume, while other areas will be re-graded to remove existing hills and mounds that could otherwise impede flow. The overall course contouring will be designed with careful consideration of the San Diego River's hydraulics to ensure the project does not redirect or channelize river flows. Development associated with the proposed project would include elevating the grade of the clubhouse and hotel development area above the floodplain. The proposed hotel site has been carefully positioned and shaped to avoid interfering with the natural flow of the San Diego River (Appendix L of the Draft EIR). The Resort Area is located just upstream of where Forester Creek meets the San Diego River, which helps avoid the portion of the river where flood flows become larger. The grading of the hotel site allows floodwaters to continue flowing south without obstruction. The grading for portions of the residential development areas would be within the existing floodplain limits. A small portion of the Residential North development encroaches into the existing floodplain.

A Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) would be processed through the Federal Emergency Management Agency (FEMA) to revise the flood mapping at the project site due to the proposed alteration of the floodway. A CLOMR would need to be approved by FEMA, the City of Santee, and the City of San Diego prior to the issuance of a grading permit for the project. The CLOMR would ~~remove proposed structures from the floodplain and floodway and~~ demonstrate that, ~~if~~ built as proposed, the project would meet or exceed minimum local and federal regulations~~.~~ regarding structures within a floodplain and floodway.

1.4.8 Stockpiling Sites

The project will require the import of soil to raise the proposed resort, hotel, and residential development out of the FEMA mapped floodplain. This import of soil will most likely take place over an extended period of time prior to the start of grading.

One temporary disposal site for the stockpiling of soil is proposed. The disposal site will be located on the eastern side of the project site within the current golf course driving range and would accommodate the import of approximately 279,020 cubic yards. The eastern import access will be from Inwood Drive and be provided with temporary best management practices (BMPs) for sediment and erosion control.

To comply with state and federal water quality regulations, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared during the Final Engineering Phase for the project to design and implement the required and effective temporary sediment and erosion control BMPs. This will be in compliance with the 2022 Construction Stormwater General Permit, Order 2022-0057-DWQ, City of Santee requirements as outlined in the City of Santee's Guidelines for Surface Water Pollution

Prevention dated June 2015, the City of Santee Jurisdictional Urban Runoff Management Program (JRMP) dated July 2021, the City of San Diego Stormwater Standards dated May 2021, and the City of San Diego Jurisdictional Runoff Management Plan (JRMP) dated January 2024. The site will not be disturbed prior to having a SWPPP with an approved Notice of Intent and an effective waste discharge identification number.

1.4.9 Off-Site Improvements

The following off-site improvements would be required as part of the implementation of the proposed project:

1. Emergency Vehicle Access: The project will include the construction of a 26-foot-wide emergency vehicle access roadway, from the Vista del Verde community south to the golf course property and the developed portion of the resort. One parking spot on the Vista del Verde property may be removed but will be relocated within that property. The project also includes installation of a motorized gate and replacement of the existing chain link fence with a steel tubular fence on the boundary of the golf course property.
2. West Hills Parkway: West Hills Parkway will be widened within the existing right-of-way from Carlton Oaks Drive to approximately 700 feet south ~~to the existing bridge~~ of Carlton Oaks Drive to provide a dedicated left-turn lane into Residential West. ~~New striping will~~Updates would include installation of a ~~striped~~raised concrete median, restriping of existing painted medians, and increased width for bike lanes. The widening and installation of a raised concrete median on West Hills Parkway would be located between the project's proposed emergency access point to the north and the project's proposed driveway to the south (approximately 270 feet in length) (Figure 3A). Trees are proposed on both sides of West Hills Parkway to provide source control of stormwater, limit stormwater transport and pollutant conveyance to the collection system, restore predevelopment hydrology to the extent possible, and provide environmentally enhanced roads. This work would be located within the City of San Diego's jurisdiction and therefore would follow their standards.
3. Extension of a Padre Dam Municipal Water District (PDMWD) Public Water Main: A PDMWD water main would be extended from Carlton Oaks Drive south along West Hills Parkway and into Residential West to provide a connection to the proposed private water system.
4. Access to Residential North and the Resort Area: Access to these areas would be provided by Carlton Oaks Drive at the intersection with Burning Tree Way. This access point is approximately 200 feet west of the existing hotel access road (Inwood Drive). Inwood Drive will be closed and replaced with curb and sidewalk. Additionally, six existing driveway aprons along the project frontage will be closed and replaced with curb and landscaping along with other miscellaneous frontage improvements such as overhead power undergrounding and landscaping. Overhead power undergrounding would extend north of Carlton Oaks Drive. Potable and recycled water would be connected to existing main lines in Carlton Oaks Drive and extended into the project.
5. Drainage Improvements: Existing drainage pipes discharge to the golf course at five locations along the north subdivision boundary. All improvements will be constructed in a manner that will maintain the existing flow and drainage patterns.

    a) *An existing 42-inch storm drain discharges to the site from a headwall located approximately 15 feet off site, within a public easement (City of Santee) on an existing residential lot (Lot 17*

of Map 4402). The off-site flows will be picked up on site by proposed storm drain improvements and discharged into the San Diego River (North Channel).

b) *An existing 27-inch storm drain extends onto the project site from an existing residential lot (Lot 14 of Map 5417).* This pipe will be extended under the proposed access road to a new headwall and discharge into the San Diego River (North Channel).

c) *An existing 18-inch storm drain discharges to the site from a headwall located approximately 15 feet off site within a public easement (City of Santee) on an existing residential lot (Lot 230 of Map 6973).* The off-site flows will be picked up on site by proposed storm drain improvements and discharged onto the golf course.

d) An existing 47" x 71" storm drain discharges to the site from a headwall located approximately 20 feet off site within a public easement (City of Santee) on an existing residential lot (Lot 239 of Map 6973). The off-site flows will be picked up on site by proposed storm drain improvements and discharged onto the golf course.

e) *An existing 72-inch diameter storm drainpipe discharges to the site from the headwall located immediately off site at the north property line of Residential West.* The existing headwall includes a large concrete energy dissipator and concrete channel. These storm drain facilities are located off site on existing residential lots (Lots 679 and 680 of Map 7295) and within an existing public easement (City of Santee). The off-site flows will be picked up on site by proposed storm drain improvements and discharged onto the golf course.

6. Sewer Maintenance Hole Improvements: Three existing sewer maintenance holes are located off site within a PDMWD easement within the Vista del Verde condominium property. The need for engineered sewer manhole liners will be determined in the project design phase. All work will be limited to the public easement area.

1.5 Regulatory Setting

1.5.1 Federal Environmental Regulations

1.5.1.1 Federal Endangered Species Act

The federal Endangered Species Act (ESA) was enacted in 1973 to provide protection to threatened and endangered species and their associated ecosystems. “Take” of a listed species is prohibited except when authorization has been granted through a permit under Section 4(d), 7, or 10(a) of the act. *Take* is defined as to harass, harm, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of these activities without a permit. The U.S. Supreme Court ruled in 1995 that the term *harm* includes destruction or modification of habitat. ESA Sections 7 and 10 may authorize *incidental take* for an otherwise lawful activity (e.g., a development project), if it is determined that the activity would not jeopardize survival or recovery of the species. ESA Section 7 applies to projects where a federally listed species is present, and there is a federal nexus, such as where a federal CWA Section 404 permit (e.g., impacts on waters of the United States) is required. ESA Section 10 applies when a federally listed species is present, but no federal nexus is present.

1.5.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was enacted in 1918. Its purpose is to prohibit the killing or transport of covered native migratory birds—or any part, nest, or egg of any such bird—unless allowed by another regulation adopted in accordance with the MBTA. There is a list of species that are protected by this act, which includes almost all native non-game bird species.

1.5.1.3 Bald and Golden Eagle Protection Act

When first enacted in 1940, the Bald and Golden Eagle Protection Act prohibited the take, transport, or sale of bald eagles (*Haliaeetus leucocephalus*), their eggs, or any part of the eagle. The act was amended in 1962 to extend prohibitions to the golden eagle (*Aquila chrysaetos*). *Take* is defined by the act as being to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb."

1.5.1.4 Clean Water Act

In 1948, Congress first passed the Federal Water Pollution Control Act. This act was amended in 1972 and became known as the Clean Water Act (CWA). The CWA regulates the discharge of pollutants into waters of the U.S. Under Section 404, permits need to be obtained from the U.S. Army Corps of Engineers (USACE) for discharge of dredge or fill material into waters of the U.S. Under Section 401 of the CWA, water quality certification from the Regional Water Quality Control Board (RWQCB) needs to be obtained if there are to be any impacts on waters of the U.S.

1.5.2 State Environmental Regulations

1.5.2.1 California Environmental Quality Act

CEQA requires that biological resources be considered when assessing the environmental impacts resulting from proposed actions. CEQA does not specifically define what constitutes an "adverse effect" on a biological resource. Instead, lead agencies are charged with determining what specifically should be considered an impact. CEQA provides a checklist regarding what types of biological resources should be considered in this process.

1.5.2.2 California Department of Fish and Wildlife – Species of Special Concern

The California Department of Wildlife (CDFW) maintains a list of vertebrate animal species considered of "special concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. A Species of Special Concern is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- Is extirpated from the state or, in the case of birds, is in its primary seasonal or breeding role
- Is listed as threatened or endangered federally, but not by the state
- Meets the state definition of threatened or endangered, but has not formally been listed

- Is experiencing, or formerly experienced, serious noncyclical population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for threatened or endangered status by the state
- Has naturally small populations exhibiting high susceptibility to risk from any factor(s) that, if realized, could lead to declines that would qualify it for threatened or endangered status by the state

Impacts to Species of Special Concern are typically evaluated and mitigated within the context of an Environmental Impact Report or other document prepared pursuant to CEQA.

1.5.2.3 California Fish and Game Code Sections 3503, 3503.5, 3511, 3513

California Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA, except as provided by rules and regulations adopted by the United States Secretary of the Interior under the MBTA. Assembly Bill 454 (California Migratory Bird Protection Act) amended Section 3513 to prohibit take or possession of any migratory non-game bird as designated in the MBTA prior to 2017, except as provided by rules and regulations adopted by the United States Secretary of the Interior under the MBTA before January 1, 2017, or subsequent rules or regulations adopted pursuant to the MBTA, unless those rules or regulations are inconsistent with California Fish and Game Code. Assembly Bill 454 became operative on January 1, 2020, and became inoperative on January 20, 2025, at which time the original provisions of Section 3513 were reenacted.

1.5.2.4 California Fish and Game Code Section 4150

California Fish and Game Code Section 4150 states that a mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a non-game mammal. A non-game mammal may not be taken or possessed under this code. All bat species occurring naturally in California are considered non-game mammals and are therefore prohibited from take, as stated in California Fish and Game Code Section 4150.

1.5.2.5 Lake and Streambed Alteration Program

The Lake and Streambed Alteration Program is administered by the California Department of Fish and Wildlife (CDFW) and is found in Section 1600 et seq. of the FGC. The regulations define that an entity shall not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river or stream, or lake. The CDFW must be notified if a project would affect lake or streambed resources.

1.5.2.6 California Endangered Species Act

The California Endangered Species Act (CESA) prohibits the "take" of any species that the California Fish and Game Commission determines to be a threatened or endangered species. CESA is found in FGC Sections 2050–2116. CESA is administered by CDFW, and incidental take of listed species can be approved by the CDFW. *Take* is defined by CESA as to hunt, pursue, catch, capture, or kill, or attempt

to hunt, pursue, catch, capture, or kill. Notably, this differs from the federal Endangered Species Act- definition.

1.5.2.7 Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the California Fish and Game Commission to designate plants as "rare" or "endangered." There are 64 species of plants designated and protected as rare under the NPPA. Species designated as endangered are regulated under provisions of CESA. The NPPA prohibits take of endangered or rare native plants, but it includes some exceptions for agricultural and nursery operations, emergencies, and—after properly notifying CDFW—certain vegetation removal. It is primarily codified in FGC Section 1900 et seq.

1.5.2.8 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act is the California equivalent of the CWA. It provides for statewide coordination of water quality regulations through the establishment of the California State Water Resources Control Board and nine separate RWQCBs that oversee water quality on a day-to-day basis at the regional/local level.

1.5.2.9 Natural Community Conservation Planning Act of 1991

The Natural Community Conservation Planning (NCCP) Act is designed to conserve natural communities at the ecosystem scale while accommodating compatible land use. The CDFW is the principal state agency implementing the NCCP Program. NCCP plans developed in accordance with this act provide for comprehensive management and conservation of multiple wildlife species and identify and provide for the regional or area-wide protection and perpetuation of natural wildlife diversity while allowing compatible and appropriate development and growth. The San Diego MSCP is an NCCP and is discussed in Section 1.5.3 below.

1.5.2.10 California Coastal Act

The California Coastal Act of 1976 established the California Coastal Commission, which regulates the use of land and water in the coastal zone. The coastal zone extends up to 5 miles inland from the coast. The BSA is outside of the coastal zone and is therefore not subject to the jurisdiction of the California Coastal Commission.

1.5.3 Local Environmental Regulations

1.5.3.1 San Diego Multiple Species Conservation Program

The San Diego MSCP is a long-term regional conservation plan designed to establish a connected preserve system that protects the sensitive species and habitats within its boundaries. The MSCP covers 582,243 acres over 12 jurisdictions. The Final MSCP Subregional Plan was approved in March 1998 (MSCP Plan) (City of San Diego 1998). The combination of the MSCP Plan and the local jurisdiction's subarea plans serve as a multiple species Habitat Conservation Plan (HCP) pursuant to federal Endangered Species Act Section 10(a)(1)(B) and a NCCP pursuant to the California NCCP Act of 1991 and CESA. The participating jurisdictions and special districts are submitting plans to the U.S. Fish and Wildlife Service (USFWS) and CDFW in support of applications of permits and management authorizations to impact listed species and other species of concern. The conservation

and management responsibilities, guarantees of implementation, and corresponding authorizations for all parties are contained in Implementing Agreements between the local jurisdictions and the Wildlife Agencies (USFWS and CDFW).

Local jurisdictions implement their respective portions of the MSCP Plan through subarea plans, which describe specific implementing mechanisms for the MSCP. The City of San Diego has an approved subarea plan under the MSCP (City of San Diego 1997). The City of Santee is in the process of ~~preparing~~finalizing a subarea plan and ~~provided a~~the public review draft ~~to the wildlife agencies~~was published in ~~2018~~August 2025 (City of Santee ~~2018~~ 2025).

1.5.3.2 City of Santee

General Plan

The Conservation Element of the City of Santee's General Plan contains policies related to protection and preservation of sensitive biological resources (City of Santee 2003). The Conservation Element of the City of Santee's General Plan states that "all development proposals impacting biological resources should be consistent with the provisions of the City's future Multiple Species Conservation Program Subarea Plan and Implementing Agreement, and applicable State and Federal Regulations." The following objectives and policies are relevant to the proposed project:

- Objective 1.0: Protect areas of unique topography or environmental significance to the greatest extent possible.
- Objective 2.0: Protect floodways to reduce flood hazards, protect biological resources and preserve the aesthetic quality along water corridors.
- Objective 7.0: Preserve significant biological resources.
    - *Policy 7.1:* The City shall encourage the preservation and enhancement of significant biological resources in areas designated as permanent open space.
    - *Policy 7.2:* The City shall require that all development proposals provide appropriate mitigation for identified significant biological resources including selective preservation, sensitive site planning techniques and in-kind mitigation for identified- impacts.
    - *Policy 7.3:* The City shall require that, for all development proposals involving the setting aside of land for permanent open space either on-site or off-site, provisions are in place to ensure the long term management of the open space and biological- resources.
    - *Policy 7.4:* The City shall complete a Multiple Species Conservation Program Subarea plan that conserves a minimum of 2,600 acres in the City as permanent open space for preservation of habitats and species.
- Objective 10.0: Preserve significant natural resources, such as mineral deposits, biological resources, watercourses, groundwater, hills, canyons, and major rock outcroppings, as part of a Citywide open space system.
    - *Policy 10.1:* The City should encourage the conservation of rare or unique plants and wildlife by identifying such resources through the environmental review process and by using open space preservation, where appropriate, to preserve the resources

as a condition of a project approval, consistent with the City's future Multiple Species Conservation Program Subarea Plan.

In addition to the Conservation Element of the City of Santee's General Plan, the City of Santee's Land Use Element includes guiding principles that would apply to the proposed project as they relate to the protection of the San Diego River:

- Guiding Principle #5: Development should respect the river environment, including protection of the riparian habitat and protected species.
- Guiding Principle #6: Development should protect natural drainage, and ensure protection of water quality.

Municipal Code

The City of Santee Municipal Code includes the following provisions that are relevant to the proposed project:

Title 8 – Streets, Sidewalks and Public Property

Chapter 8.06 – Urban Forestry establishes a reasonable amount of tree cover on public and private lands in the City resulting in trees that contribute to a quality environment. Specific standards for planting, maintenance, and removal are outlined under this chapter.

Title 11 – Buildings and Construction

Chapter 11.38 – Drainage and Watercourses establishes that no obstruction or interference with watercourses or floodways unless a permit is obtained prior to such fill or alteration.

Title 13 – Zoning

Chapter 13.08 – Development Review provides development review procedures and criteria to ensure site planning gives consideration to protection of the surrounding areas from potentially adverse influences within the development.

Chapter 13.16 – Park/Open Space District provides site development standards to protect landforms, areas capable of groundwater replenishment, natural drainages and waterways, lands with biological significance (including riparian and woodland areas), areas with significant native vegetation and habitat values, and natural areas for ecological, education, and other scientific study- purposes.

City of Santee MSCP Subarea Plan (Draft)

The General Plan for the City of Santee requires that all development proposals impacting biological resources be consistent with the provisions of the City of Santee's future MSCP Subarea Plan and Implementing Agreement, and applicable state and federal regulations. Although the draft Santee MSCP Subarea Plan has not yet been approved, it is used as the guidance document for projects occurring within the City of Santee.

The proposed project has been identified as ~~Not a Part (~~NAP~~)~~ of the Subarea Plan Area. The take authorization under the Subarea Plan is not available for projects occurring in the NAP areas. The applicant will seek 'take' authorization through ESA Section 7 or an individual Section 10 permit. The applicant will process all required permits and adhere to all relevant regulatory requirements.

Impacts on listed species will utilize standard state and federal incidental take permit processes, as applicable. The format and content of this ~~biological survey report is~~Revised Biological Survey Report are based upon the City of San Diego Biological Guidelines (City of San Diego 2018).

City of Santee Preserve Adjacency Guidelines

The draft Santee MSCP Subarea Plan includes guidelines to reduce potential for impacts from development on adjacent preserves. Because the proposed project is adjacent to City of Santee-owned Preserve Lands (Mast Park West), the City of Santee will ensure that new developments adjacent to the boundaries of the Subarea Plan Managed Preserve adhere to the following adjacency guidelines:

- **Drainage** - all developed and paved areas must prevent the release of toxins, chemicals, petroleum products, excess water, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystem processes within the preserves. This will be accomplished using a variety of methods, including natural detention basins, grass swales, or mechanical trapping devices.
- **Lighting** - of all developed areas adjacent to the preserve should be directed away from the preserve wherever feasible and consistent with public safety. Low-pressure sodium lighting should be used whenever possible.
- **Noise** - uses adjacent to the preserve should be designed to minimize noise impacts. New development adjacent to the San Diego River shall incorporate noise reduction strategies in site design, landscaping, and buffer separation.
- **Invasive species** - no invasive nonnative plant or animal species can be introduced into areas immediately adjacent to the preserve. All open space slopes immediately adjacent to the preserve should be planted with native species that reflect the adjacent native habitat.
- **Fuel modification zones** shall be fully contained within the project site. Prior to implementing new developments adjacent to the Subarea Plan Preserve System, the local fire authority should review and approve proposed fuel modification treatments to ensure that no new fuel modification will be required within the preserve properties.

1.5.3.3 City of San Diego

General Plan

The City of San Diego General Plan presents goals and policies for biological resources in the Conservation Element, which generally aim to: protect and conserve the landforms, canyon lands, and open spaces; limit development of floodplains and sensitive biological areas including wetlands, steep hillsides, canyons, and coastal lands; manage and/or minimize runoff, sedimentation, and erosion due to construction activity in order to improve watershed management and water quality; manage wetland areas for natural flood control and preserve wetland areas; preserve areas within the MSCP and implement the goals and policies of the City of San Diego's MSCP SAP; support the long-term monitoring of restoration and mitigation efforts to track and evaluate changes in wetland acreage, functions, and values; and to work with private, state, and federal organizations or people in order to implement an effective wetland management system (City of San Diego 2008). The Conservation Element of the City of San Diego General Plan contains the following policies that are relevant to the proposed project:

- *Policy CE-B.1:* Protect and conserve the landforms, canyon lands, and open spaces that: define the City's urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetlands habitats; provide buffers within and between communities; or provide outdoor recreational opportunities.
- *Policy CE-B.2:* Apply the appropriate zoning and ESL regulations to limit development of floodplains, sensitive biological areas including wetlands, steep hillsides, canyons, and coastal- lands.
- *Policy CE-E.2:* Apply water quality protection measures to land development projects early in the process – during project design, permitting, construction, and operations – in order to minimize the quantity of runoff generated on-site, the disruption of natural water flows, and the contamination of storm water runoff.
    - Increase on-site infiltration, and preserve, restore, or incorporate natural drainage systems into site design.
    - Direct concentrated drainage flows away from the MHPA and open space areas. If not possible, drainage should be directed into sedimentation basins, grassy swales, or mechanical trapping devices prior to draining into the MHPA or open space areas.
    - Reduce the amount of impervious surfaces through selection of materials, site planning, and street design where possible. o Increase the use of vegetation in drainage design.
    - Maintain landscape design standards that minimize the use of pesticides and herbicides. o Avoid development of areas particularly susceptible to erosion and sediment loss (e.g., steep slopes) and, where impacts are unavoidable, enforce regulations that minimize their impacts.
    - Apply land use, site development, and zoning regulation that limit impacts on and protect the natural integrity of topography, drainage systems, and water bodies.
    - Enforce maintenance requirements in development permit conditions
- *Policy CE-G.1:* Preserve natural habitats pursuant to the MSCP, preserve rare plants and animals to the maximum extent practicable, and manage all City-owned native habitats to ensure their long-term biological viability.
- *Policy CE-G.3:* Implement the conservation goals/policies of the City's MSCP SAP, such as providing connectivity between habitats and limiting recreational access and use to appropriate- areas.
- *Policy CE-G.5:* Promote aquatic biodiversity and habitat recovery by reducing hydrological alterations, such as grading a stream channel.
- *Policy CE-H.4:* Support the long-term monitoring of restoration and mitigation efforts to trach and evaluate changes in wetland acreage, functions and values.

Municipal Code - Environmentally Sensitive Lands Regulations

Specific development regulations pertaining to sensitive biological resources exist in the Municipal Code in the Environmentally Sensitive Lands Regulations (ESL; Chapter 14, Division 1, Section 143.0141). The ESL defines sensitive biological resources as those lands included within the Multi-

-Habitat Planning Area (MHPA) as identified in the City of San Diego's MSCP) Subarea Plan (City of San Diego 1997), the Vernal Pool Habitat Conservation Plan (VPHCP)(City of San Diego ~~2018~~2019), and other lands outside of the MHPA that contain wetlands; vegetation communities classifiable as Tier I, II, IIIA or IIIB; habitat for rare, endangered or threatened species; or narrow endemic species. The City of San Diego Land Development Manual – Biology Guidelines (City of San- Diego 2018) provides guidelines to supplement the development regulation requirements.

MSCP Subarea Plan

The City of San Diego MSCP Subarea Plan describes how the City of San Diego implements its portion of the MSCP Plan. The City of San Diego subarea encompasses 206,124 acres within the MSCP study area. The proposed project consists of approximately 64.29 acres within the City of San Diego, all of which are within the subarea plan area. The documents used to implement the MSCP within the City of San Diego include the City of San Diego Subarea Plan (City of San Diego 1997), the Final MSCP Plan, and the Implementing Agreement between the City of San Diego and the Wildlife Agencies (signed July 1997). The implementing agreement is the contract between the City of San Diego and the Wildlife Agencies that ensures implementation of the subarea plan and thereby allows the City of San Diego to issue Take Permits for covered species within covered projects within its jurisdiction. The City of San Diego Subarea Plan is consistent with the MSCP Plan and qualifies as a stand-alone document to implement the City of San Diego's portion of the MSCP preserve.

The City of San Diego MHPA was developed by the City of San Diego in cooperation with the Wildlife Agencies, property owners, developers, and environmental groups. The City of San Diego's MHPA is approximately 56,831 acres and includes approximately 47,910 acres within City of San Diego jurisdiction, and additional City of San Diego-owned lands (8,921 acres) in the unincorporated areas around San Vicente Reservoir, Otay Lakes, and Marron Valley. The Preserve Design Criteria contained in the MSCP Plan and the City Council–adopted criteria for the creation of the MHPA were used as guides in the development of the City of San Diego's MHPA. The MHPA delineates core biological resource areas and corridors targeted for conservation. Within the MHPA limited development may occur. The MHPA represents a "hard line" preserve, in which boundaries have been specifically determined. The San Diego River on the southern side of the project site is located within the City of San Diego's MHPA. Portions of the existing golf course within the City of San Diego were designated as MHPA, perhaps erroneously. The proposed project would revise and restructure the existing golf course layout to a new golf course layout. Environmentally sensitive lands within the MHPA have been avoided; no sensitive vegetation within the MHPA would be removed by the proposed project.

The majority of the covered species are considered adequately conserved provided that the conditions described in "Species Evaluated For Coverage Under the MSCP" (Appendix A of City of San Diego 1997) are implemented. Appendix A of the City of San Diego MSCP Subarea Plan provides a full description of the conditions for coverage. Implementation of the conditions have been assured by incorporation of policies and/or guidelines into the appropriate section(s) of the Subarea Plan, associated land development regulations and/or biology guidelines.

Section 1.5.2 includes general management directives for all areas covered by the MSCP while Section 1.5.6 includes specific guidelines for the Eastern Area of the MSCP. The project has been designed to comply with the general management directives outline in 1.5.2. The guidelines for the Eastern Area apply specifically to East Elliott and Mission Trails Regional Park. The project will not impact these areas.

~~The guidelines are summarized below.~~

Chapter 2
Methods

2.1 Literature and Database Review

Prior to field surveys, a literature and records search was conducted to establish the existence or potential occurrence of special-status biological resources (e.g., plant or animal species) or water resources within the BSA.

The following databases and resources were reviewed:

- CDFW California Natural Diversity Data Base (CNDDB) (CDFW 2019a)
- California Native Plant Society's (CNPS') Online Inventory of Rare and Endangered Plants, 8th Edition (CNPS 2019)
- San Diego Plant Atlas (San Diego Natural History Museum [SDNHM] 2019)
- USFWS Carlsbad Fish and Wildlife Office species occurrence data (USFWS 2018)
- SanBIOS sensitive species sightings (SANDAG 2019)
- National Wetlands Inventory (NWI) database (USFWS 2019)

For the purposes of this report, species are considered to be sensitive or have special status if they meet at least one of the following criteria:

- Species listed or proposed for listing as threatened or endangered under ESA (Code of Federal Regulations [CFR], Title 50, Section 17.12 [listed plants]); 50 CFR 17.11 (listed animals); and various notices in the Federal Register (FR) (proposed species).
- Species that are candidates for possible future listing as threatened or endangered under ESA.
- Species listed or proposed for listing by the State of California as threatened or endangered under CESA (14 California Code of Regulations [CCR] 670.5).
- Plant species listed as rare under the California NPPA (FGC 1900, et seq.).
- Species that meet the definitions of "rare" or "endangered" under CEQA (State CEQA Guidelines Sections 15380 and 15125).
- Animal species of special concern to the CDFW.
- Animals that are "fully protected" in California (FGC Sections 3511 [birds], 4700 [mammals], 5050 [amphibians and reptiles], and 5515 [fish]).
- Species listed as having a California Rare Plant Rank (CRPR) of 1A (presumed extinct in California), 1B (rare, threatened, and endangered in California and elsewhere), or 2 (rare, threatened, or endangered in California, but more common elsewhere). CRPR List 1A, 1B, and 2 species are considered special-status plant species as defined in the NPPA, FGC Section 1901 or CESA, FGC Sections 2050–2098.

- Species considered CRPR List 3 (plants for which more information is needed [a review list]), or List 4 (plants of limited distribution [watch list]) (CNPS 2019). Many CRPR List 3 and List 4 species may not meet the definitions of special status as defined in the NPPA, FGC Section 1901, or CESA, FGC Sections 2050–2098, but are strongly recommended for consideration under CEQA (CNPS 2001).
- Species covered under the San Diego MSCP.

2.2 General Biological Survey and Vegetation Mapping

ICF biologists conducted field surveys in ~~April~~March through September 2019. Surveys were updated in April through August 2024. Dudek performed ~~one survey~~surveys in 2025 related to western spadefoot and to verify and update the vegetation mapping and aquatic resource delineation. Table 2-1 provides a summary of all of the biological surveys and assessments conducted within the BSA. Vegetation mapping was conducted over the entire BSA. Survey areas for special-status species were restricted to suitable habitat for those species within the BSA.

Focused surveys were conducted for the following:

- Rare plants, with a focus on San Diego ambrosia (Ambrosia pumila)
- Southwestern pond turtle (Actinemys pallida)
- Coastal California gnatcatcher (Polioptila californica californica)
- Least Bell's vireo (Vireo bellii pusillus)
- Southwestern willow flycatcher (Empidonax traillii extimus)
- Crotch's bumble bee (Bombus crotchii)
- Western spadefoot (*Spea hammondii*)

The uplands within the BSA were assessed for suitability for Quino checkerspot butterfly (*Euphydryas editha quino*) and western burrowing owl (*Athene cunicularia hypugaea*); suitable habitat was found to be missing for both. No suitable Quino checkerspot habitat was found to be present, and there were no suitable burrow resources within open habitat for burrowing owl.

Representative photographs of the site are included in Appendix A. Plant and animal species observed or otherwise detected were recorded in field notebooks. Animal identifications were made in the field by direct, visual observation or indirectly by detection of calls, burrows, tracks, or scat. Plant identifications were made in the field or in the lab through comparison with voucher specimens or photographs. The locations of special-status plant and animal species incidentally observed or otherwise detected were mapped.

A summary of methods, results, and potential impacts is included in this report. The comprehensive list of all plant species observed during all field surveys is included in Appendix B. The comprehensive list of all animal species observed or detected during all field surveys is included in Appendix C.

The results of the literature review were compiled into tables of potentially occurring special-status plant and wildlife species, and each species was analyzed for its potential to occur within the BSA. These tables were later updated according to the results of the field surveys. The results of the determinations are provided in Appendices D and E.

The following sources were referenced for taxonomy and nomenclature, including both scientific and standardized English names used in this report: Baldwin et al. (2012) and Rebman and Simpson (2014) for plants; the Society for the Study of Amphibians and Reptiles (2022) for amphibians and reptiles; American Ornithological Society for birds (Chesser et al. 2021); and Bradley et al. (2014) for mammals. The scientific binomial from the cited reference is included with the first mention of a species in the body of this report.

Table 2-1. Biological Survey Dates

Date	Survey Activity	Survey Personnel[1]
3/14/2019	Quino checkerspot butterfly habitat assessment	James Hickman
4/6/2019	California gnatcatcher	James Hickman
4/16/2019	Least Bell's vireo	Ryan Layden
4/17/2019	Jurisdictional Delineation	Lanika Cervantes, Nicole Salas
4/19/2019	California gnatcatcher	James Hickman
4/24/2019	Vegetation mapping and rare plant survey	Kelsey Dix, Shawn Johnston
4/26/2019	California gnatcatcher	James Hickman
4/30/2019	Least Bell's vireo	Ryan Layden
5/3/2019	California gnatcatcher	James Hickman
5/17/2019	Least Bell's vireo	Ryan Layden
5/24/2019	California gnatcatcher	James Hickman
5/29/2019	Least Bell's vireo	Ryan Layden
5/29/2019	Southwestern willow flycatcher	Brian Lohstroh
6/10/2019	Least Bell's vireo	Ryan Layden
6/10/2019	Southwestern willow flycatcher	Brian Lohstroh
6/24/2019	Least Bell's vireo	Ryan Layden
6/24/2019	Southwestern willow flycatcher	Brian Lohstroh
6/24/2019	Rare plant survey	Kelsey Dix, Shawn Johnston
6/27/2019	California gnatcatcher	James Hickman
7/2/2019	Southwestern willow flycatcher	Brian Lohstroh
7/8/2019	Least Bell's vireo	Ryan Layden
7/8/2019	Southwestern willow flycatcher	Brian Lohstroh
7/22/2019	Least Bell's vireo	Ryan Layden
9/3/2019	Southwestern pond turtle	Will Kohn
9/4/2019	Southwestern pond turtle	Will Kohn
9/5/2019	Southwestern pond turtle	Will Kohn, Marcus Goncalves
9/6/2019	Southwestern pond turtle	Will Kohn
3/11/2020	Jurisdictional Delineation mapping refinement	Meris Guerrero
12/7/2021	Jurisdictional Delineation mapping refinement	Meris Guerrero
12/21/2022	Vegetation mapping	Shawn Johnston
4/28/2022	Rare plant survey	Shawn Johnston, Alix Fowler
5/9/2022	Least Bell's vireo	Ryan Layden
5/20/2022	California gnatcatcher, western pond turtle visual	Brian Lohstroh
5/23/2022	Least Bell's vireo	Ryan Layden
5/27/2022	California gnatcatcher, western pond turtle visual	Brian Lohstroh
6/3/2022	California gnatcatcher, western pond turtle visual	Brian Lohstroh

Date	Survey Activity	Survey Personnel[1]
6/7/2022	Least Bell's vireo	Ryan Layden
6/8/2022	Rare plant survey	Shawn Johnston, Alix Fowler
6/14/2022	California gnatcatcher	Brian Lohstroh
6/21/2022	Least Bell's vireo	Ryan Layden
6/21/2022	California gnatcatcher	Brian Lohstroh
6/29/2022	California gnatcatcher	Brian Lohstroh
6/29/2022	Mitigation site assessment	Alix Fowler, Dick Rol
7/8/2022	Least Bell's vireo	Ryan Layden
8/9/2024	Crotch's bumble bee habitat assessment	Brian Lohstroh
8/16/2024	Crotch's bumble bee survey	Brian Lohstroh, Antonette Gutierrez
8/26/2024	Crotch's bumble bee survey	Brian Lohstroh, Antonette Gutierrez
8/30/2024	Crotch's bumble bee survey	Brian Lohstroh, Antonette Gutierrez
3/30/2025	Western spadefoot survey	Brock Ortega[2]
~~1.~~		
8/19/2025	Rookery assessment	Brock Ortega[2]
9/1/2025	Vegetation mapping refinement	Brock Ortega[2]
9/8/2025	Jurisdictional Delineation mapping refinement	Anna Touchstone, Katie Dayton, Megan Minter[2]

Notes:

[1] All surveys performed by ICF unless otherwise noted.

[2] ~~.~~ Survey performed by Dudek.

2.2.1 Vegetation Mapping

ICF botanists Shawn Johnston and Kelsey Dix conducted vegetation mapping within the BSA on April ~~-~~ 24, 2019, by walking meandering transects and observing from selected vantage points that allowed 100% visual coverage of the BSA. Updates to the ICF vegetation mapping were conducted by Dudek in September 2025.

Vegetation communities were classified based on the dominant and characteristic plant species, in accordance with the Holland classification system (1986), as modified by Oberbauer et al. (2008). Vegetation mapping was completed with Apple iPad devices using the ESRI Collector application. Digital aerial imagery for the BSA was loaded into ESRI Collector, which allowed for the digital mapping of vegetation polygons over aerial imagery in the field.

All plants observed within the BSA were identified to the species level (including subspecies or variety, as applicable) using *The Jepson Manual: Vascular Plants of California Second Edition* (Baldwin et al. 2012) and recorded (Appendix B). Plant common names followed the *Checklist of the Vascular Plants of San Diego County, 5th Edition* (Rebman and Simpson 2014) if the common names were not provided in Baldwin et al. (2012).

2.3 Special-Status Plant Survey Methods

ICF botanists Shawn Johnston and Kelsey Dix conducted focused surveys for special-status plant species within the BSA on April 24 and June 24, 2019 (Table 2-1). Mr. Johnson is very experienced with identifying the plant species of southern San Diego County; no permits are required for this work. The survey on June 24, 2019, included a focus on inspecting the BSA for San Diego ambrosia, a federally endangered plant known from the San Diego River floodplain. Surveys were repeated in 2022 within all suitable habitat for rare plants. ICF botanists Shawn Johnston and Alix Fowler conducted rare plant surveys on April 28 and June 8, 2022. Shawn Johnston conducted a reference site visit at a population of San Diego ambrosia during the week of May 16, 2022, and determined that the species would be readily observable during early June if it were present within the BSA.

Surveys were conducted in accordance with survey protocols set forth by *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2000); *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018); and *CNPS Botanical Survey Guidelines* (CNPS 2001). Soil maps and vegetation maps were reviewed to identify areas with higher potential to support special-status plant species.

The locations of special-status plants were mapped with ESRI Collector software on an Apple iPad and uploaded to ArcGIS Online. Subsequent to the field survey, data were brought into geographic information system (GIS) for analysis.

2.4 Special-Status Animal Survey Methods

In 2019, ICF biologists conducted protocol-level surveys for southwestern pond turtle, coastal California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher within suitable habitat for each of the species. No suitable breeding habitat for tricolored blackbird (*Agelaius tricolor*) exists in the BSA, so no surveys were determined to be necessary to determine the absence of this species. In March 2019, ICF conducted a habitat assessment for Quino checkerspot butterfly (Quino) and found no suitable habitat; therefore, the species was considered to be absent and no surveys were required. Details of the habitat assessment for Quino is described in Section 2.4.1. ICF conducted a review for suitable burrowing owl habitat while performing other studies. This review included searching for appropriately sized burrows or crevices that were 4 inches or larger in diameter within open habitats (i.e., not densely vegetated habitat). No suitable burrows were found; therefore, the species was considered to be absent, and no surveys were required. In 2022, ICF repeated protocol-level surveys for coastal California gnatcatcher and least Bell's vireo and conducted focused visual surveys for southwestern pond turtle. The 2022 survey update for least Bell's vireo included suitable habitat previously surveyed in 2019, excluding San Diego River south of the golf course. San Diego River was excluded from the survey because CNDDB data (CDFW 2022) and the 2019 survey results show San Diego River (South Channel) to be consistently occupied by least Bell's vireo; therefore, San Diego River is considered occupied habitat. The proposed project does not propose any direct impacts within San Diego River (South Channel). ICF conducted four focused surveys for Crotch's bumble bee in potentially suitable habitat within the BSA in August 2024. In 2025, Dudek performed an egg cluster and larvae survey within suitable breeding habitat in the BSA. Details of the survey methodology for southwestern pond turtle, coastal California

gnatcatcher, least Bell's vireo, southwestern willow flycatcher, Crotch's bumble bee, and western spadefoot are discussed in the following sections.

2.4.1 Quino Checkerspot Butterfly Habitat Assessment

The BSA is within the geographical limits of the Recommended Quino Survey Area, as described within the USFWS *Quino Checkerspot Butterfly Survey Guidelines* (USFWS 2014). ICF biologist James Hickman conducted a habitat assessment for the federally endangered Quino checkerspot butterfly (Quino) on March 14, 2019 (Table 2-1). Mr. Hickman possesses a valid USFWS 10(A)1(a) recovery permit to conduct protocol surveys for Quino and is experienced with this species' habitat requirements. The Guidelines recommend site assessments to determine if a project site contains areas where surveying for Quino is recommended. Site assessments involve conducting a field survey of the site and mapping excluded areas. Excluded areas include developed areas and closed-canopy woody vegetation, including forests, riparian areas, shrublands, and chaparral.

As the BSA consists of a golf course and other developed areas, ponds, and riparian areas that are unsuitable to support Quino, the entire site was determined to be entirely excludable habitat and no surveys were recommended.

2.4.2 Burrowing Owl Habitat Assessment

The BSA is within the range for western burrowing owl, and individuals have occasionally and rarely been found within the vicinity. Western burrowing owl is a covered species under the Draft City of Santee Subarea Plan. Preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils that also include suitably sized burrows of 4 inches or greater in size (CDFW 2012). ICF, while performing the suite of other technical studies, also systematically surveyed the BSA for the presence of 4-inch or greater burrows within suitable habitat. Excluded areas included developed areas and closed-canopy woody vegetation, including forests, riparian areas, shrublands, and chaparral.

Because the BSA consists of a golf course, other developed areas, ponds, and riparian areas that are devoid of burrows and unsuitable to support burrowing owls, the entire site was determined to be entirely excludable, and no surveys were recommended.

2.4.3 Southwestern Pond Turtle

The ponds within the survey area have intermittent hydrology (dry out during some summers). While pond turtles require permanent waters, visual and trapping surveys were conducted to provide further information regarding distribution of this species. ICF biologist William Kohn (Scientific Collection Permit [SCP] #3387) conducted southwestern pond turtle trapping on September 3 through 6, 2019 (Table 2-1). He was assisted by biologist Marcus Goncalves on September 5. Trapping was conducted based on the recommended guidelines provided by the *USGS Western Pond Turtle (Emys marmorata) Trapping Survey Protocol for the Southcoast Ecoregion* (USGS 2006a). Visual surveys for turtles were conducted opportunistically between trap deployments and trap checks, and generally followed recommended guidelines provided by the *USGS Western Pond Turtle Visual Survey Protocol for the Southcoast Ecoregion* (USGS 2006b).

Prior to the trapping survey, the study's trapping plan was submitted to Laura Patterson and Tim Hovey at CDFW for review and approval. On August 20, 2019, Ms. Patterson and Mr. Hovey provided

written approval of the trapping plan prior to initiation of the study. Trapping was conducted in Pond A, which is associated with San Diego River (North Channel) and was created by a weir that impounds the creek. Prior to the trapping effort, all gear and traps were decontaminated using a chlorine bleach solution. The survey utilized floating hoop-style turtle traps that measure approximately 3 feet in diameter by 5 feet long, with a 2-inch mesh size, which were held open with two PVC poles. Two empty 1-gallon plastic jugs were attached to each trap for floatation to allow for any turtles to have a space in which to breathe, while keeping the trap funnel entrance submerged. The traps were baited with canned sardines in oil. The traps were set in the afternoon of the first day and checked the following morning. The traps were then redeployed and checked in the afternoon. The surveys were conducted over 4 days and 3 nights. Trapping would have been stopped if a pond turtle was captured. Traps were removed at the conclusion of the study.

Data collected during trap deployments and at trap checks included: GPS location, date and time, weather conditions, water and air temperatures, and identification of all species captured. The *Turtle Trapping Study in Support of Carlton Oaks Residential Project* report is included as Appendix F.

Visual surveys for western pond turtle were repeated in 2022 over all suitable habitat within the BSA. ICF biologist Brian Lohstroh conducted visual surveys on May 20, May 27, and June 3, 2022 (Table 2-1) following the visual survey protocol (USGS 2006b).

2.4.4 Coastal California Gnatcatcher

ICF biologist James Hickman conducted six protocol-level presence/absence surveys for coastal California gnatcatcher in accordance with the *Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Guidelines* (USFWS 1997). Mr. Hickman possesses a valid USFWS 10(A)1(a) recovery permit to conduct protocol surveys for California gnatcatcher and is experienced with this species' habitat requirements. Surveys were conducted on April 6, 19, and 26, May 3 and 24, and June 27, 2019 (Table 2-1). Surveys were conducted within all potential habitat within the project site and a 500-foot buffer from the project site.

The six surveys were conducted at least 1 week apart between 6:00 a.m. and 12:00 p.m. Surveys were not conducted during periods of excessive or abnormal heat, wind, rain, fog, or other inclement weather. Methods included slowly walking through the vegetation with frequent stops to listen and play recorded coastal California gnatcatcher vocalizations. During each visit, a recorded vocalization was broadcast at least once in all potential habitat at distance intervals of approximately 75 to 100 feet. The 2019 USFWS survey report is included in Appendix G.

ICF repeated protocol level surveys for coastal California gnatcatcher in 2022. ICF biologist Brian Lohstroh conducted six protocol-level presence/absence surveys on May 20 and 27, and June 3, 14, 21, and 28, 2022 (Table 2-1). Surveys were conducted within all potential habitat within the project site and a 300-foot buffer from the project site. Surveys were conducted during appropriate times and conditions to detect the species. The 2022 USFWS survey report is included in Appendix G.

2.4.5 Least Bell's Vireo

ICF biologist Ryan Layden conducted eight protocol-level surveys for least Bell's vireo following the guidance in *Least Bell's Vireo Survey Guidelines* (USFWS 2001) in 2019. Mr. Layden is an avian biologist familiar with the song, calls, scolds, and plumage characteristics of adult and juvenile least Bell's vireo. The survey protocol to determine presence/absence of least Bell's vireo does not

require that the surveyor have a federal 10(A)1(a) permit, as long as vocalization tapes are not used. Riparian habitat within the BSA was determined to be suitable breeding habitat for this species and was designated as the survey area. The survey area was inspected eight times within the least Bell's vireo breeding season between April 16 and July 22, 2019 (Table 2-1).

The eight surveys were conducted at least 10 days apart and were conducted between 7:00 a.m. and 11:00 a.m. (Table 2-1). Surveys were not conducted during periods of excessive or abnormal heat, wind, rain, fog, or other inclement weather. All visits were performed during morning hours prior to 11:00 a.m., when vireos are most active, and included frequent stops to look for individuals and listen for vocalizations (songs and/or scolds). All vireo detections (e.g., vocalization points, areas used for foraging) were recorded to estimate location and extent of territories. A list was compiled of all bird species observed or detected following the taxonomy in *Online Checklist of North American Birds* (Chesser et al. 2021). The USFWS survey report is included in Appendix H.

ICF repeated surveys for least Bell's vireo in 2022. Protocol-level surveys were previously conducted in suitable habitat within the project boundary and 100-foot buffer in 2019 (Appendix H). These surveys determined that the San Diego River to the south of the golf course and the riparian area in the northeastern side of the proposed project were occupied by least Bell's vireo during the breeding season.

The 2022 survey update included suitable habitat previously surveyed in 2019, excluding the San- Diego River south of the golf course. San Diego River (South Channel) was excluded from the survey as CNDDB data (CDFW 2022) and the 2019 survey results show the San Diego River (South Channel) to be consistently occupied by least Bell's vireo and therefore the San Diego River (South Channel) is considered occupied habitat. The Project does not propose any direct impacts within the San Diego River (South Channel).

The project proposes impacts to riparian habitat on the northeastern side of the proposed project (associated with an emergency access road to the project site) and the habitat in the north-central associated with a storm-drain outfall. The remainder of the potentially suitable habitat would not be directly impacted by the proposed project. Because of the City of Santee recommendation for 3:1 mitigation for both occupied and unoccupied riparian habitat (following the guidance in the ~~2018 Wildlife Agency~~2025 Draft Santee MSCP ~~subarea plan~~Subarea Plan) and previous information on the wide distribution of least Bell's vireo within the San Diego River, only five surveys (instead of eight) were conducted during this 2022 update of 2019 surveys. Surveys were conducted during appropriate times and conditions. The 2022 USFWS survey report is included in Appendix H.

2.4.6 Southwestern Willow Flycatcher

ICF biologist Brian Lohstroh conducted five protocol-level surveys for southwestern willow flycatcher following the survey protocol in *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher* (Sogge et al. 2010). Mr. Lohstroh is an avian biologist holding a USFWS 10(A)1(a) recovery permit (TE-063608-6) to conduct breeding season presence/absence surveys for southwestern willow flycatcher. Riparian habitat within the BSA was determined to be suitable breeding habitat for this species and was designated as the survey area. Mr. Lohstroh conducted one survey within the first survey period (May 15–31, 2019), two within the second survey period (June 1–24, 2019), and two within the third survey period (June 22–July 17, 2019) (Table 2-1). Southwestern willow flycatcher surveys were not conducted concurrently with least

Bell's vireo surveys by the same biologist; a second biologist conducted the vireo portion on any given southwestern willow flycatcher survey date.

The five surveys were conducted at least 5 days apart and were concluded before 10 a.m. (Table 2-1). Surveys were not conducted during periods of excessive or abnormal heat, wind, rain, fog, or other inclement weather. During each survey, the surveyor approached each site and listened for spontaneously singing flycatchers. If flycatchers were not heard during the initial listening period, the surveyor broadcast digital willow flycatcher songs from a smart phone device for 10–15 seconds, then listened for approximately 1 minute for a response. This procedure was repeated every 20–30 yards throughout the site. The USFWS survey report is included in Appendix H.

Surveys were conducted in 2019 in potentially suitable habitat within the BSA. The project has been revised to avoid direct impacts to all potentially suitable habitat for southwestern willow flycatcher. Because of the lack of direct impacts to suitable habitat surveys were not updated in 2022.

2.4.7 Crotch's Bumble Bee

ICF biologists conducted four protocol-level surveys for Crotch's bumble bee (Table 2-1). Although the survey visits did occur during the colony active period for Crotch's bumble bee (April through August), which is determined to provide the highest detection probability, the survey schedule did not strictly adhere to the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023). The *Survey Considerations* recommend that three on-site surveys take place, ideally spaced 2-4 weeks apart to span a range of dates and account for variability in resource use and floral resource phenology. Due to Project-related schedule constraints, only two of the ~~four~~three surveys met the protocol requirements and were spaced ~~7, 10, and 4 days~~approximately 2 weeks apart. (The first survey was spaced two weeks apart from the third survey and the second survey was spaced more than two weeks apart from the fourth survey.) However, a total of four surveys from August 9 to August 30, 2024 (Table 2-1~~).~~) were conducted. The ~~fourth~~additional survey ~~visit was added to~~visits provide a wider range of dates and help compensate for the lack of strict adherence to the Survey Considerations of providing three surveys 2-3 weeks apart.

The surveys were conducted passively, using visual and photographic identification of foraging bumblebees. The surveyors also used 8 x 42 or similar power binoculars to assist with visual identification. No bumblebee captures were made during the surveys. Passive surveys for Crotch's bumble bee have been shown to be effective in Southern California because trained, experienced biologists can readily differentiate Crotch's bumble bee from the other potentially occurring *Bombus* species in the field live (often with the aid of binoculars) or by studying photographs of observed, uncaptured bumblebees (AECOM 2023a, 2023b). Both Mr. Lohstroh and Ms. Gutierrez have more than 20 years of experience performing focused surveys for other flying insects, such as Quino checkerspot butterfly, for which they hold current U.S. Fish and Wildlife Service permits. The surveyors also attended a Crotch's bumble bee-focused training in 2023 and passed an associated Crotch's bumble bee identification test (AECOM 2023a, 2023b). In addition, they have surveyed for the species at numerous other sites with positive Crotch's bumble bee identification in 2023 and 2024.

2.4.8 Western Spadefoot

A Dudek biologist conducted a single-pass survey for western spadefoot egg clusters and larvae within suitable breeding habitat in the BSA (Table 2-1). The survey consisted of reviewing all water bodies within the BSA, including the golf course water features, irrigation basin, San Diego River northern tributary, San Diego River (south of the berm), and standing water areas inside and adjacent to the berm. Western spadefoots were known to be breeding elsewhere throughout their range (Brock Ortega, Dudek, pers. obs. from Santee, Fallbrook, and Riverside County, 2025) at the time of the survey, so the timing was deemed to be appropriate. There are no official survey protocols for western spadefoot, and the habitat was deemed marginal; therefore, a single-pass egg/larvae survey was deemed appropriate. San Diego River north, the golf course water features, and the irrigation ponds were either densely vegetated, too deep, or included steep constructed sides, in addition to bullfrogs and predatory fishes, which made them unsuitable for western spadefoots. The San Diego River south of the berm included possible backwater areas that could be suitable, but mostly consisted of fast-flowing water that occasionally flowed into deeper pools before continuing. These areas were not searched and were mostly considered to be of marginal suitability. Two pooled water areas, likely the result of depressions combined with river overflow, were present in the western third of the BSA directly adjacent to the berm. At least one area was within the City of San Diego, and the western-most area was at the boundary of both San Diego and Santee.

At the two possible breeding locations, the survey consisted of walking the perimeter while looking for evidence of western spadefoot. This included searches for the diagnostic egg clusters and larvae. The eastern pooled area included a dense covering of duck weed (*Lemna* sp.) that had to be pushed aside to review the water column. The western pooled area was freely visible and included numerous aquatic plants that spadefoot could attach egg clusters to, making it the most suitable feature. After confirming that no egg clusters or larvae were present at the margins or as far as could be seen from the edge, the biologist walked into the pooled areas to further search the interior.

2.5 Jurisdictional Delineation

2.5.1 Project Research

Prior to the field visit, aquatic resources were identified using high-resolution aerial imagery overlaid with GIS data from the NWI (USFWS 2019) and national hydrography dataset (NHD) (USGS 2019). These were used to identify the locations of potential areas of USACE, RWQCB, and CDFW jurisdiction within the biological study area, which is the project site and a 100-ft buffer. In addition to the regionally available data (e.g., NWI and NHD) the approximate location and extent of aquatic resources were identified based on observed vegetation types, topographic changes, and visible drainage patterns. The proposed project is located within the 100-year floodway and floodplain of the San Diego River.

2.5.2 Field Investigation

On April 17, 2019, ICF delineators, Lanika Cervantes and Nicole Salas, conducted the jurisdictional field delineation within the project site; a survey buffer was not included in the field jurisdictional delineation. The jurisdictional delineation was later updated in 2025 as described below. The large,

internal avoidance area along Sycamore Canyon Creek and San Diego River (North Channel) in the northeastern portion of the project site was not delineated, as these areas would not be impacted by the proposed project. The survey was conducted on foot, and jurisdictional limits were recorded using high-resolution aerial photographs (1 inch = 100 feet) and an Apple iPad using ESRI Collector with a sub-meter accuracy GPS unit. Existing conditions were documented as field notes and site photographs (Appendix I).

ICF delineator Meris Guerrero conducted a site visit on March 11, 2020, to direct land surveyors from SB&O to record the precise limits of riparian areas along the SANDAG trail adjacent to the western residential areas. Ms. Guerrero conducted a site visit on December 7, 2021, to confirm and refine CDFW jurisdiction along the borders of development along the northern side of the project- site.

In September 2025, Dudek biologists visited the project site to verify and update the aquatic resource delineation previously prepared by ICF. While the mapping remained largely the same, an additional previously un-delineated portion of the site in the northeast corner was included in the 2025 delineation as well as a previously un-mapped wetland in the northwest portion of the site. Furthermore, the extents of riparian habitat have changed since 2019 and were re-delineated by Dudek. The aquatic resources delineation was conducted by Dudek biologists Megan Minter, Anna Touchstone, and Katie Dayton on September 8, 2025. An addendum memo to the project's approved aquatic resource delineation report was prepared to summarize the findings of the 2025 site visit and has been appended to this report as part of Appendix I.

2.5.3 Jurisdictional Methods

2.5.3.1 -U.S. Army Corps of Engineers Jurisdiction

Potential waters of the U.S., including wetlands, were evaluated for the presence of Ordinary High Water Mark (OHWM) indicators and/or wetland vegetation, soils, and hydrology. Lateral limits of non-wetland waters of the U.S. were delineated based on the presence of OHWM indicators using field indicators pursuant to *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States: A Determination Manual* (USACE 2008a). Arid West Ephemeral and Intermittent Stream OHWM Datasheets were completed for all applicable non-wetland waters and are provided in Appendix I. The project was also analyzed for potential wetlands using the methodology set forth in the 1987 *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987) and the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b). Vascular plants were identified using *The Jepson Manual: Vascular Plants of California* Second Edition (Baldwin et al. 2012) and *The National Wetland Plant List* (Lichvar et al. 2016).

Within the proposed project site, in areas located outside of the OHWM that exhibited evidence of wetland hydrology and/or hydrophytic vegetation, wetland sample soil pits were dug to examine soil color and texture and determine the wetland boundary. A paired-pit technique (i.e., one sample point with wetland results paired with one sample point with non-wetland results) was used to identify the wetland boundary. Wetland Determination Forms are provided in the Updated Jurisdictional Delineation Report (Appendix I). An Approved Jurisdictional Determination for the non-jurisdictional golf course ponds was obtained from USACE in June 2020 and is included in Appendix J.

2.5.3.2 State Water Resources Control Board/Regional Water Quality Control Board Jurisdiction

Evaluation of state jurisdiction followed guidance from Section 401 of the CWA and typically follows the same jurisdictional areas as USACE. In addition, the proposed project site was reviewed for resources potentially regulated under the Porter-Cologne Act (i.e., isolated features). Isolated vernal pools, isolated wetlands, or other aquatic features not normally subject to federal regulation did not occur within the proposed project site; therefore, no further evaluation pursuant to the Porter-Cologne Act was necessary.

2.5.3.3 California Department of Fish and Wildlife Jurisdiction

CDFW jurisdiction typically includes surface water features with a defined bed and bank. Evaluation of potentially jurisdictional areas followed the guidance of standard practices by CDFW personnel. Briefly, CDFW jurisdiction was delineated by measuring outer width and length boundaries of potentially jurisdictional areas (e.g., lakes or streambeds), consisting of the greater of either the top of bank measurement or the extent of adjacent associated riparian or wetland vegetation.

2.5.3.4 City of San Diego Jurisdiction

City of San Diego wetlands include areas within the city limits characterized by any of the following conditions:

- Areas with naturally occurring wetland vegetation communities.
- Areas that have hydric soils or wetland hydrology but lack naturally occurring vegetation communities because of human activities.
- Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands.
- Areas within the Sensitive Coastal Overlay Zone.

The City of San Diego wetland definition is intended to differentiate between naturally occurring wetlands and wetlands intentionally created by human actions. Areas demonstrating wetland characteristics, which are artificially created, are not considered wetlands by the City of San Diego wetland definition.

2.5.3.5 City of Santee Jurisdiction

The City of Santee does not evaluate jurisdictional areas differently than those outlined above.

Chapter 3
Environmental Setting

Chapter 3 describes the results of biological surveys conducted for the proposed project, including the physical and biological characteristics of the site.

3.1 Physical Characteristics

This section describes existing topography, land use, hydrology, and soils associated with the BSA for the proposed project.

3.1.1 Topography

The project site is located immediately north of State Route 52 (SR-52) and the San Diego River and is immediately south of Carlton Oaks Drive. The topography in the project site is relatively flat as it is within the historical floodplain of the San Diego River.

3.1.2 Hydrology

The proposed project site lies within the Lower San Diego River watershed (Hydrologic Unit Code [HUC] 10: 1807030407) and contains the lower San Diego River and Forester Creek. These drainages are all characterized by vegetated streambeds and riparian habitats that run through urban areas. The southern boundary of the project site parallels the San Diego River (South Channel). Sycamore Canyon Creek enters the site in the northeast merges with the San Diego River (North Channel), then traverses the existing golf course, joining the San Diego River (South Channel) in the southwest side of the project site.

The drainages are surrounded by open space. Single-family residences are scattered throughout the area, while concentrated low-density residential uses surround the project site. Developed areas along the San Diego River are likely causing drainages to receive additional inputs via urban runoff. The lower San Diego River and Forester Creek are listed as impaired waterbodies under Section 303(d) of the CWA.

No vernal pools or similar ephemeral, seasonally inundated depressions were found to occur within the BSA.

3.1.3 Soils

There are no steep slopes or rock outcrops in the BSA. The Natural Resources Conservation Service (NRCS) has mapped the following soil series as occurring within the delineated jurisdictional waters based on the Soil Survey Geographic (SSURGO) database (USDA/NRCS 2006): Redding, Riverwash, Visalia, and Vista.

Soil series included within the SSURGO mapping unit (San Diego County Area; CA638) are described below based on the official soil descriptions provided by the U.S. Department of Agriculture

(USDA/NRCS 2012). Soil maps for the project site are included in the Jurisdictional Delineation Report (Appendix I).

3.1.3.1 Redding

The Redding soil series (RdC, ReE, RhC, and RhE) consists of well- or moderately well-drained soils that are found on terraces. The soils are formed from alluvium derived from mixed sources. The extent of the soils occurs along the northern and eastern edge of Central Valley in California. They occur in elevations from 130 to 1,000 feet and have slopes from 0% to 30%. They have very low to high run off and very slow to slow permeability.

This soil series is not identified as hydric soils for San Diego County (USDA/NRCS 2011).

3.1.3.2 Riverwash

The Riverwash soil series (Rm) consists of excessively drained soils found on drainage ways. The soils formed from sandy, gravelly, or cobbly alluvium procured from mixed sources, and occur in elevations from 700 to 2,900 feet and at 0% to 4% slopes. They have negligible runoff.

This soil series is identified as hydric for San Diego County (USDA/NRCS 2011). Riverwash soils have potential to support wetland communities, including riparian forest. Vegetation mapping and jurisdictional delineations determined the extent of wetland communities within the BSA.

3.1.3.3 Visalia

The Visalia soils series (VbB and VbC) consists of well-drained soils that are typically associated with alluvial fans and floodplains. The soils are formed from alluvium derived from granite and occur in elevations ranging from 0 to 4,000 feet and at 5% to 15% slopes. This soils series is identified as hydric for San Diego County (USDA/NRCS 2011).

3.1.3.4 Vista

The Vista soil series (VbB, VbC, and VvD) consists of moderately deep, well-drained soils that formed in material weathered from decomposed granitic rocks. Vista soils are on hills and mountainous uplands and have slopes of 2% to 85%. This soil series is not identified as hydric for San Diego County (USDA/NRCS 2011).

3.2 Biological Resources

3.2.1 Vegetation Communities and Land Cover Types

~~Thirteen~~Eighteen vegetation communities or ~~landcover~~land cover types were observed within the BSA. Table 3-1 provides the amount of each vegetation community present within the BSA, which are illustrated in Figure 4. The majority of the BSA (~~80~~78%) is made up of developed and disturbed habitats, with the remainder (~~20~~22%) consisting of natural habitats. The vegetation communities and land cover types observed were: coastal and valley freshwater marsh, developed (including golf course, culvert, spillway), Diegan coastal sage scrub – disturbed, disturbed habitat, disturbed wetland, eucalyptus woodland, freshwater (jurisdictional ponds), mule-fat scrub – disturbed, non-

native grassland, non-native riparian, southern cottonwood-willow riparian forest (including disturbed), southern willow scrub, and southern riparian scrub.

Table 3-1. Existing Vegetation Communities and Land Cover Types Within the Biological Study Area (Acres)

Vegetation Community	Project Site: On-Site	Project Site: Off-Site	100-Foot Buffer	Total in BSA
Natural Habitats:				
Coastal and Valley Freshwater Marsh	~~0.68~~1.21	0	0	~~0.68~~1.21
Diegan Coastal Sage Scrub – disturbed	0.50	0.11	0	0.61
Disturbed Wetland	0.~~15~~32	0	0	0.~~15~~32
Fresh Water	5.31	0	0	5.31
Mule Fat Scrub – disturbed	0.~~52~~49	0	0.35	0.~~87~~83
Non-Native Grassland	0.~~09~~15	0	0.02	0.~~11~~17
Non-Native Riparian	0.~~31~~12	0	0	0.~~31~~12
Southern Cottonwood-Willow Riparian Forest	~~4.93~~9.29	~~-~~0	~~18.94~~19.12	~~23.87~~28.42
Southern Cottonwood-Willow Riparian Forest – disturbed	~~8.76~~9.19	~~-~~0	0.69	9.~~45~~88
Southern Willow Scrub	0.17	0	0	0.17
Southern Riparian Scrub	0	~~-~~0	0.98	0.98
Natural Habitat Subtotals*:	**~~21.25~~26.75**	**0.11**	**~~20.98~~21.15**	**~~42.36~~ 48.01**
Developed and Other Landcover:				
Developed	7.~~21~~11	3.~~38~~30	~~21.00~~22.28	~~31.59~~32.69
Developed – Golf Course	~~128.86~~124.80	0.02	0.~~83~~91	~~129.69~~125.73
Developed – Culvert	<0.01	0	0	<0.01
Developed – Spillway	0.03	0	0	0.03
Disturbed Habitat	~~5.65~~0.52	0.12	0.~~48~~45	~~6.25~~1.09
Eucalyptus Woodland	~~1.32~~0.10	0.~~02~~	0.~~34~~08	~~1.68~~0.17
Non-Native Woodland	5.57~~0.52~~	<0.01	0.10	~~0.52~~5.67
Developed and Other Subtotals~~*~~:	**~~143.56~~138.13**	**3.~~52~~44**	**~~22.65~~23.73**	**~~169.73~~165.38**
Project Totals*:	**164.~~82~~88**	**3.~~63~~55**	**~~43.62~~ 44.88**	**~~212.07~~213.39**

Note:
*Totals may not match sum of categories because of rounding.

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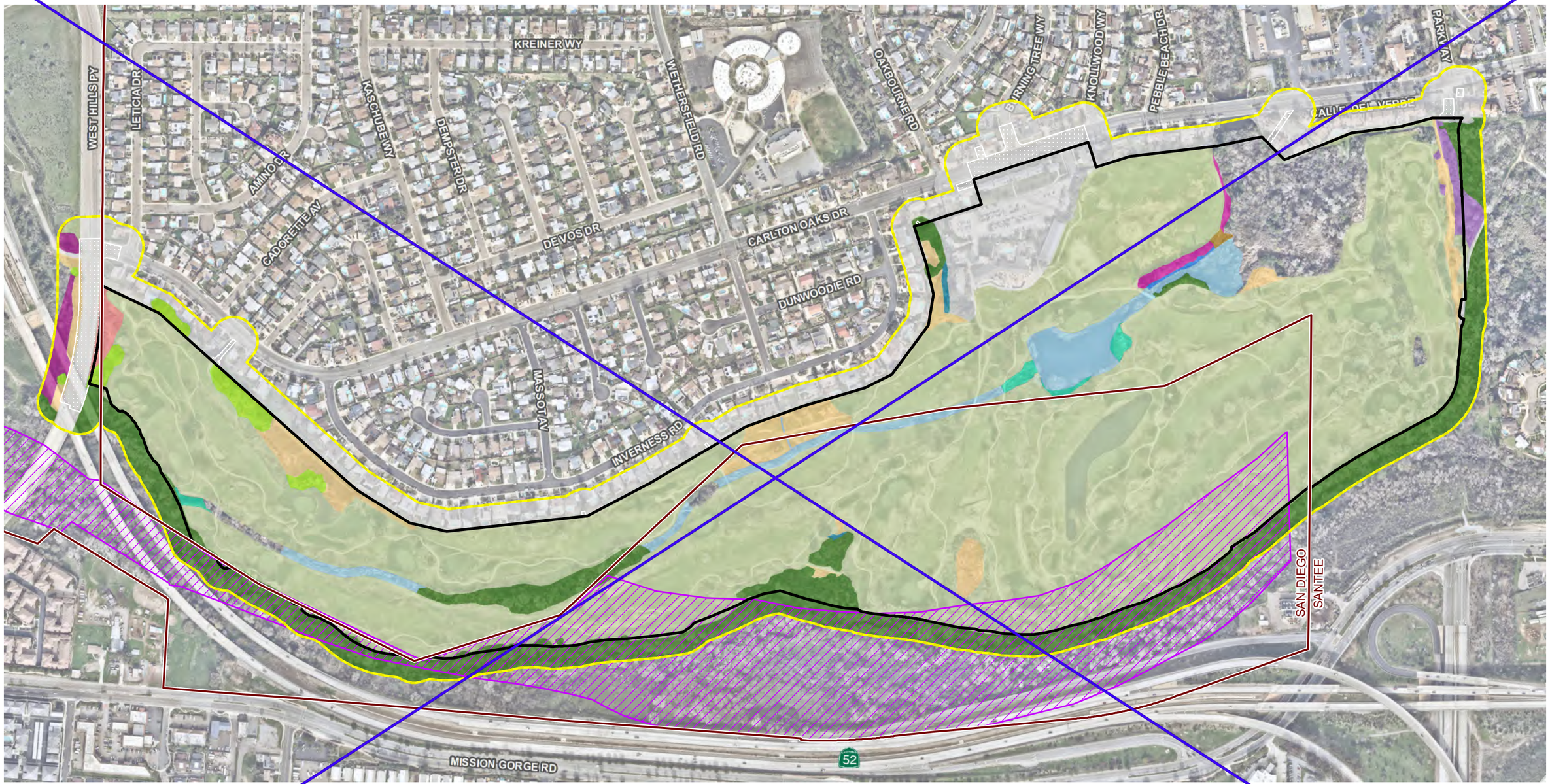

Project Site
Biological Study Area
Offsite Areas
City of Santee/San Diego Municipal Boundary
City of San Diego MHPA

Vegetation Classification (Holland Code)

Riparian
- Mule Fat Scrub-disturbed (63310)
- Non-Native Riparian (65000)
- Southern Cottonwood-Willow Riparian Forest (61330)
- Southern Cottonwood-Willow Riparian Forest-disturbed (61330)
- Southern Riparian Scrub (63320)

Wetlands
- Coastal and Valley Freshwater Marsh (52410)
- Disturbed Wetland (11200)
- Fresh Water (64140)

Upland
- Diegan Coastal Sage Scrub-disturbed (32500)
- Non-Native Grassland (42200)
- Non-Native Woodland (79000)

Developed/Disturbed
- Developed (12000)
- Developed-Golf Course
- Disturbed Habitat (11000)
- Eucalyptus Woodland (79100)

Source: Biological Resources-ICF (2022); Imagery-SANGIS (2023)

0 225 450 Feet
1 in = 450 feet

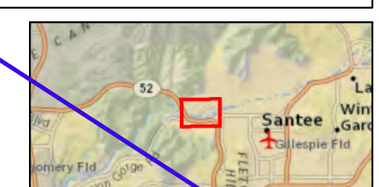

Figure 4
Vegetation Communities
Carlton Oaks Country Club and Resort

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The existing golf course is ~~primarily considered~~ "developed," consisting of managed ornamental plantings, including trees and fairways, which were dominated by exotic and ornamental grasses. Areas of jurisdictional wetlands were identified as their applicable vegetation community. San Diego River (North Channel) runs through the golf course and has associated riparian habitat, including coastal and valley freshwater marsh, southern cottonwood-willow riparian forest, and disturbed wetland. ~~Within the golf course there were also non-jurisdictional human-made ponds that were~~Within the golf course there are also two human-made ponds; the western pond contains both native (freshwater marsh, southern willow scrub, southern cottonwood-willow riparian forest) and non-native vegetation communities (disturbed wetland) but the eastern pond contains no native vegetation and is used to irrigate the golf course grounds and was therefore identified as developed.

Small amounts of other upland vegetation communities exist, primarily around the edges of the project site, including eucalyptus woodland, non-native grassland, and Diegan coastal sage scrub—disturbed.

The San Diego River (South Channel) and Forester Creek merge to the east and south of the project site. The majority of the riparian areas in and around the project site were mapped as southern cottonwood-willow riparian forest. Small sections of more open, shrubby habitat were mapped as mule-fat scrub – disturbed and southern riparian scrub.

In conformance with Resolution 078-2021, in December 2021, a contractor working on behalf of the City of Santee conducted fuel management clearing at the northeast corner of the site, in the vicinity of the northeast emergency entrance from Calle del Verde. This fuel modification removed non-native trees on the slope of the adjacent condominium complex and also resulted in less than 0.1 acres of tree removal within the project site. The fuel modification removed dozens of non-native trees such as Mexican fan palms (*Washingtonia robusta*) and damaged or removed five native trees on site to access some of these non-native trees (Appendix L). Because of the limited size of this disturbance area and existing surrounding riparian habitat elements that were not disturbed or effected and potential for riparian regrowth, no changes are recommended to the original vegetation mapping layers. Vegetation mapping presented in Figure 4 represents conditions that were present prior to the fuel management activities.

3.2.1.1 Coastal and Valley Freshwater Marsh: Oberbauer Code 52410

Freshwater marsh communities are found in areas permanently inundated or flooded by fresh water, lacking significant current from water movement. Prolonged saturation in these communities allows for the accumulation of deep, peaty soils. Freshwater marshes are usually located in the coastal valleys near river mouths and around the margins of lakes and springs. Freshwater marsh is dominated by perennial, emergent monocots, typically ranging from 4 to 5 feet tall. Typically, species of cattails (*Typha* spp.) and bulrush (*Schoenoplectus* spp.) dominate this community.

A total of ~~0.68~~1.21 acres of freshwater marsh was identified within the BSA (Table 3-1; Figure 4). Broad-leaved cattails (*Typha latifolia*) and bulrushes dominated this community. ~~Other species included the invasive floating water-primrose (*Ludwigia peploides*) and bulrushes.~~ Within the City of San Diego, this would be categorized as a type of freshwater marsh. The City of San Diego considers freshwater marsh to be an ESL wetland. The City of Santee does not have a similar designation, but does consider it a sensitive community and is addressed within the Draft Subarea Plan~~.~~ (City of Santee 2025).

3.2.1.2 Developed: 12000

Developed areas include those that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. These areas are characterized by permanent or semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require irrigation. Areas where no natural land is evident because of a large amount of debris or other materials being placed upon it may also be considered urban/developed (Oberbauer et al. 2008).

A total of ~~31.59~~32.69 acres of developed land was identified within the BSA. The 7.~~21~~11 acres of developed areas on site are primarily associated with the existing golf course clubhouse in the northern portion of the project site along Carlton Oaks Drive (Table 3-1; Figure 4). The other urban/developed land in the BSA includes residential housing on the north side of the project site, and public roads including West Hills Parkway and Carlton Oaks Drive. Developed land is not considered a sensitive land cover by the City of Santee (City of Santee 2025) or City of San Diego (City of San Diego 2018).

3.2.1.3 Developed – Golf Course: 12000

This community includes areas associated with the golf course, ~~with~~including fairways, rough, and greens. It also includes the ornamental pond and trees associated with the golf course, such as eucalyptus and planted Fremont's cottonwood (*Populus fremontii).* Areas of "rough" may include planted, ornamental, or invasive non-native grass and forb species.

A total of ~~129.69~~125.73 acres of developed golf course occurs in the BSA. Golf course is not considered a sensitive land cover by the City of Santee (City of Santee 2025) or City of San Diego (City of San- Diego 2018).

3.2.1.4 Diegan Coastal Sage Scrub: 32500

Diegan coastal sage scrub is a low, soft-woody community of shrubs that are most active in the winter and early spring with many species identified as facultatively drought-deciduous. The dominant species may vary by soil type, slope, and aspect. It is most commonly dominated by California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), black sage (*Salvia mellifera*), white sage (*Salvia apiana*), and lemonade berry (*Rhus integrifolia*). This vegetation community is primarily constrained to drier coastal slopes. Many species associated with this community have become rarer because of development pressures from urban and agricultural development.

A total of 0.61 acres of Diegan coastal sage scrub – disturbed was identified in the BSA (Table 3-1, Figure 4). Areas mapped as Diegan coastal sage scrub – disturbed on site consist of dry open plantings on the shoulder and embankment of West Hills Parkway. Broom baccharis (*Baccharis sarothroides*) was the dominant plant species, with associated species such as California buckwheat and California sagebrush, and with invasive non-native weeds between the shrubs. Diegan coastal sage scrub is classified by the City of San Diego as a Tier II sensitive upland (City of San Diego ~~1997~~2018). The City of Santee does not have a similar designation, but does consider it a sensitive community and is addressed within the Draft Subarea Plan. (City of Santee 2025).

3.2.1.5 Disturbed Habitat: 11000

Disturbed habitat supports either no vegetation or a cover of non-native weedy species that are adapted to a regime of frequent human disturbance (Oberbauer et al. 2008). Many of the characteristic species of this habitat are also indicator species of annual grasslands, although disturbed areas are dominated more by non-native forbs than grasses. Characteristic species may include black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), Italian thistle (*Carduus pycocephalus*), bristly ox-tongue (*Helminthotheca echioides*), and milk thistle (*Sylibum marianum*).

A total of ~~6.25~~1.09 acres of disturbed habitat was identified in the BSA (Figure 4; Table 3-1). The disturbed habitat in the BSA was generally dominated by non-native herbaceous species, including tumbleweed (*Salsola tragus*), field mustard (*Hirschfeldia indica*), horseweed (*Conyza canadensis*), Bermuda grass (*Cynodon dactylon*), and sow thistle (*Sonchus* spp.). Disturbed habitat is not considered a sensitive vegetation community by the City of Santee~~,~~ (City of Santee 2025), and is classified by the City of San Diego as a Tier IV upland. Lands designated as Tier IV are not considered to have significant habitat value (City of San Diego 2018).

3.2.1.6 Disturbed Wetland: 11200

Disturbed wetlands are areas permanently or periodically inundated by water that have been significantly modified by human activity.

A total of 0.~~15~~32 acres of disturbed wetland was observed in the BSA, associated with a storm drain outfall to the west of the existing golf course clubhouse and the existing western golf course pond within the City of Santee (Table 3-1; Figure 4). No disturbed wetland was mapped in City of San~~-~~ Diego. The disturbed wetland in the ~~BSA~~storm drain outfall was dominated by cocklebur (*Xanthium strumarium*) and black mustard, with some Mexican rush (*Juncus mexicanus*) and western ragweed (*Ambrosia psilostachya*). The disturbed wetland associated with the western pond totals 0.17 acres and was dominated by the invasive floating water-primrose (*Ludwigia peploides*). The City of Santee considers it a sensitive community and is addressed within the Draft Subarea Plan~~.~~ (City of Santee 2025).

3.2.1.7 Eucalyptus Woodland: 79100

Eucalyptus woodland is dominated by gum trees (*Eucalyptus* spp.), an introduced genus that has been planted for ornamental purposes and for hardwood production and wind blocking. Gum trees typically occur in the form of clustered trees. The understory of mature groves is usually sparse because of the allelopathic chemicals exuded by the decomposing leaves. With a constant moisture source, the species becomes naturalized and will reproduce and expand its range. The sparse understory offers only limited wildlife habitat; however, individual trees and eucalyptus woodlands can provide nesting sites for a variety of raptors. During winter migrations, a large variety of migrating songbirds may be found feeding on the insects that are attracted to eucalyptus flowers.

A total of ~~1.68~~0.17 acres of eucalyptus woodland was identified within the BSA (Table 3-1; Figure 4). Areas mapped as eucalyptus woodland are present on the west side of the BSA along the edges of the project site. Gum tree species include red iron bark (*Eucalyptus sideroxylon*), Tasmanian blue gum (*Eucalyptus globulus*), and sugar gum (*Eucalyptus cladocalyx*). Eucalyptus woodland is not considered a sensitive vegetation community by the City of Santee (City of Santee 2025) and is classified by the City of San Diego as a Tier IV upland. Lands designated as Tier IV are not considered to have significant habitat value, and impacts would not be considered significant (City of San Diego 2018).

3.2.1.8 Fresh Water: 64140

This community represents areas of year-round bodies of fresh water in the form of lakes, streams, ponds or rivers. These are areas of open water, and vegetation cover is usually less than 10%.

A total of 5.31 acres of fresh water was identified within the BSA (Table 3-1; Figure 4). These are primarily associated with sections of San Diego River (North Channel) that are too deep to support emergent wetland vegetation (freshwater marsh). Most of the area mapped as fresh water is in the two large ponds in San Diego River (North Channel) to the southeast of the existing golf course clubhouse. Within the City of San Diego, this landcover type is equivalent to a natural flood channel. The City of San Diego considers natural flood channel to be an ESL wetland, and impacts are generally prohibited; impacts would require an ESL Deviation to be approved by the City of San- Diego (City of San Diego 2018). The City of Santee does not have a similar designation, but does consider it a sensitive community and is addressed within the Draft Subarea Plan. (City of Santee 2025).

3.2.1.9 Mule Fat Scrub – disturbed: 63310

Mule fat scrub is a shrubby riparian scrub community dominated by mule fat (*Baccharis salicifolia*) and occasionally interspersed with small willows (*Salix* spp.). This vegetation community occurs along intermittent stream channels with a coarse substrate and moderate water depth, along areas with shallow groundwater, or along areas that receive runoff from roads and other structures (Holland 1986). In some environments, limited hydrology may favor the persistence of mule fat.

A total of 0.8783 acres of mule fat scrub was identified within the BSA, exclusively within the City of Santee (Table 3-1; Figure 4). Within the BSA, mule fat scrub community species included mule fat with an understory of black mustard and field mustard. The City of Santee ~~does not have a similar designation but does consider~~considers it a sensitive community and is addressed within the Draft Subarea Plan. (City of Santee 2025).

3.2.1.10 Non-Native Grassland: 42200

Non-native grassland contains a dense to sparse cover of annual grasses. It may include showy-flowered native annual forbs, but grasses make up over 50% of the cover. In San Diego County the presence of wild oats (*Avena* spp.), bromes (*Bromus* spp.), storksbill (*Erodium* spp.), and wild barley (*Hordeum murinum)* are common indicators.

A total of 0.1117 acres of non-native grasslands was identified with the BSA, exclusively within the City of Santee, in small openings adjacent to native riparian habitats (Table 3-1; Figure 4). Non-native grassland is classified by the City of San Diego as a Tier IIIB sensitive upland (City of San Diego 1997). The City of Santee considers it a sensitive community and is addressed within the Draft Subarea Plan. (City of Santee 2025).

3.2.1.11 Non-Native Riparian: 65000

Non-native riparian includes densely vegetated riparian thickets dominated by non-native, invasive species. This community may include native riparian species but will have over 50% cover of non-native species. This community often occurs in areas where disturbance has occurred and is extensive along the major rivers of coastal Southern California. Non-native riparian may include giant reed, tamarisk (*Tamarix* spp.), and/or eucalyptus, but will not have over 50% cover of those

species. Other common invasive species include Mexican fan palm (*Washingtonia robusta*), Canary Island date palm (*Phoenix canariensis*), castor bean (*Ricinis communis*), and gum trees.

A total of 0.~~31~~12 acres of non-native riparian was identified within the BSA, exclusively within the City of Santee (Table 3-1; Figure 4). This was associated with a bank of San Diego River (North Channel) that was dominated by Mexican fan palm and myoporum (*Myoporum* spp.). The City of Santee considers it a sensitive community and is addressed within the Draft Subarea Plan~~.~~ (City of Santee 2025).

3.2.1.12 Non-Native Woodland: 79000

The non-native woodland community applies to woodlands of exotic trees that are not maintained or artificially irrigated (i.e., not ornamental plantings). This is a catch-all for non-native woodland communities not dominated by eucalyptus or tamarisk.

A total of ~~0.52~~5.67 acres of non-native woodland was identified within the BSA ~~exclusively within the City of Santee~~ (Table 3-1; Figure 4). This community was nearly exclusively Brazilian pepper tree (*Schinus terebinthifolia*). This is not considered a sensitive vegetation community. Non-native woodland is considered by City of San~~-~~ Diego as a Tier IV upland. Lands designated as Tier IV are not considered to have significant habitat value and impacts would not be considered significant (City of San Diego 2018). Non-native woodland is not considered a sensitive vegetation community by the City of Santee (City of Santee 2025).

3.2.1.13 Southern Cottonwood-Willow Riparian Forest: 61330

Southern cottonwood willow riparian forest is a tall, open, broadleaved, winter deciduous riparian forest dominated by Fremont's cottonwood (*Populus fremontii),* Goodding's black willow (*Salix gooddingii*), and red willow *(Salix laevigata)*. Areas with the '*disturbed*' moniker for this community represents areas with a more open, sparse understory of arroyo willow and non-native grasses, lacking the diverse and dense canopy of southern cottonwood-willow riparian forest.

A total of ~~23.87~~28.42 acres of southern cottonwood-willow riparian forest was identified within the BSA with the majority of this community occurring with the 100-foot buffer outside the project site (Table 3-1; Figure 4). An additional 9.~~45~~88 acres of this community was identified as *disturbed* within the BSA at San Diego River (North and South Channels). Within these areas, the community was dominated by large riparian trees such as Fremont's cottonwood, Goodding's black willow, and western sycamore (*Platanus racemosa*), with an understory of arroyo willow (*Salix lasiolepis*), mule fat, poison hemlock (*Conium maculatum*), poison oak (*Toxicodendron diversilobium*), rushes (*Juncus* spp.), flatsedge (*Cyperus eragrostis*), black mustard, field mustard, bromes, wild oats, perennial ryegrass (*Festuca perennis*), and wild barley. Within the City of San Diego, this would be categorized as a type of riparian forest. The City of San Diego considers riparian forest to be an ESL wetland, and impacts are generally prohibited; impacts would require an ESL Deviation to be approved by the City of San Diego (City of San Diego 2018). The City of Santee does not have a similar designation, but does consider it a sensitive community and is addressed within the Draft Subarea Plan~~.~~ (City of Santee 2025).

3.2.1.14 Southern Riparian Scrub: 63320

Southern riparian scrub is a broadleaved, winter-deciduous, dense riparian vegetation community dominated by several willow species, occasionally containing scattered Fremont's cottonwood or

western sycamore trees. Associated plant species may include Douglas mugwort (*Artemisia douglasiana*) or hoary nettle (*Urtica dioica* ssp. *holosericea*). Most stands are too dense to allow much understory growth.

A total of 0.98 acres of southern riparian scrub was identified within the BSA, exclusively outside of the project site, but within the BSA in the City of San Diego (Table 3-1; Figure 4). Southern riparian scrub within the BSA was dominated by arroyo willow (*Salix lasiolepis*), mule-fat, and broom baccharis. The City of San Diego considers riparian scrub to be an ESL wetland, and impacts are generally prohibited (City of San Diego 2018). ~~The City of Santee does not have a similar designation, but does consider it a sensitive community and is addressed within the Draft Subarea Plan.~~

3.2.1.15 Southern Willow Scrub: 63320

Southern willow scrub is a dense, broad-leafed, winter-deciduous riparian thicket dominated by several willow species, with scattered emergent Fremont cottonwood and California sycamore. This community was formerly extensive along the major rivers of coastal Southern California, but is now much reduced (Oberbauer et al. 2008).

Southern willow scrub totals 0.17 acres and was mapped by Dudek in 2025 within the western golf course pond. This community was dominated by willows (*Salix sp.*) and the City of Santee considers it a sensitive community and is addressed within the Draft Subarea Plan (City of Santee 2025).

3.2.1.16 Developed – Culvert, Spillway: 12000

Developed – culvert is mapped within the northeastern corner of the project site for an existing culvert approximately 16 feet wide that runs underneath an existing dirt road (Figure 4). This culvert connects the San Diego River east of the project site into Sycamore Canyon Creek within the project site. Developed land is not considered a sensitive land cover by the City of Santee (City of Santee 2025). However, this culvert would likely be regulated by the aquatic resource agencies.

Within the San Diego River (North Channel), a large in-line pond has been constructed and an approximately 60-foot-long concrete and riprap-lined dam occurs directly downstream of this pond (Figure 4). This area was identified during the Dudek vegetation mapping efforts as the spillway, which due to the presence of concrete and riprap would be considered developed lands. Developed land is not considered a sensitive land cover by the City of Santee (City of Santee 2025). However, the spillway would likely be regulated by the aquatic resource agencies.

3.2.2 Flora

One hundred thirty-seven species of plants were observed within the BSA, including 78 native and 59 non-native species. These represent plants associated with all vegetation communities and land cover types identified in the BSA.

3.2.2.1 -Special-Status Plant Species

No City of San Diego MSCP covered plant species were observed within the BSA, and no CESA- or ESA-listed plant species were observed within the BSA. Four special-status plant species listed under the CRPR were observed within the BSA within the City of San Diego: Palmer's sagewort (*Artemisia palmeri*), San Diego marsh-elder (*Iva hayesiana*), southern California black walnut

(*Juglans californica* var*. californica*), and southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*) (Figure 5). California black walnut and southwestern spiny rush were observed within avoidance areas within the proposed project area in the City of San Diego and would not be impacted. Palmer's sagewort and San Diego marsh-elder were present within the BSA buffer but were not detected in the proposed project area. Southwestern spiny rush was the only special status plant species observed within City of Santee and was only present outside of the proposed project site (near the San Diego River).

San Diego marsh-elder is a CRPR 2B.2 species and is therefore considered rare or endangered under CEQA Guidelines Section 15380. Palmer's sagewort, southern California black walnut, and southwestern spiny rush are CRPR 4.2 species. These species are plants of limited distribution but are locally common. These CRPR 4.2 species do not clearly meet CEQA standards and thresholds for impact considerations. These populations do not have local rarity, are not peripheral to the taxa's distribution, and do not occur in unusual substrates or habitat. Palmer's sagewort, southern California black walnut, and southwestern spiny rush are therefore not considered endangered, rare, or threatened under CEQA.

No San Diego ambrosia were observed within the BSA during focused surveys conducted for San- Diego ambrosia; these surveys occurred in 2019 and 2022 at times of the year when San Diego ambrosia would be most readily detectable. San Diego ambrosia is a narrow endemic in the City of San Diego MSCP Subarea Plan (City of San Diego 1997). It typically occurs on terraces of creek beds, seasonally dry drainages, and floodplains outside of tree canopy. It is often associated with riverwash and sandy alluvium such as those present in the BSA. San Diego ambrosia is considered absent from the BSA because of negative results from the focused surveys.

Southwestern spiny rush was the only special-status plant species observed within the City of Santee. No other special status plant species are expected to occur within the City of Santee because of negative results from focused surveys.

Palmer's Sagewort (*Artemisia palmeri*)

CRPR 4.2

Palmer's sagewort is primarily found along creeks and drainages near the coast but may also occur in mesic chaparral in inland locations. It is typically found in understory beneath riparian woodland (Reiser 2001). This species was observed within the BSA in the City of San Diego in the San Diego River (South Channel) riparian area outside of the project site (Figure 5).

San Diego Marsh Elder (*Iva hayesiana*)

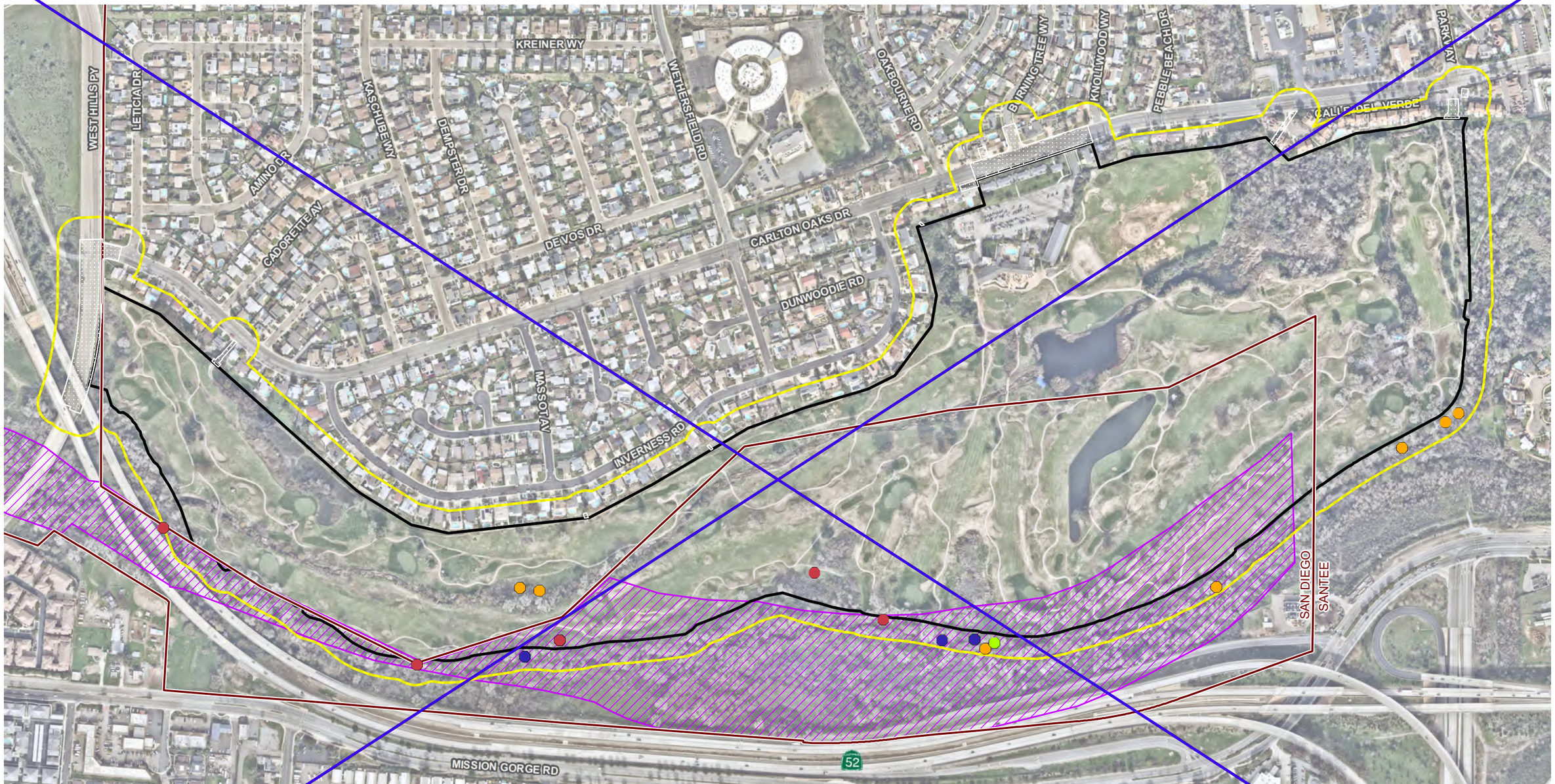
CRPR 2B.2

San Diego marsh elder is a species that is fairly endangered in California but more common elsewhere (i.e., in Mexico). This species primarily occurs in creeks or intermittent streambeds. It will also occur in seeps or other mesic areas. It is often found in sunny openings where other riparian vegetation is not present (Reiser 2001). This species was observed within the BSA in the City of San- Diego in the San Diego River (South Channel) riparian area; no San Diego marsh elder was observed within the project site (Figure 5).

Southern California Black Walnut (*Juglans californica* var. *californica*)

CRPR 4.2

Southern California black walnut is listed as a CRPR 4.2 species, which is a watch list species with a limited distribution. Southern California black walnut is a tree that grows to 20 to 50 feet tall, often in open savanna. This species shows preference for deep alluvial soils but may also be more tolerant of clays than other tree species (Reiser 2001). This species is rare in San Diego County but more common and widespread in Orange, western Riverside, and Los Angeles Counties. Several individuals were observed within the San Diego River (South Channel) riparian area (Figure 5). Two Southern California black walnuts were observed within wetland avoidance areas in the project site within the City of San Diego (Figure 5). Additional southern California black walnut individuals were previously mapped outside of the project site, but within the BSA in the San Diego River (South Channel) (HELIX 2017); these were determined by ICF botanists to be non-native pecan (*Carya- illinoinensis*).



Project Site
Biological Study Area
Offsite
City of Santee/San Diego Municipal Boundary
City of San Diego MHPA

Sensitive Plant Species

- Palmer's sagewort *(Artemisia plamerii)*
- San Diego marsh-elder *(Iva Hayesiana)*
- Southern California black walnut *(Juglans californica)*
- Southwestern Spiny Rush *(Juncus acutus)*

Source: Biological Resources-ICF (2022); Imagery-SANGIS (2023)

ICF

N

0 225 450 Feet

1 in = 450 feet

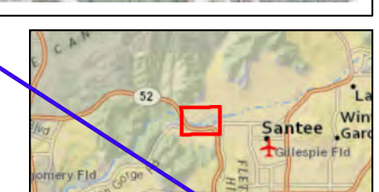


Figure 5
Sensitive Plant Species
Carlton Oaks Country Club and Resort

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Southwestern Spiny Rush (*Juncus* acutus ssp. *leopoldii*)

CRPR 4.2

Southwestern spiny rush is a large, distinctive bushy rush common in marshes and wet drainages throughout coastal San Diego County (Reiser 2001). Within the BSA, this species was identified within the San Diego River (North Channel) within the City of Santee and the San Diego River (South Channel) within the City of San Diego (Figure 5). Other previous reports of this species within the project site (HELIX 2017) were identified by ICF botanists as other non-sensitive *Juncus* species. Two individuals of Southwestern spiny rush were mapped within avoidance areas within San Diego River (North Channel) in the project site and would not be impacted (Figure 5). The remaining five populations were observed within the BSA in the City of San Diego in the San Diego River (South Channel) riparian area outside of the project site (Figure 5).

3.2.3 Fauna

Three species of reptile were detected within the BSA: painted slider (*Chrysemys picta*), western fence lizard (*Sceloporus occidentalis*), and side-blotched lizard (*Uta stansburiana*). Two species of amphibians were identified: American bullfrog (*Rana catesbiana*) and Baja California chorus frog (*Pseudacris hypochondriaca*). One fish species, bluegill (*Lepomis macrochirus*), was captured during pond turtle trapping surveys.

Sixty-five bird species were observed or detected within the BSA. This includes birds typical of golf course and riparian vegetation communities. Year-round residents include California towhee (*Melozone crissalis*) and Bewick's wren (*Thryomanes bewickii*). Summer breeding species (neotropical migrants) utilizing the BSA include four special-status species: least Bell's vireo, vermilion flycatcher (*Pyrocephalus rubinus*), yellow warbler (*Setophaga petechia*), and yellow-breasted chat (*Icteria virens*).

Six mammal species were detected within the BSA: California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), northern raccoon (*Procyon lotor*), desert cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), and southern mule deer (*Odocoileus hemionus* ssp*. fuliginatus*), the latter of which is an MSCP-covered species.

Special-status species observed or detected, and the results of the focused biological surveys, are discussed further below.

3.2.3.1 Special-Status Animal Species

Focused, protocol-level surveys were conducted for ESA-listed species least Bell's vireo, southwestern pond turtle, coastal California gnatcatcher, and southwestern willow flycatcher in 2019. Focused surveys in 2019 and 2022 revealed multiple breeding pairs of least Bell's vireo throughout the BSA (Figure 6). Focused surveys or habitat assessments conducted for southwestern pond turtle, California gnatcatcher, southwestern willow flycatcher, western burrowing owl, Crotch's bumble bee, and western spadefoot were negative, and the species were therefore considered to be absent from the BSA (see Section 3.2.3.3). Other ESA species were not expected or determined to have low potential to occur based on biological determination, including factors such as of lack of suitable habitat or being outside of the species range (Appendix E).

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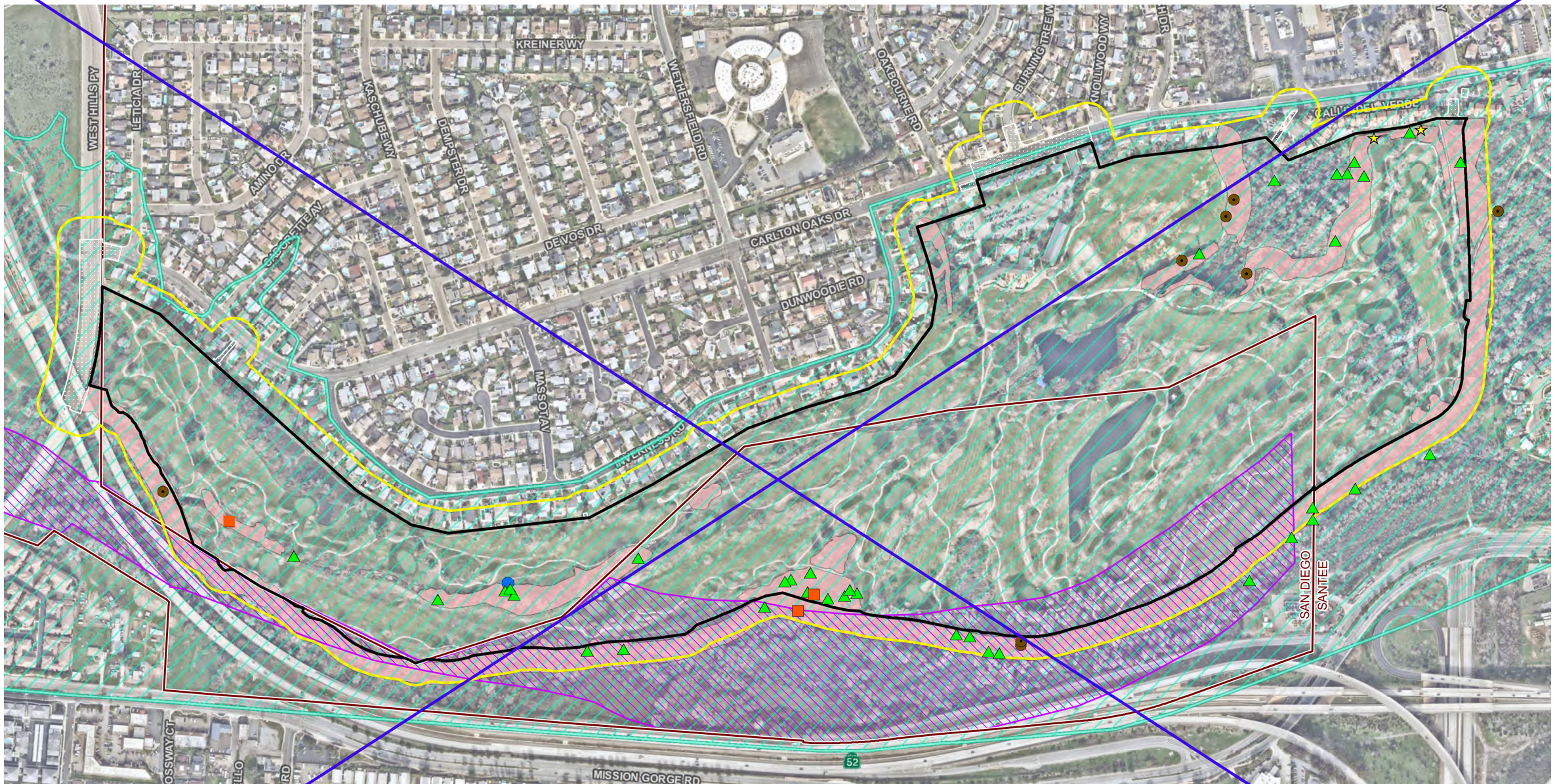
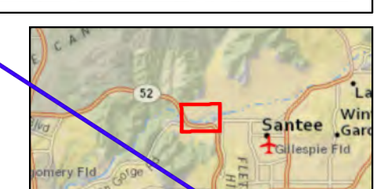


Project Site
Biological Study Area
Offsite Areas
City of Santee/San Diego Municipal Boundary
City of San Diego MHPA
Least Bell's Vireo Critical Habitat
Potentially Suitable Habitat
Brown-headed cowbird *(Molothrus ater)*

Least Bell's Vireo (*Vireo bellii pusillus*)
- Female
- Male
- Male with fledgling
- Pair



Source: Biological Resources-ICF (2022); Imagery-SANGIS (2023)

ICF

N

0 225 450 Feet

1 in = 450 feet

Figure 6
Least Bell's Vireo Distribution
Carlton Oaks Country Club and Resort

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Federal candidate insect species Monarch butterfly (*Danaus plexippus*) was observed nectaring on flowers within the project area; no suitable milkweed breeding habitat was observed. Six non-listed special-status species birds were incidentally detected during focused surveys or other biological surveys within the BSA: Cooper's hawk (*Accipiter cooperi*), a double-crested cormorant (*Phalacrocorax auritus*) rookery, vermilion flycatcher (*Pyrocephalus rubinus*), western bluebird (*Sialia mexicana*), yellow warbler, and yellow-breasted chat (Figure 7). One MSCP-covered mammal species—southern mule deer—was observed.

Cooper's Hawk (Accipiter cooperi)

CDFW Watch List, MSCP San Diego Subarea Plan – Covered Species

Cooper's hawk is originally a species found in oak groves and riparian woodland but has recently adapted to urban eucalyptus woodland environments (Unitt 2004). The species is now a year-round breeder within the coastal slope of San Diego County. They are most numerous in lowland and foothill canyons and urban areas. Cooper's hawk nests high in trees but still hidden under the canopy. This species most frequently nests in gum trees and oaks. Additional winter visitors also occur, primarily from September to March.

One observation occurred within riparian habitat along the San Diego River (South Channel), outside the project site. Approximately 34 acres of suitable riparian forest nesting habitat was present within the BSA; no nests or nesting activity were observed during avian surveys, though suitable nesting habitat exists in trees throughout the cities of Santee and San Diego (Figure 7).

Least Bell's Vireo (Vireo *bellii pusillus*)

Federally Endangered, California Endangered, MSCP San Diego Subarea Plan – Narrow Endemic and Covered Species

Least Bell's vireo is a neotropical migratory songbird that generally arrives in San Diego County in March and April and leaves by August or September. Banding studies show that the birds have high site fidelity and often return to the same locations (Unitt 2004). Least Bell's vireo is highly restricted to willow and mule fat scrubs and riparian woodlands (Unitt 2004). Riparian woodland supporting least Bell's vireo typically has a dense canopy where the birds forage and a dense understory where they nest (Unitt 2004). The population in San Diego County is concentrated in riparian areas along the coastal lowlands, especially along the Santa Margarita River and along the San Luis Rey River (Unitt 2004). Other major sites include the San Dieguito River above Lake Hodges, San Diego River from Interstate 805 to Santee, the Sweetwater River above Sweetwater Reservoir, Jamul and Dulzura Creeks, Otay River, and the Tijuana River Valley (Unitt 2004). Least Bell's vireo have declined because of riparian habitat loss and degradation throughout Southern California and the Central Valley. Additionally, habitat fragmentation increases susceptibility of vireo nests to brood parasite brown-headed cowbird (USFWS 1998).

Least Bell's vireo were observed in 2019 within and adjacent to the San Diego River (South Channel) riparian area and in some of the suitable habitat the northeastern side of the BSA (Figure 6). No vireo were detected along San Diego River (North Channel) or Sycamore Canyon Creek within the golf course or in the riparian forest associated with the stormwater outfall in the north-central area of the BSA in 2019. Four territories of male least Bell's vireo were observed throughout the breeding season (Appendix H). While females are less visible than the vociferous males, pairs of least Bell's

vireo were detected within habitat along the northeastern boundaries of the BSA. Breeding was also confirmed with the observation of fledglings in the south-central portion of the BSA (Figure 6).

Least Bell's vireo were observed throughout suitable habitat in the cities of San Diego and Santee 2022 (Figure 6, Appendix H-2). One least Bell's vireo territory was observed in the northeast portion of the project site, adjacent to the driving range in Sycamore Canyon Creek. Two territories were observed in San Diego River (North Channel) on the western side of the project area (Figure 6). Both of these territories included evidence of nesting activity. Several other least Bell's vireo individuals were heard singing within the limits of the San Diego River (South Channel), but locations were not mapped because the San Diego River (South Channel) is known to be occupied (e.g., 2019 survey results) and is assumed to be occupied for this analysis. No least Bell's vireo were observed in the riparian area to the west of the existing golf clubhouse (Residential North in City of Santee).

The entire project site and most of the BSA is within designated USFWS Critical Habitat for least Bell's vireo (Figure 6). The primary constituent elements to support the feeding, nesting, roosting, and sheltering of least Bell's vireo are present in riparian woodland vegetation that generally contains both canopy and shrub layers. All riparian woodland vegetation within the BSA was included in the survey area for least Bell's vireo (Figure 6). The remainder of the BSA within the USFWS Critical Habitat does not contain primary constituent elements for least Bells' vireo; golf course vegetation outside of the riparian areas are not suitable habitat Riparian habitat, including southern cottonwood-willow riparian forest, along the San Diego River (South Channel) and the northeastern corner of the site, are considered occupied habitat. The USFWS Carlsbad Fish and Wildlife Office species occurrence data (USFWS 2018) also showed that least Bell's vireo were observed along the San Diego River (South Channel) in the southwestern area near West Hills Parkway in 2016. All mule-fat scrub and southern cottonwood-willow riparian forest in the BSA, with the exception of the isolated 0.37-acre riparian patch to the west of the existing golf clubhouse (between golf course and existing housing), were determined to be occupied by least Bell's vireo. Vireo were confirmed absent in the isolated riparian patch through protocol surveys conducted in 2019 and 2022.

Monarch Butterfly (*Danaus plexippus*)

Federal Proposed Threatened

The California overwintering populations of Monarch butterfly roosts in large trees, often eucalyptus, within frost-free areas generally within 1-mile of the coast. Interior valleys such as Santee are subject to winter frosts and are therefore wholly unsuitable as overwintering habitat. Monarch species exclusively utilizes milkweed (*Asclepias* spp.) as larval host plants for breeding (USFWS 2024). Native milkweed are found in a variety of habitats in San Diego County, but no milkweed were observed within the BSA during focused surveys. Adult monarch will nectar on a variety of short-corolla flowers in natural and urbanized landscapes. Monarch was incidentally observed, during surveys for Crotch's bumble bee, nectaring on native and ornamental vegetation.

Southern Mule Deer (Odocoileus virginianus fuliginatus)

MSCP San Diego Subarea Plan – Covered Species

Mule deer are widespread across western North America and the southern subspecies occupies all of San Diego County's ecoregions (Tremor et al. 2017). Southern mule deer inhabit a wide array of habitats from coastal sage scrub to chaparral, oak woodland, riparian woodland, montane conifer-

hardwood forest, and desert scrub. Southern mule deer are typically smaller than other deer in California. Besides habitat loss and fragmentation, poor habitat quality is the greatest factor limiting the size of the mule deer populations (Tremor et al. 2017). This species was observed utilizing the golf course at the edge of the riparian corridor along the San Diego River (South Channel)) (Figure 7). This species could utilize any of the golf course within the cities of Santee and San Diego during the nighttime.

Vermilion Flycatcher (*Pyrocephalus* rubinus)

CDFW Species of Special Concern

Vermilion flycatcher is a brightly colored neotropical migrant songbird. Its' characteristic habitat of open riparian woodland and mesquite bosques on desert floodplains habitats is barely represented in San Diego County (Unitt 2004). In coastal San Diego County, this species rarely occurs, but is most nests associated with open man-made 'savannas' such as golf courses, graveyards, and large campgrounds. The species nests in forks in the middle level of trees (Unitt 2004), making the species vulnerable to brown-headed cowbirds. One individual was incidentally observed during surveys in 2024 (Figure 7) and could utilize suitable trees within the cities of Santee and San Diego.

Western Bluebird (*Sialia* mexicana)

MSCP San Diego Subarea Plan – Covered Species

The western bluebird is a stocky blue bird with a chestnut chest and is considered common in the foothills and mountains of San Diego County. This species can usually be found in montane coniferous and oak woodlands (Unitt 2004). It can also occur in areas with scattered trees, open forests, and scrubs, and during the winter it can be found in the desert. Western bluebirds breed in western North America from southern British Columbia south to central Mexico, east to western Montana, and west to Texas, but are absent from the Great Basin (Guinan et al. 2020). They can also winter outside their breeding range in central California and along the lower Colorado River (Guinan et al. 2020). Western bluebird numbers are declining due to loss of nesting cavities to logging, fire suppression, and competition with nonnative species such as European starling and house sparrow (*Passer domesticus*) (Unitt 2004). This species is still fairly common in San Diego County (Unitt 2004). Several individuals were observed within suitable riparian forest habitat along the San Diego River (South Channel)) (Figure 7) and could utilize suitable trees within the cities of Santee and San Diego.

Yellow-Breasted Chat (*Icteria virens*)

CDFW Species of Special Concern

The yellow-breasted chat is a common summer breeding visitor that prefers to nest in extensive dense thickets of riparian habitat (Unitt 2004). This species is very secretive, so finding its nests is a challenge. The decline of this species is linked to the loss of riparian woodlands in the coastal lowland as a result of development, agriculture, and channeling rivers. This species is still considered a common species in San Diego County. Yellow-breasted chats were observed throughout suitable riparian forest habitat along the San Diego River (South Channel). Suitable nesting and foraging habitat for this species occurs throughout the riparian forest in avoidance areas in the south-central and northeastern areas of the project site in the cities of Santee and San Diego (Figure 7).

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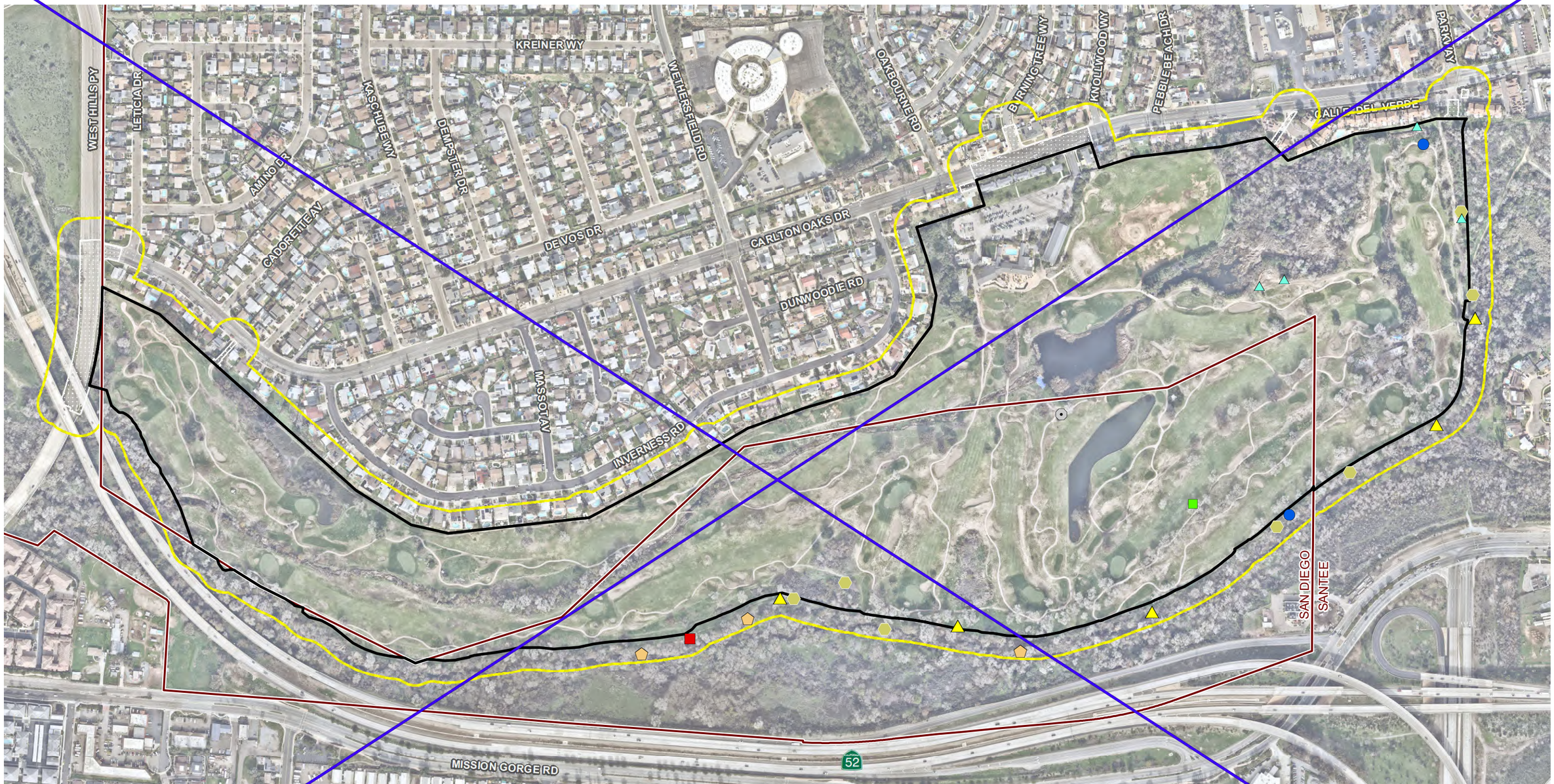

Project Site
Biological Study Area
Offsite Areas
City of Santee/San Diego Municipal Boundary

Other Sensitive Species*

Cooper's hawk
Double-crowned cormorant rookery
Southern mule deer
Western bluebird
Yellow warbler
Yellow-breasted chat
Monarch Butterfly
Vermilion Flycatcher

*Least Bell's Vireo Observations are on Figure 6.

Source: Biological Resources-ICF (2022); Imagery-SANGIS (2023)

ICF N

0 225 450 Feet

1 in = 450 feet

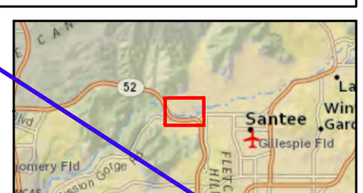

Figure 7
Other Sensitive Species
Carlton Oaks Country Club and Resort

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Yellow Warbler (Setophaga petechia)

CDFW Species of Special Concern

The yellow warbler is a small insectivorous migratory passerine that inhabits lowland and foothill mature riparian woodlands (Unitt 2004). Preferred plant species include cottonwoods, willows (Salix spp.), and other small trees and shrubs typically found in open-canopy riparian woodlands. Yellow warblers are usually on their breeding grounds from late March to mid-October. Destruction and degradation of riparian habitat and brood parasitism by the brown-headed cowbird led to the decline of this species (Unitt 2004). However, cowbird trapping has caused an increase in population, and yellow warblers are considered fairly common in San Diego County (Unitt 2004). Yellow warblers were observed throughout suitable riparian forest habitat along the San Diego River (South Channel) where suitable nesting and foraging habitat occurs, in the cities of Santee and San Diego (Figure 7).

3.2.3.2 Animal Species with High Potential to Occur

Two special-status reptile and one special-status avian species were determined to have high potential to occur within the BSA but were not detected incidentally during other biological surveys. These include Belding's orange-throated whiptail (*Aspidocelis hyperythra hyperythra*), two-striped garter snake (*Thamnophis hammondii*), and white-tailed kite (*Elanus lecurus*). These represent locally common species that occur in limited ranges, or species that have been affected by development. Although focused surveys were not conducted to determine the presence/absence of these species, there is a reasonable assumption that these species will variably utilize the habitats within the BSA because of the suitability of the habitat and the local distribution of these species. Therefore, these species are treated as if they are present for this analysis.

Belding's Orange-Throated Whiptail (*Aspidocelis hyperythra hyperythra*)

CDFW Watch List; MSCP San Diego Subarea Plan – Covered Species

Belding's orange-throated whiptail occurs in low-elevation coastal scrub, chamise–redshank chaparral, mixed chaparral, and valley–foothill hardwood habitats (Zeiner et al. 1988). Orange-throated whiptail occurs in Orange, Riverside, and San Diego Counties west of the crest of the Peninsular Ranges and in southwestern San Bernardino County near Colton. It extends up to 3,410 feet above mean sea level (Zeiner et al. 1988). Orange-throated whiptails forage on the ground and scratch through surface debris for food. Their diet consists of a variety of small arthropods, especially termites. Orange-throated whiptails likely lay eggs in loose, well-aerated soil under or near surface objects or at the base of dense shrubs (Zeiner et al. 1988). Although this species was not observed during the 2019 surveys, it has high potential to utilize the peripheries of riparian areas within the BSA within the cities of Santee and San Diego.

Two-Striped Garter Snake (*Thamnophis hammondii*)

CDFW Species of Special Concern

The two-striped garter snake is a medium-sized snake found in or near permanent and intermittent freshwater streams, creeks, and pools in vegetation communities including willow, oak woodlands, cedar, coastal sage scrub, sparse pine, scrub oak, and chaparral. While generally considered to be a very aquatic species, terrestrial upland habitats and rodent burrows are important habitat

components for this species. The two-striped garter snake feeds on a variety of prey including fish, fish eggs, frogs, salamanders, leeches, and earthworms. Two-striped garter snake occurs in California from Salinas, Monterey County, south along the coast into Baja California, Mexico, in the South Coast, Peninsular, and Transverse Ranges, primarily west of the deserts with populations also occurring in some perennial desert slope streams in San Bernardino, Riverside, and San Diego Counties (Thomson et al. 2016). Although this species was not observed during the 2019 surveys, it has high potential to utilize San Diego River (North Channel) and Sycamore Canyon Creek within the BSA within the cities of Santee and San Diego.

White-Tailed Kite (*Elanus lecurus*)

CDFW Fully Protected

White-tailed kite is found in lower elevations in open grasslands, agricultural areas, wetlands, and oak woodlands. Its primary source of food is the California vole (*Microtus californicus sanctidiegi*) (Unitt 2004). It typically forages in open, undisturbed habitats and nests in the top of dense oaks, willows, or other large trees (Unitt 2004). The white-tailed kite population is on the decline mostly because of habitat loss associated with urban sprawl; however, this species is still considered fairly widespread throughout the foothills of San Diego County (Unitt 2004).

Although this species was not observed during the 2019 or 2022 surveys, suitable nesting habitat is present in the trees within the golf course and riparian habitats in the BSA. This species was observed off site within the San Diego River (North Channel) in 2016 (HELIX 2017). This species could nest in trees throughout the cities of Santee and San Diego.

3.2.3.3 Animal Species Determined to Be Absent During Focused Surveys

Southwestern Pond Turtle

Southwestern pond turtle is a federal proposed threatened species, CDFW species of special concern, and an MSCP San Diego Subarea covered species. They are a small to medium size drab-colored diurnal aquatic turtle that are typically active in February through November, inhabiting slack-water ponds with basking areas out of the water, including rocks and logs.

No southwestern pond turtles were captured nor observed during the 2019 focused trapping study or 2022 visual survey, which suggests this species is not present within the BSA. Turtle trapping was conducted at four sites within Pond A for 4 days and 3 nights between September 3 and September 6, 2019. Weather conditions during the trapping dates were favorable for pond turtles (Appendix F). No southwestern pond turtles were observed within suitable pond habitat during visual surveys conducted in 2022 within natural and artificial ponds within the cities of Santee and San Diego.

Eleven nonnative red-eared sliders were captured, including two that were melanistic (red-eared sliders that have a similar appearance to southwestern pond turtles). The presence of melanistic red-eared sliders suggests that visual surveys alone of the site would not have allowed for reliable identification of southwestern pond turtles within the pond.

Southwestern Willow Flycatcher

Southwestern willow flycatcher is listed as federally endangered and California endangered; it is also an MSCP San Diego Subarea Plan covered species. Southwestern willow flycatcher is a neotropical migratory songbird that generally arrives in San Diego County in April and leaves by August, and is the only subspecies known to breed in San Diego County (Unitt 2004). Willow flycatchers of the southwestern subspecies, as well as willow flycatchers of other subspecies, may move through San Diego County during migration.

No southwestern willow flycatcher or migrant willow flycatchers were observed or detected during protocol surveys in 2019 (Appendix H). Therefore, this species was determined to be absent from the survey area.

To provide context for the negative survey results, a review of the Carlsbad Fish and Wildlife Office occurrence data and CDFW CNDDB shows an absence of recent records of southwestern willow flycatcher in the lower San Diego River valley and a 5-mile radius of the BSA. The southern cottonwood-willow riparian forest associated with the San Diego River (South Channel) and Forester Creek supports southwestern willow flycatcher habitat constituents and was determined to be moderately suitable habitat for this species. Southwestern willow flycatcher typically prefer habitat where surface water is present or soil moisture is high enough to maintain the appropriate vegetation characteristics (Sogge et al. 2010); surface water was present during the southwestern willow flycatcher surveys. There were also portions of the survey area that supported the canopy structure and herbaceous understory preferred by southwestern willow flycatcher. However, much of the riparian habitat was dominated by plant species associated with marginal southwestern willow flycatcher habitat, such as cottonwoods and the nonnative shamel ash (*Fraxinus uhdei*). A wider aerial view indicates that besides the golf course, the riparian habitat within the BSA is surrounded by development, including freeways that produce a significant amount of noise. Commuter traffic noise is especially loud along the western portion of the survey area. San Diego River (South Channel) within the golf course does not have appropriate vegetative structure for this species. The riparian scrub habitat and ephemeral drainage at the northeastern corner of the site does not contain suitable vegetation constituents for this species. Surveys were not updated in 2022 because no suitable habitat is present in the project area; moderate quality habitat for the species is only found in the survey area buffer along the San Diego River (South Channel), within the cities of San Diego and Santee.

Coastal California Gnatcatcher

Coastal California gnatcatcher is listed as federally threatened species, CDFW species of special concern, an MSCP San Diego Subarea Plan covered species. Coastal California gnatcatcher is a resident songbird highly associated with coastal sage scrub vegetation communities (Unitt 2004).

No California gnatcatcher were observed or detected during six protocol surveys in 2019, which were conducted within suitable habitat inside or within 500 feet of the project site within the Cities of Santee and San Diego. No California gnatcatcher were observed or detected during six protocol surveys in 2022, which were conducted within suitable habitat inside or within 300 feet of the project site. Therefore, this species was determined to be absent in 2019 and 2022 (Appendix G). While this species is known from the vicinity in Mission Trails and Santee, the potential habitat within the project site is very disturbed, limited in extent (<1 acre) and isolated

from other potential habitat; therefore, California gnatcatcher are unlikely to utilize this habitat in the future.

Crotch's Bumble bee

Crotch's bumble bee was reinstated as a candidate species under CESA on September 30, 2022, and now receives the same protections as a state threatened species until a final decision is made regarding its status by the Fish and Game Commission. Crotch's bumble bee is nearly endemic to California, including historically occupied grasslands and shrublands in Southern to Central California, and occasional records in the northern portion of the state (CDFW 2019b). This species is often found in scrub or open grassland habitats that support a variety of pollen and nectar sources. Crotch's bumble bee has a short tongue and is best suited for foraging at open flowers with short corollas (CDFW 2019b). The vast majority of the project site is a developed golf course with limited ornamental nectar resources. The Diegan coastal sage scrub and disturbed habitat found within the project footprint have low abundance and diversity of nectar resources. This species has been photographed using nectar resources in the adjacent Mast Park (iNaturalist 2023) and may use nectar resources adjacent to wetlands within avoidance areas within the project site. No Crotch's bumble bee were observed or detected during four protocol surveys in 2024, which were conducted within suitable habitat within the BSA (Appendix M). Crotch's bumble bee is considered currently absent from the BSA but has potential to move into suitable habitat in the project area prior to construction.

3.2.3.4 Other Listed and Candidate Animal Species

Quino Checkerspot Butterfly

Quino checkerspot butterfly is listed as federally endangered. Because the BSA consists of a golf course and other developed areas, ponds, and riparian areas that are all unsuitable with respect to supporting Quino checkerspot butterfly, the entire site was determined to be entirely excludable habitat, and no surveys were recommended. Quino checkerspot butterfly is considered absent from the project site.

Western Burrowing Owl

Western burrowing owl was named a candidate species for listing under CESA on October 10, 2024. As such, it receives the same protections as a state threatened species until a final decision has been made on its status by the California Fish and Game Commission. The species may be found throughout much of California and west of the Mississippi River where suitable habitat occurs. Although some open habitats occur within the BSA, no requisite suitably sized burrows were present. Therefore, suitable habitat was not present, and the species is considered absent from the BSA. However, it still has potential to move onto the project site prior to construction if suitable burrows become available.

Western Spadefoot

Western spadefoot is currently a federal candidate for listing and a California Species of Special Concern. A habitat assessment for the species found there to be low potential for the species to occur due to marginal back-water areas adjacent to the San Diego River and possible stagnant ponded areas within other riparian zones in the BSA outside of the development footprint. A follow-

up survey in 2025 confirmed marginal habitat, and a survey of potentially suitable pooled areas was negative.

3.3 Jurisdictional Waters and Wetlands

Within the project site, 10 features, including two excluded golf course ponds and one concrete V-ditch within the delineation area, aquatic resources were identified, evaluated, and mapped for potential USACE, RWQCB, and CDFW jurisdiction pursuant to the regulations described in Section 1.4, *Regulatory Setting*. Each feature evaluated within the proposed project site is depicted on Figure 8, described below, and summarized by resource agency in Tables 3-2, 3-3, and 3-34. The totals presented in each table should not be summed due to overlap between resources.

Table 3-2. Summary of USACE and RWQCB Aquatic Resources Within the Project Site (including Avoidance Areas)

			USACE/RWQCB[6]		
			Non-wetland	Wetland[4]	Excluded Waters[5]
Feature	Linear Feet	OHWM Width[1]	Acres[2]	Acres	Acres
Aquatic Resource					
NWW 1	7,218	54	7.48[3]	--	--
NWW 2	416	24	0.24	--	--
NWW 3	139	3	0.01	--	--
NWW 4	76	--	--	--	--
NWW 5	163	20	0.09	--	--
WW 1	--	--	--	0.05	--
WW 2	--	--	--	0.20	--
Non-jurisdictional Feature					
EW 1	--	--	--	--	1.77
EW 2	--	--	--	--	1.06
EW 3	253	--	--	--	0.01
Subtotal	**8,265**	--	**7.82**	**0.25**	**2.84**
Total	**8,265**	--	**8.07**		**2.84**

[1] Based on average OHWM width in the delineation area.
[2] Total acreage may not add up to the total shown; total is reflective of rounding GIS raw data in each category.
[3] Of this, 0.02 acres is concrete/riprap-lined.
[4] Acreage does not include wetlands within the stream channel (i.e., wetlands below the OHWM).
[5] 33 CFR 328.3(b)(4)(i) – artificially, constructed lakes and ponds created in dry land are not considered waters of the U.S.
[6] USACE/RWQCB jurisdiction was not delineated in the large, interior avoidance area on the northeast side of the project site
OHWM = ordinary high-water mark; RWQCB = Regional Water Quality Control Board; USACE = U.S. Army Corps of Engineers.

Table 3-2. Summary of Potential USACE Aquatic Resources Within the Project Site

	USACE		
Feature[1]	Non-wetland Waters (Acres)	Wetland Waters (Acres)	Total (Acres)
NWW 1	8.42	7.17	15.59
NWW 3	0.01	0	0.01
NWW 5	0.09	0	0.09
Total	**8.53**	**7.17**	**15.70**

Notes: Totals may not sum due to rounding. USACE = U.S. Army Corps of Engineers. NWW = non-wetland water.
[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both non-wetland waters and wetlands.

~~**Table 3-3. Summary of CDFW Jurisdictional Resources Within the Project Site (including Avoidance Areas)**~~

			~~CDFW~~		
~~Aquatic Resource~~	~~Linear Feet~~	~~Top of Bank Width[1] (feet)~~	~~Unvegetated Streambed Acres[2]~~	~~Vegetated Streambed Acres~~	~~Riparian Acres~~
~~NWW 1~~	~~7,218~~	~~65~~	~~2.970~~	~~13.708~~	~~0.476~~
~~NWW 2~~	~~416~~	~~60~~		~~0.606~~	
~~NWW 3~~	~~139~~	~~6~~		~~0.019~~	
~~NWW 4~~	~~76~~	~~N/A~~			~~0.059~~
~~NWW 5~~	~~163~~	~~30~~		~~0.122~~	~~0.214~~
~~**Subtotal**~~	~~8,012~~	~~--~~	~~**2.970**~~		~~**0.749**~~
~~**Total**~~	~~**8,012**~~	~~--~~		~~**18.175**~~	

~~[1] Based on average width in the proposed project site.~~
~~[2] Total acreage may not add up to the total shown; total is reflective of rounding GIS data in each category.~~
~~CDFW = California Department of Fish and Wildlife~~

Table 3-3. Summary of Potential RWQCB Aquatic Resources Within the Project Site

	RWQCB		
Feature[1]	Non-wetland Waters (Acres)	Wetland Waters (Acres)	Total (Acres)
NWW 1	8.42	7.17	15.59
NWW 2	0.23	0	0.23
NWW 3	0.01	0	0.01
NWW 4	0	0.01	0.01
NWW 5	0.09	0	0.09
WW 1	0	0.05	0.05
WW 2	0	0.20	0.20
WW 3	0	0.01	0.01
WW 4	0	0.01	0.01
Total	**8.76**	**7.44**	**16.20**

Notes: Totals may not sum due to rounding. RWQCB = Regional Water Quality Control Board. WW=wetland waters
[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve

	RWQCB		
Feature[1]	Non-wetland Waters (Acres)	Wetland Waters (Acres)	Total (Acres)

continuity between documents. Therefore, a feature labeled NWW may include both non-wetland waters and wetlands.

Table 3-4. Summary of Potential CDFW Aquatic Resources Within the Project Site

	CDFW		
Feature[1]	Riparian Habitat (Acres)	Streambed (Acres)	Total (Acres)
NWW 1	9.46	9.82	19.28
NWW 2	0	0.61	0.61
NWW 3	0	0.02	0.02
NWW 4	4.29	0	4.29
NWW 5	0.67	0.14	0.81
NWW 6	0	0.07	0.07
RIP 1	1.18	0	1.18
WW 1	0.23	0	0.23
WW 2	0.48	0	0.48
WW 3	0.01	0	0.01
WW 4	0.01	0	0.01
Total	**16.32**	**10.65**	**26.97**

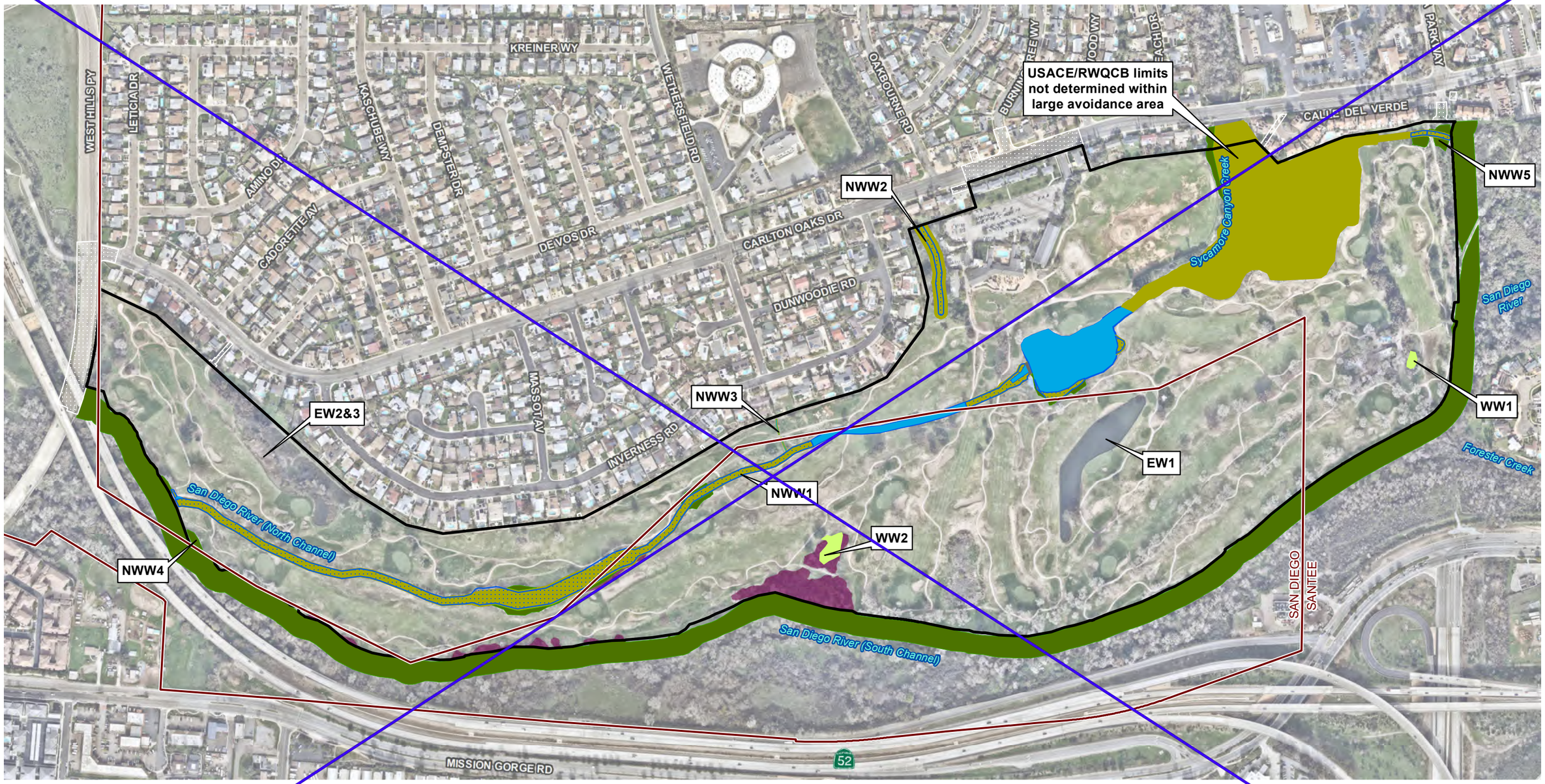
Notes: Totals may not sum due to rounding. CDFW = California Department of Fish and Wildlife.
[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both streambed and riparian habitat.

Ten features within the delineation area were identified and mapped for potential USACE, RWQCB, and CDFW jurisdiction~~. At least 8.07 acres of non-wetland and wetland aquatic resources likely subject to USACE and~~ by ICF in 2019, 2020, and 2021. While the mapping remained largely the same, the 2025 delineation efforts conducted by Dudek resulted in the identification of an additional previously un-mapped feature in the northeast corner of the site, as well as a previously un-mapped wetland in the northwest portion of the site. Additionally, the extents of riparian habitat expanded since ICF's mapping efforts. Therefore, a total of eleven potentially jurisdictional aquatic features were identified within the project site as shown on Figure 8. Approximately 15.70 acres of non-wetland and wetland aquatic resources likely subject to USACE and 16.20 acres of RWQCB regulatory jurisdiction (i.e., are waters of the State/U.S.) occur within the delineation area (the project site~~); the full extent of USACE/RWQCB jurisdiction was not determined within sections of NWW1 within Avoidance Areas in the northeast side of the project site, because these areas will not be affected by the project.~~). Additionally, there are ~~18.175~~ 26.97 acres ~~(8,012 linear feet)~~ of streambed and riparian resources that would be subject to CDFW jurisdiction pursuant to Sections 1600–1616 of the California Fish and Game Code. ~~Finally,~~The total acreages for each agency should not be summed due to overlap between jurisdictional aquatic resources.

The ICF delineation determined that three of the mapped aquatic resources—EW 1, EW 2, and EW 3—are ornamental and/or artificial aquatic resources, constructed in dry land. These types of features are excluded aquatic resources (33 CFR 328.2[b]) and are not considered waters of the U.S. An approved jurisdictional determination from the USACE was obtained confirming that CWA

jurisdiction does not exist over the excluded waters (i.e., EW 1, EW 2, and EW 3) (Appendix I). Descriptions of each feature are provided herein.

Non-Wetland Water (NWW) 1 is an intermittent segment of San Diego River (North Channel) and Sycamore Canyon Creek that is likely regulated by the USACE, RWQCB, and CDFW, and portions within the City of San Diego would be considered City of San Diego ESL Wetlands. NWW 1 is tributary to the San Diego River (South Channel) and has been manipulated due to the construction of the golf course. Prior to construction of the golf course, NWW 1 was the historic main channel of the San Diego River, but the San Diego River main channel was diverted south of the berm along the east and south side of the project site. The lateral limits of NWW 1 are clearly defined by bed and bank, clear break in slope, and change in vegetation cover and species (Appendix I). NWW 1 flows northeast to southwest across the project site and contains sections of unvegetated non-wetland waters and vegetated non-wetland waters; no adjacent waters or wetlands (outside of the OHWM) were observed. Within the delineation area, NWW 1 is dominated by southern cattails (*Typha domingensis*) with sections supporting patches of arroyo willow, red willow, cottonwood, and palms. A large in-line pond has also been constructed within the feature (Figure 8) and an approximately ~~20~~60-foot-long concrete and riprap-lined dam/spillway occurs directly downstream of this pond. Near the downstream segment of the delineated feature (Figure ~~5~~8), the river is not as constrained, allowing for a larger active floodplain supporting an understory of yerba mansa (*Anemopsis californica*) and curly dock (*Rumex crispus*) and an overstory of willows and cottonwood.



Project Site
Offsite Areas
City of Santee/San Diego Municipal Boundary

Waters of the U.S. and State
- Nonwetland Water
- Nonwetland Water (Riprap-lined)
- Wetland Waters
- Wetland Waters Within OHWM

CDFW Waters
- Unvegetated Streambed
- Vegetated Streambed
- Riparian

*Within the City of San Diego, these areas are also ESL Wetlands.

City of San Diego ESL Wetland
- Southern Cottonwood-Willow Riparian Forest (61330)

Source: Jurisdictional Resources-ICF (2021); Imagery-SANGIS (2023)

ICF N

0 225 450 Feet

1 in = 450 feet

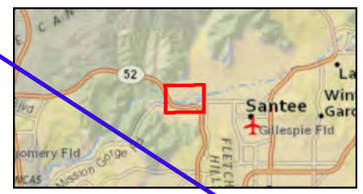


Figure 8
Jurisdictional Waters and Wetlands
Carlton Oaks Country Club and Resort

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NWW 2 ~~is~~was mapped by ICF as an intermittent stream, likely subject to USACE, RWQCB, and CDFW jurisdiction, that flows north to south, draining into NWW 1. This feature begins at a storm drain outfall located off of Carlton Oaks Drive. This feature is also manipulated as it is confined between the existing housing development to the west and the existing golf course parking lot to the east (Figure 8). Lateral limits of NWW 2 were delineated based on a clear break in slope and changes in vegetation cover and species (Appendix I). This feature is dominated by Brazilian peppertrees (*Schinus terebinthifolia*), southern cattails, and willows within the active floodplain while the banks are dominated by highway iceplant (*Carpobrotus edulis*). This feature flows into a large culvert, which is assumed to outlet into NWW 1 (located 200 feet south of this feature); however, the outlet within NWW 1 could not be located at the time of the ~~delineation.~~ICF or Dudek delineation. This culvert does not provide a continuous surface connection to NWW 1. Therefore, NWW 2 does not connect to a Traditionally Navigable Water (TNW) and would not be considered USACE jurisdictional. NWW 2 was considered USACE jurisdictional by ICF under previous federal regulations. In response to the Sackett v. EPA (2023) Supreme Court (Court) ruling, the revised Clean Water Rule adopted in 2023 would now exclude NWW 2 from federal jurisdiction, reflecting the Court's narrowed interpretation of federal authority over aquatic resources. Therefore, this feature is no longer considered USACE jurisdictional as a waters of the United States.

NWW 3 is an ephemeral stream that flows north to south and is likely subject to USACE, RWQCB, and CDFW jurisdiction. It is a tributary to NWW 1 (Figure 8). This feature starts at a small storm drain outfall near the edge of the existing housing developments. The channel bottom is unvegetated; however, the banks support scattered palms and are dominated by ripgut brome (*Bromus diandrus*), ragweed, and short-pod mustard. The lateral limits of NWW 3 are delineated based on bed and bank and break in slope.

NWW 4 (San Diego River [South Channel]) is associated riparian habitat to the San Diego River (South Channel), subject to CDFW jurisdiction ~~only~~with a small portion under RWQCB jurisdiction (Figure 8). No OWHM indicators or hydrology indicators were observed at this location. A 10- to 12-foot-tall berm occurs outside of the golf course between the San Diego River (South Channel), separating small riparian patches occurring on the golf course from the riparian areas associated with this feature. ~~However, in this area the berm has been eroded and is only 5 feet tall. Therefore, this area~~Willows and other riparian-associated vegetation exist north of the berm within the limits of the golf course in the south-central portion of the project site. These areas were mapped within the vegetation layer as southern cottonwood-willow riparian forest. These areas are separated from normal overflow of the San Diego River (South Channel) by the tall berm, but may be inundated by flooding from Sycamore Canyon Creek or from extreme flow events associated with the San Diego River (North Channel). The cottonwoods and willows are able to persist because of the elevated water table associated with the perennial San Diego River (South Channel). The berm in the westernmost portion of NWW 4 has eroded, reducing its height to 5 feet. Therefore, this area along the project's southern boundary is considered contiguous riparian habitat subject to CDFW jurisdiction. The riparian habitat within ~~this area~~NWW 4 is dominated by arroyo willows, cottonwoods, and mule fat.

NWW 5 is an intermittent stream channel located at the northeastern-most end of the delineation area. NWW 5 is subject to USACE, RWQCB, and CDFW jurisdiction (Figure 8). It is densely vegetated with cattails and a mix of other riparian vegetation including willows and cottonwoods. There is an existing culverted road crossing that is approximately 16 feet wide.

Wetland Water (WW) 1 is a depressional wetland (Figure 8) that is located approximately 400- linear feet from the San Diego River (South Channel) and approximately 800 linear feet from the OHWM of NWW 1. Additionally, WW 1 is located within the FEMA-mapped 100-year floodplain. ~~This feature is not considered CDFW jurisdictional as it is a wetland that is not directly associated with a lake, river, or stream feature.~~ Ponded water occurs within this area; however, no inlet or outlet structure was observed. Due to the location of a maintenance facility directly adjacent to this area, irrigation water may be drained into this area, allowing it to persist over time and causing wetland conditions. The area was dominated by bulrush and yerba mansa near the center and Brazilian peppertrees and willows along the edge. This feature would likely fall under RWQCB jurisdiction as a wetland waters of the state and CDFW jurisdiction as riparian habitat. WW 1 does not contain a continuous surface connection to a TNW and would likely not fall under USACE jurisdiction.

WW 2 is a depressional wetland (Figure 8) that is located approximately 225 linear feet from the San Diego River and approximately 425 linear feet from the OHWM of NWW 1. WW 2 is located within the FEMA-mapped 100-year floodplain. ~~This feature is not considered CDFW jurisdictional as it is separated from the San Diego River (South Channel) by a 10- to 12-foot-high berm, and therefore is not associated with a lake, river, or stream feature.~~ This depressional wetland had several inlet structures diverting irrigation water into this area, which is allowing this area to persist. The center of the depression supports bulrush, while the edges support willows and mule fat. ~~This feature may be considered a City of San Diego ESL wetland.~~ A portion of this feature would likely fall under RWQCB jurisdiction as a wetland waters of the state and CDFW jurisdiction as riparian habitat. WW 2 does not contain a continuous surface connection to a TNW and would likely not fall under USACE jurisdiction.

WW 3 is an isolated, depressional wetland (Figure 8) that is located within the developed-golf course approximately 200 linear feet north of the San Diego River (South Channel) and approximately 800 linear feet from the OHWM of NWW 1. WW 3 is located within the FEMA-mapped 100-year floodplain; however, due to a broken irrigation pipe directly adjacent to this area, irrigation water may be draining into this area, allowing it to persist over time and causing wetland conditions. Saturated soils occur within this area; however, no ponded water or inlet or outlet structure was observed during the Dudek field survey. This feature would likely fall under RWQCB jurisdiction as a wetland waters of the state and CDFW jurisdiction as riparian habitat. WW 3 does not contain a continuous surface connection to a TNW and would likely not fall under USACE jurisdiction.

WW 4 is a depressional wetland (Figure 8) that is located within the developed-golf course approximately 550 linear feet north of the San Diego River (South Channel) and approximately 515 linear feet from the OHWM of NWW 1. WW 4 is located within the FEMA-mapped 100-year floodplain. Saturated soils occur within this area; however, no ponded water or inlet or outlet structure was observed. WW 4 is likely present due to an adjacent broken irrigation pipe allowing irrigation water to pool in this area and create wetland conditions. The area was dominated by Bermuda grass (*Cynodon dactylon*, FACU), fat hen (*Atriplex prostrata*, FACW), tree tobacco (*Nicotiana glauca*, FAC) , and Gooding's willow (*Salix gooddingii*, FACW). Soils exhibited a depleted matrix. This feature would likely fall under RWQCB jurisdiction as a wetland waters of the state and CDFW jurisdiction as riparian habitat. WW 4 does not contain a continuous surface connection to a TNW and would likely not fall under USACE jurisdiction.

Excluded Water (EW) 1, EW 2~~,~~ (i.e. RIP 1), and EW 3~~:~~ (i.e. NWW 6): In addition to the mapped jurisdictional aquatic resources described above, two managed golf course ponds and one concrete

v-ditch were identified as potential aquatic resources during the ICF desktop delineation. These features were evaluated for USACE, RWQCB and/or CDFW jurisdiction and determined at that time not to be potential aquatic resources pursuant to Sections 404 and 401 of the CWA, the Porter-Cologne Act, and Section 1602 of the California Fish and Game Code. Specifically, the two managed golf course ponds and concrete v-ditch ~~are~~were determined to be human-made, ornamental waters created on dry land for primarily aesthetic reasons for the existing golf course. The concrete V-ditch and western golf course pond (EW 2 and EW 3 as described in the ICF delineation report [Appendix I] and shown on Figure 8) receive urban runoff and stormwater runoff originating from the northern residential development. ~~The~~As determined by ICF, the human-made v-ditch and western golf course pond are not an aquatic resource as they are not a relocated tributary, excavated in a tributary, or drained wetlands as historical aerials do not show a tributary previously existing over the area. Additionally, EW 1 (~~south of the proposed Residential North~~Figure 8) is filled with non-potable water and is used to irrigate the golf course grounds. Representative photos were taken of these areas by ICF and historical aerial imagery evaluated to provide further support and documentation as to why they were not considered jurisdictional. U.S. Army Corps of Engineers issued an Approved Jurisdictional Determination on June 19, 2020, determining that waters of the U.S. are not present within the EW-1, EW-2, and EW-3 (Appendix J).

Historical aerials reviewed by ICF confirmed the three features were constructed in dry land (Appendix J in Appendix E, Revised Biological Survey Report). Prior to the construction of the golf course the San Diego River was leveed and re-routed to the south of the proposed project site in the 1960s. This converted the majority of the project site, including the areas inclusive of ~~EW1, EW2~~EW 1, EW 2, and ~~EW3~~EW 3, to uplands (Appendix J: Attachment 1: Figure 1), and the surrounding area began to develop with residential homes and the golf course. The excluded waters were constructed into golf course ponds and the concrete v-ditch in the 1980s, where the site had been upland habitat since the re-routing of the San Diego River.

Per the 2015 Clean Water Rule (33 CFR 328.3(b)(4)(ii~~)~~)), which was the guidance in place at the time of the ICF delineation, artificial, constructed lakes and ponds created in dry land are excluded by rule. Both the golf course ponds (EW 1and EW 2) ~~meet~~met this definition and ~~are~~were therefore, not considered "waters of the United States". Likewise, and in accordance with 33 CFR 328.3(b)(3) the concrete v-ditch (~~EW3~~EW 3) is a ditch that carries ephemeral flows and is not a relocated tributary and was not constructed in a tributary~~.~~ as determined by ICF. Thus, EW 3 is not considered a "waters of the United States". An approved jurisdictional determination from the USACE was obtained confirming that CWA jurisdiction does not exist over the excluded waters (i.e., EW 1, EW 2, and EW-3) (Appendix J).

Dudek conducted a site visit with CDFW and RWQCB on October 21, 2025 to review on-site aquatic resources for potential jurisdiction. It was determined during CDFW's desktop review prior to the site visit that EW 3 (Feature NWW 6 in Dudek mapping shown on Figure 8) originates from a drainage visible on 1950s historic aerial imagery, prior to the construction of the housing development to the north of the golf course. This drainage was piped under the housing development when the development was constructed and now the drainage outlets onto the golf course as EW 3 (Feature NWW6 in Dudek mapping shown on Figure 8). EW 3 (Feature NWW6 in Dudek mapping shown on Figure 8) flows directly into EW 2 (RIP 1 in Dudek mapping shown on Figure 8), a three-parameter wetland containing freshwater marsh, southern willow scrub, and southern cottonwood-willow riparian forest. It was determined at the site visit that EW 2 and EW 3 (Features RIP 1 and NWW 6 in Dudek mapping shown on Figure 8) would be considered CDFW jurisdictional based on subsequent input from CDFW following the October 2025 site visit.

3.3.1 City of San Diego ESL Wetland

City of San Diego ESL regulations have protections for wetlands. City of San Diego Municipal Code Chapter 11, Article 3, Division 1 includes the following wetland definition: "Wetlands are defined as areas which are characterized by any of the following 1) All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to … riparian forest … riparian woodlands, riparian scrub…." ~~Riparian habitat along~~Therefore, the ~~San Diego River (South Channel) within~~ majority of the jurisdictional habitats within the BSA within the City of San Diego are considered City of San Diego ~~limits meets this definition of~~ Environmentally Sensitive Lands (ESL) wetlands. The City of San Diego ~~ESL Wetlands. The riparian~~wetlands total 5.76 acres, including 1.75 acres within the MHPA and ~~wetland habitat along San Diego River (North Channel) within the City of San Diego also meets the definition of ESL Wetland (Feature NWW 1 discussed above).~~4.01 acres outside the MHPA as summarized in Table 3-5.

Table 3-5. Summary of City of San Diego Wetlands Within the Project Site

	City of San Diego Wetlands		
Feature	Within MHPA Acres	Outside MHPA Acres	Total Acres
Aquatic Resource			
NWW 1	0.05	1.78	1.83
NWW 3	0	0.01	0.01
NWW 4	1.70	1.75	3.45
WW 2	0	0.48	0.48
Total	**1.75**	**4.01**	**5.76**

Notes: Totals may not sum due to rounding.

The City of San Diego ESL regulations state "It is intended for this definition to differentiate for the purposes of delineating wetlands, between naturally occurring wetlands and wetlands intentionally created by human actions" with artificially created areas not considered wetlands under this definition. ~~Excluded Waters 1, 2, and 3 are water bodies~~Accordingly, areas within the site that exhibit wetland characteristics but are artificially created do not qualify as wetlands under the City of San Diego's definition. Excluded Waters (EW) 1 is a water body intentionally created by human actions in the creation of the golf course, as demonstrated in historic photos in Appendix J. ~~As these~~ Additionally, WW 3 and WW 4 are isolated, human-influenced (fed by the golf course ~~ponds are intentionally~~irrigation), depressional features. As these depressional features (WW 3 and WW 4) and golf course pond (EW 1) were created by human actions within upland areas of the golf course, they are ~~therefore~~ not wetlands subject to City of San Diego ESL Regulations.

The San Diego River (South Channel) and its associated riparian habitat (refer to NWW 4 and WW 2 on Figure 8) exists beyond the southern boundary of the project site, which is separated from the golf course by a tall earthen berm. Willows and other riparian-associated vegetation exist north of the berm within the limits of the golf course in the south-central portion of the project site (refer to feature WW 2 on Figure 8). These areas were mapped within the vegetation layer as southern cottonwood-willow riparian forest. These areas are separated from normal overflow of the San Diego River (South Channel) by the tall berm but may be inundated by flooding from Sycamore

Canyon Creek or from extreme flow events of the San Diego River (North Channel). The cottonwoods and willows would be able to persist because of the elevated water table associated with the perennial San Diego River (South Channel). This riparian area is considered a City of San- Diego ESL Wetland because of the presence of riparian vegetation communities ~~but is not considered CDFW jurisdictional because of the presence of the berm and the associated disconnect from wetland hydrology. This forest is within avoidance areas and will not be removed~~.

Sycamore Canyon Creek drains the nearly 10,000-acre watershed of Sycamore and West Sycamore Canyons of east Marine Corps Air Station (MCAS) Miramar, northern Santee, and the County of San- Diego Sycamore Canyon/Goodan Ranch Preserve. To the north of the project site, Sycamore Canyon Creek parallels the Santee Lakes and enters the project site under the existing Carlton Oaks Drive bridge. (refer to NWW 1 on Figure 8). Sycamore Canyon Creek then merges with San Diego River (North Channel) and encounters a historical impoundment within the existing golf course. The channel (now called San Diego River [North Channel]) passes over a spillway and then traverses the existing golf course in a mildly incised earthen channel, before meeting the mainstem San Diego River (South Channel) at the southwestern side of the project site. The impoundment along San- Diego River (North Channel) is an intermittent feature and dries out during some summers, as in 2021. The City of San Diego municipal boundary intersects with San Diego River (North Channel) below the impoundment (Figure ~~11~~8). San Diego River (North Channel) traverses 1,735 feet within the City of San Diego; all of San Diego River (North Channel) within the City of San Diego would be considered a City of San Diego ESL wetland based on the frequent occurrence of native and nonnative hydrophytic vegetation.

The riparian habitat (NWW 4 and WW 2) to the north of the berm was observed to contain breeding least Bell's vireo habitat in 2019 (Figure 6). Least Bell's vireo is widespread within this section of the San Diego River during the summer breeding season. ~~This~~These ESL ~~Wetland is~~Wetlands are considered occupied least Bell's vireo habitat. Least Bell's vireo were observed along San Diego River (North Channel) (NWW 1) within the City of San Diego during protocol-level surveys conducted in 2022.

3.3.2 City of San Diego Wetland Buffer

The City of San Diego Biology Guidelines (City of San Diego 2018) requires that a wetland buffer be maintained around all City wetlands as appropriate to protect the function and values of the wetland. The wetland buffer width, along with characteristics of the buffer area (vegetation communities present, etc.), provides protection for the functions and values of the City wetlands, according to the City's Biology Guidelines (City of San Diego 2018a) and Section 320.4(b)(2) of the USACE General Regulatory Policies (33 CFR 320–330), including wildlife habitat, food chain productivity (i.e. foraging areas for wildlife), water quality, ground water recharge, and protection from storm and flood waters. Because the golf course is the existing land use occurring within the wetland buffer surrounding the City of San Diego wetlands, there would be no change to the wetland buffer width or characteristics with project implementation.

3.4 Habitat Connectivity and Wildlife Corridors

3.4.1 Wildlife Movement Corridors

Wildlife-movement corridors are areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetative cover provide corridors for wildlife movement. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high-population density areas; and facilitate the exchange of genetic traits between populations.

The BSA is immediately north of and adjacent and parallel to an east-west running portion of the mainstem of the San Diego River (South Channel), being situated in the floodplain of the river (Figure 9). Situated as it is in the river floodplain, the topography is generally flat throughout most of the BSA. Immediately south of the river and SR-52 is residential housing. Most of the San Diego River (South Channel) is within the boundaries of the City of San Diego MHPA. The BSA is bound by residential housing to the north and by Carlton Oaks Drive on the northeast boundary. Situated north across Carlton Oaks Drive is the 190-acre Santee Lakes Recreation Preserve, consisting of several fish-stocked lakes, campgrounds, and semi-natural areas.

The *California Essential Habitat Connectivity Project* (Spencer et al. 2010) was commissioned to encourage a functional network of connected wildlands for the continued support of California's diverse natural communities. The report identifies large, relatively natural habitat blocks that support native biodiversity (Natural Landscape Blocks) and areas essential for connectivity between Natural Landscape Blocks (Essential Connectivity Areas). For the South Coast Region, the report identifies an Essential Connectivity Area from Mission Trails/Santee to the northeast to Central Poway, and County of San Diego Sycamore Canyon/Goodan Ranch Preserve to the large blocks of habitat to the east of SR-67, including City of San Diego Cornerstone Lands at San Vicente Reservoir, CDFW San Vicente Highlands Open Space Preserve, County of San Diego Boulder Oaks Preserve, El- Capitan Preserve, and Oak Oasis Preserve, and open space beyond these preserve lands. The BSA is not within this or other Essential Connectivity Areas.

The MSCP Plan includes designated Biological Core and Habitat Linkages, which served as an analytical tool to assist in testing preserve design criteria for the MHPA (City of San Diego 1998). The MSCP Plan includes the area from Mission Trails through East Elliott to Sycamore Canyon/Goodan Ranch Preserve as a Habitat Linkage; it does not identify a formal biological linkage to the east along San Diego River through the City of Santee (see Table 2.2 in City of San Diego 1998). The City of San Diego Subarea Plan does not identify wildlife corridors beyond those described in the MSCP Plan. The ~~wildlife agency draft~~MSCP Plan (City of San Diego 1998) and the Draft City of Santee Subarea Plan (2025) identifies a biological core area or wildlife movement corridor along the San Diego River between Mission Trails, through Santee, east toward the community of Lakeside~~.~~ as shown on Figure 9.

Although the *California Essential Habitat Connectivity Project* and the MSCP Plan do not include the San Diego River through Santee as a designated wildlife linkage, this analysis considers the San- Diego River as a large and important linear habitat feature consisting primarily of various riparian, wetland, and open water habitat types in addition to other habitat types such as upland scrub. This river environment provides nesting and refugia habitat for a large number of native bird species in addition to nursery and refugia sites for many other species including mammals, reptiles,

amphibians, and invertebrates. It also provides the important function of allowing animals, seeds and nutrients to move throughout the landscape ecosystem for dispersal or to allow for life-cycle completion. The San Diego River is heavily constrained by residential development to the north and south of the project site by Santee and El Cajon's Fletcher Hills, respectively. To the east of the project site, the San Diego River is heavily constrained by transportation corridors and residential and commercial development in the City of Santee, and the communities of Lakeside and Winter Gardens. To the west of the project site, the San Diego River opens into the large open space of Mission Trails Regional Park and undeveloped East Elliott areas of Marine Corps Air Station Miramar.

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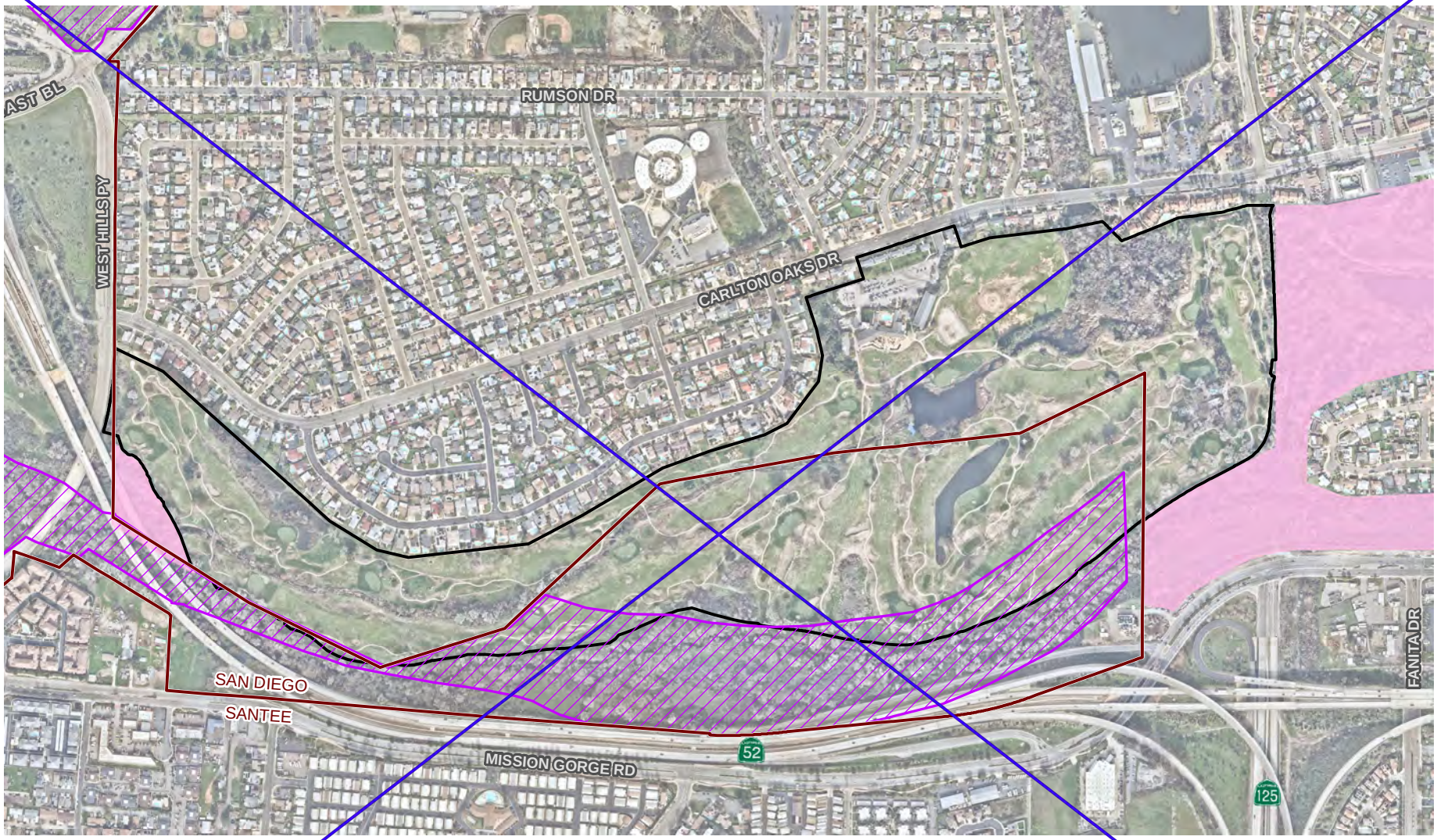

Project Site

City of Santee/San Diego Municipal Boundary

City of San Diego MHPA

Existing Protected Open Space or Conservation Lands

Source: Imagery-SANGIS (2023)

0 400 800 Feet

1 in = 800 ft

N

Figure 9
Adjacent Lands
Carlton Oaks Country Club and Resort

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The San Diego River (South Channel) contains expansive riparian forest and the main perennial channel of the San Diego River. San Diego River (South Channel) borders the project site to the south. There is a berm that exists along much of the southern boundary of the project site which has a dirt trail on or along the base of the berm for most of the southern boundary of the project site. Golf course maintenance staff report seeing wildlife species consistently utilizing the dirt trail for movement at dusk, dawn, and night. This is not surprising, considering the ease of movement along an isolated dirt path adjacent to the shelter of the riparian forest located south of the project site. The continuous riparian forest corridor of the San Diego River (South Channel) is considered to be the primary movement corridor.

The existing Carlton Oaks Golf Course is functionally a savanna, with expansive 'lawns' of golf course features, with scattered ornamental trees throughout. The golf course provides for active recreation during the day, but is essentially unoccupied by humans at night, allowing for easy, additional wildlife movement through this savanna-like community. The golf course also includes the San Diego River (North Channel). The San Diego River (North Channel) has intermittent hydrology and lacks shrub and tree cover over much of its length; common vegetation in the channel includes invasive, herbaceous floating water-primrose (*Ludwigia peploides*), which does not provide function cover for mammal movement. The golf course and the San Diego River (North Channel) can serve as a secondary movement corridor for wildlife following the San Diego River (South Channel).

A few examples of wildlife species observed moving through or living in this wildlife corridor are southern mule deer, coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), great blue heron (*Ardea herodias*), snowy egret (*Egretta thula*), red-tailed hawk (*Buteo jamaicensis*), Nuttall's woodpecker (*Dryobates nuttallii*), least Bell's vireo, western bluebird, and yellow-breasted chat.

3.4.2 Wildlife Core Areas

The MSCP Plan (City of San Diego 1998) identifies the connection from Mission Trails northeast though East Elliott to San Vicente Cornerstone Lands as part of a generalized core biological area (Mission Trails/Kearney Mesa/East Elliott/Santee). The MSCP Plan also identifies a part of the generalized core biological area extending from Mission Trails to the vicinity of the BSA. The San- Diego subarea plan (City of San Diego 1997) refined the generalized core biological area of the MSCP Plan into the specific MHPA, which is a "hard line" preserve noting that not all of the generalized core biological area would be included in the hardline preserve. The San Diego River (south channel) to the south of the project area was designated as MHPA. Biological resource core areas, such as the riparian corridor along the San Diego River (South Channel) to the south of the BSA, generally have high value.

Sycamore Canyon Creek to the north of Carlton Oaks Drive averages 200-feet wide, constrained by existing residential housing to the west and a 6-foot-tall chain link fence separating the creek from Santee Lakes. Therefore, the BSA would provide constrained connectivity for species moving between the San Diego River environment and the Santee Lakes Recreation Preserve.

~~Double-crested cormorant occurs commonly as a non-breeding visitor in both salt- and freshwater bodies in San Diego County. It is widespread and common as a winter visitor, but is very rare as a breeding population. A rookery was observed in a eucalyptus along a pond within San Diego River (North Channel) within the center of the golf course in the City of San Diego. The *San Diego County Bird Atlas* reported that only two rookery locations were known from San Diego County (Unitt~~

~~2004), with Carlton Oaks representing a new rookery. Rookeries of this species are considered special status by CDFW and are wildlife nursery sites protected under CEQA.~~

The municipal boundaries of City of San Diego and City of Santee are intertwined across the golf course and San Diego River. The habitat connectivity analysis is a landscape scale analysis and is the same for both jurisdictions.

3.4.3 Double-Crested Cormorant (*Nannopterum auritus*)

CDFW Watch List (Individuals); CDFW Sensitive (Rookeries)

Double-crested cormorant occurs commonly as a non-breeding visitor in both salt- and freshwater bodies in San Diego County. It is widespread and common as a winter visitor. It is very rare as a breeding population. The *San Diego County Bird Atlas* reported that only two rookery locations were known from San Diego County (Unitt 2004); Carlton Oaks represents a new rookery unreported in the Bird Atlas.

A rookery was observed in a eucalyptus along a pond within San Diego River (North Channel) within the center of the golf course in the City of San Diego (Figure 7). Based on the August 19, 2025 Dudek assessment conducted by senior wildlife biologist Brock Ortega, the rookery nests occurred in two separate portions of the eucalyptus tree in open-canopied higher branches. The northern opening contained approximately 11 nests and the southeastern opening contained approximately 4 nests. No birds were present during the field visit, but based on the number of nests, it is assumed that up to 15 pairs (30 adults) may use the tree. The rookery is located in the heart of the golf course near the central hub of activity, approximately 500 feet from the clubhouse and 650 feet from residences along Inverness Road. The tree and rookery are situated over a cart path and on the fairway. A large, roughly 1-foot by 2-foot upward-facing high-powered accent light sits at the base of the neighboring tree and currently illuminates this tree at night. It appears that the cormorants are accustomed to constant daytime human activity and nighttime illumination. Rookeries of this species are considered special-status by CDFW and are wildlife nursery sites protected under CEQA.

3.5 Regional Planning

Portions of the project site within the City of San Diego are covered by the San Diego MSCP City of San Diego Subarea Plan. The portion of the project site within the City of Santee is not a part of the Santee Subarea Plan and is therefore not discussed in this section.

3.5.1 City of San Diego MHPA

City of San Diego MHPA ~~is present~~overlaps a portion of the golf course along ~~and within~~ the southern boundary of the BSA within the City of San Diego~~.~~ (Figure 9). The golf course was established in 1958 and renovated in 1989, long before the original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. Of the 13.~~19~~42 acres ~~within~~of the project site that overlap the MHPA, ~~12.86~~there are 6.96 acres of developed-golf course, which would be ~~re-designed,~~permanently impacted by the golf course redesign. The remaining project site acreage that overlaps the MHPA would be avoided by the proposed project (i.e. 6.45 acres: 4.66 acres of developed-golf course and ~~0.33~~1.80 acres of southern cottonwood-willow riparian forest ~~would be avoided.~~). Although impacts would occur within the

MHPA, the existing uses (i.e. golf course), which predate the MSCP, would not change with project implementation.

3.5.2 MSCP City of San Diego Subarea Plan Species

The MSCP City of San Diego Subarea Plan covered animal species observed within the BSA were least Bell's vireo, Cooper's hawk, mule deer, and western bluebird. Belding's orange-throated whiptail is MSCP-covered; it was determined to have a high potential to occur and is therefore treated as if it were observed. No other MSCP covered plant or animal species were observed or determined to have a high potential to occur.

Least bell's vireo is the only one of these MSCP species which has specific conditions of coverage under the City of San Diego's MSCP Subarea Plan (City of San Diego 1997). The conditions of coverage in the City of San Diego's MSCP Subarea Plan are as follows:

> *Jurisdictions will require surveys (using appropriate protocols) during the CEQA review process in suitable habitat proposed to be impacted and incorporate mitigation measures consistent with the 404(b)1 guidelines into the project. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. Jurisdictions must require new developments adjacent to preserve areas that create conditions attractive to brown-headed cowbirds to monitor and control cowbirds. Area specific management directives must include measures to provide appropriate successional habitat, upland buffers for all known populations, cowbird control, and specific measures to protect against detrimental edge effects to this species. Any clearing of occupied habitat must occur between September 15 and March 15 (i.e., outside of the nesting period).*

The project complies with the conditions of coverage listed above, as follows. Surveys were conducted using appropriate protocols during the CEQA process. Mitigation measures were designed consistent with the 404(b)1 guidelines. Cowbirds are a nest-parasite for songbirds including Least Bell's vireo. Brown-headed cowbirds prefer habitats with scattered trees among grassland vegetation-woodland edges including prairies, fields, pastures, orchards, and is often associated with cows and agriculture (Unitt 2004, Lowther 2020). Cowbirds are widespread in San- Diego County (Unitt 2004) and were observed during vireo surveys in 2019 and 2022 (Appendix H). The project would not create new development adjacent to preserve areas which are more attractive to brown-headed cowbirds than the existing golf course conditions. No other specific Area Specific Management Directives are applicable to this project. No clearing of occupied habitat would occur within the City of San Diego or the MHPA. MM-BIO-12 will ensure that clearing of occupied habitat within the City of Santee occurs outside of the nesting period.

Mule deer, western bluebird, and Belding's orange-throated whiptail are non-listed animal species covered under the City of San Diego MSCP Subarea Plan. These three species do not have conditions for coverage (City of San Diego 1998).

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Chapter 4
Project Impact Analysis

This section identifies direct, indirect, and cumulative impacts that would result from the proposed project as determined by the CEQA process. Direct impacts associated with proposed project construction would include permanent impacts and temporary impacts. Direct permanent impacts are those where the ground disturbance would be permanent; the biological resources would not be replaced by the proposed project. Direct temporary impacts are those that would be caused by construction activity, but vegetation/habitat would be re-established in place following completion of construction.

Indirect impacts are actions that are not a direct result of the proposed project but affect biological resources either as a secondary effect of the direct impacts (e.g., construction noise, runoff, nighttime lighting, fugitive dust) or as the cause of degradation of a biological resource over time (e.g., edge effects).

Cumulative impacts refer to the incremental effect of the project's impacts when added to the effects of other closely related projects.

4.1 CEQA Guidelines

The CEQA Guidelines define "significant effect on the environment" as a "substantial or potentially substantial adverse change in the environment". CEQA provides guidelines on how to determine a significant effect on biological resources. Local jurisdictions such as the City of San Diego may provide further guidance on what would constitute a significant effect on biological resources.

4.1.1 California

The CEQA Guidelines (CEQA Appendix G) indicate that there may be a significant effect on biological resources if the project would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

4.1.2 City of San Diego

According to the City's Significance Determination Thresholds, potential impacts to biological resources are assessed through review of the project's consistency with the City's ESL Regulations, Biology Guidelines, and MSCP Subarea Plan. Before a determination of the significance of an impact can be made, the presence and nature of the biological resources must be established. Thus, significance determination, pursuant to the City's Significance Determination Thresholds, proceeds in two steps: (1) determine if significant biological resources are present; and (2) determine the sensitivity of identified biological resources in terms of direct, indirect, and cumulative impacts that would result from project implementation.

~~d.~~• Sensitive biological resources are defined by the City of San Diego Municipal Code as:

a. Lands that have been included in the MHPA as identified in the City of San Diego MSCP Subarea Plan (City of San Diego 1997);

b. Wetlands (as defined by the Municipal Code, Section 113.0103);

c. Lands outside the MHPA that contain Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines (July 2002 or current edition) of the Land Development manual;

d. Lands supporting species or subspecies listed as rare, endangered, or threatened;

e. Lands containing habitats with narrow endemic species as listed in the Biology Guidelines of the Land Development manual; and

f. Lands containing habitats of covered species as listed in the Biology Guidelines of the Land Development manual.

~~e.~~• Occurrence of any of the following situations associated with identified biological resources may indicate significant direct and indirect biological impacts.

A. Direct Impacts

a. Any encroachment in the MHPA is considered a significant impact to the preservation goals of the MSCP. Any encroachment into the MHPA (in excess of the allowable encroachment by a project) would require a boundary adjustment, which would include a habitat equivalency assessment to ensure that what would be added to the MHPA is at least equivalent to what would be removed.

b. Lands containing Tier I, II, IIIA, and IIIB habitats and all wetlands are considered sensitive and declining habitats. Impacts to these resources may be considered- significant.

c. Impacts to individual sensitive species, outside of any impacts to habitat, may also be considered significant based upon the rarity and extent of impacts. Impacts to State or Federally listed species and all narrow endemics should be considered- significant.

d. Certain species covered by the MSCP and other species not covered by the MSCP may be considered significant on a case-by-case basis taking into consideration all pertinent information regarding distribution, rarity, and the level of habitat conservation afforded by the MSCP.

B. Indirect Impacts

The Significance Determination Thresholds indicate that depending on the circumstances, indirect effects of a project may be as significant as the direct effects of the project. Indirect effects include, but are not limited to, the following impacts:

a. Introduction of urban meso-predators into a biological system
b. Introduction of urban runoff into a biological system
c. Introduction of invasive exotic plant species into a biological system
d. Noise and lighting impacts
e. Alteration of a dynamic portion of a system, such as stream flow characteristics or fire cycles
f. Loss of a wetland buffer that includes no environmentally sensitive lands.

The full analysis of these thresholds will be provided in the ~~Environmental Impact Report~~EIR prepared for the proposed project.

4.2 Direct Impacts

4.2.1 Vegetation Communities

The proposed project is primarily situated in areas mapped as developed or developed-golf course. The proposed project would result in direct permanent impacts ~~on up~~ to ~~148.17~~133.42 acres, of which ~~only 1.91~~ 3.56 acres are mapped as native or naturalized vegetation communities. ~~The~~The proposed project would also temporarily impact 3.28 acres, of which 3.13 acres are native or naturalized vegetation communities. The permanent and temporary impacts on these communities are detailed in ~~Tables~~ Table 4~~-~~-1 ~~and 4-2~~ and are shown on Figure 10. ~~Non-sensitive vegetation communities and land cover types are denoted with an asterisk.~~

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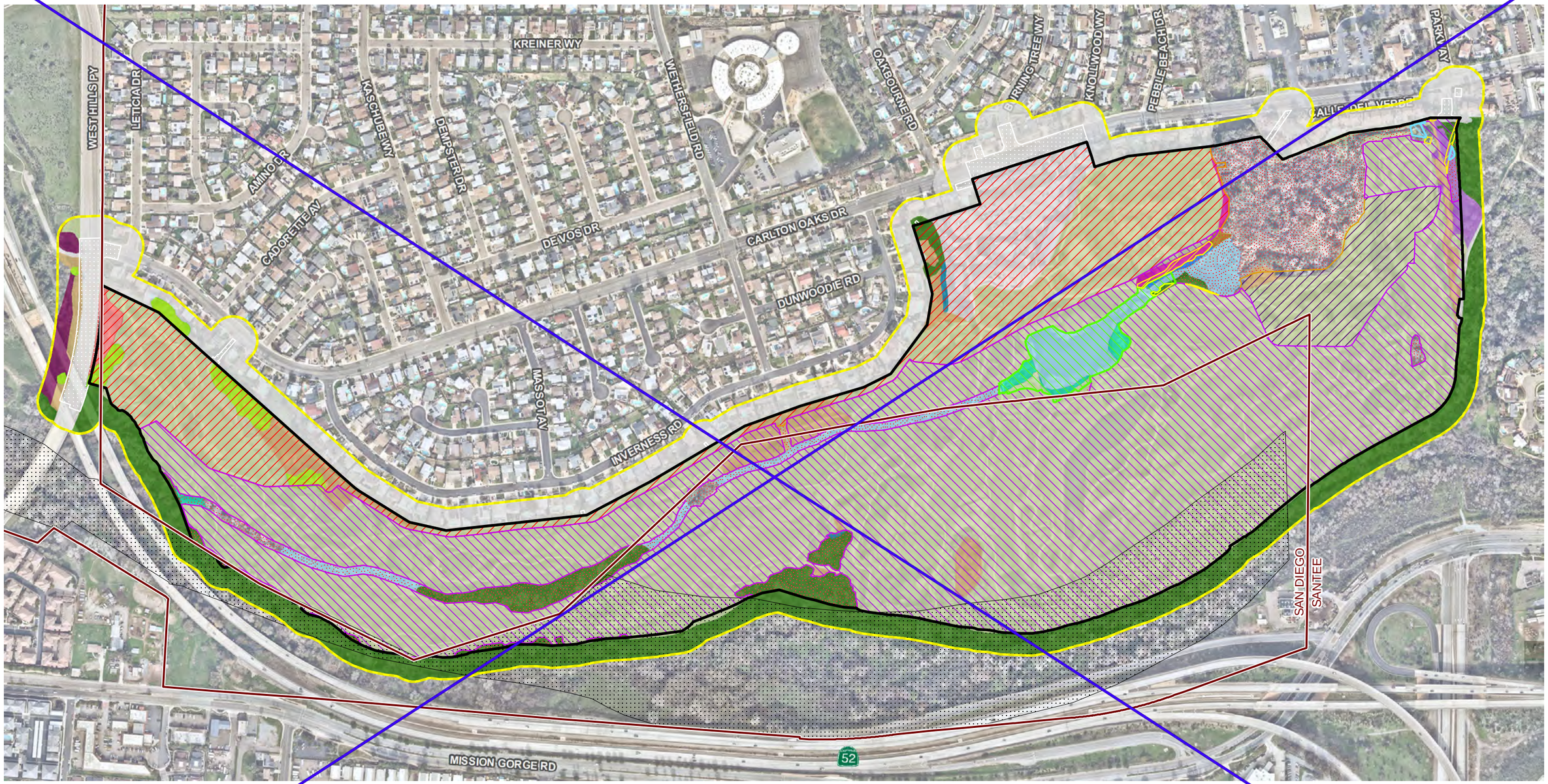


Project Site
Biological Study Area
City of Santee/San Diego Municipal Boundary
City of San Diego MHPA

Permanent Impact: Clubhouse/Hotel/Other
Permanent Impact: Residential
Permanent Impact: Golf Course Redesign
Permanent Impact for Fuel Modification Zone

Temporary Impacts Along Sycamore Creek
Temporary Impacts Within Golf Course
Avoidance
Offsite

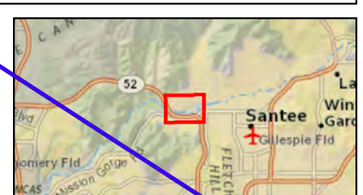
Vegetation Classification (Holland Code)

Riparian
- Mule Fat Scrub-disturbed (63310)
- Non-Native Riparian (65000)
- Southern Cottonwood-Willow Riparian Forest (61330)
- Southern Cottonwood-Willow Riparian Forest-disturbed (61330)
- Southern Riparian Scrub (63320)

Wetlands
- Coastal and Valley Freshwater Marsh (52410)
- Disturbed Wetland (11200)
- Fresh Water (64140)

Upland
- Diegan Coastal Sage Scrub-disturbed (32500)
- Non-Native Grassland (42200)
- Non-Native Woodland (79000)

Developed/Disturbed
- Developed (12000)
- Developed-Golf Course
- Disturbed Habitat (11000)
- Eucalyptus Woodland (79100)



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1 in = 450 feet

Source: Biological Resources-ICF (2022); Hunsaker & Associates (2023); Imagery-SANGIS (2023)

Figure 10
Potential Impacts on Vegetation Communities
Carlton Oaks Country Club and Resort

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Tables 4-~~1 through~~2 and 4-~~6~~3 are separated to show the portions of the impacts within the City of Santee and the City of San Diego~~.~~. Table 4-2 presents all permanent and ~~are broken down by project component. Table 4-1 presents all permanent~~temporary impacts on vegetation communities and other land cover types in the City of San Diego. Table 4-~~2~~3 presents all permanent and temporary impacts on vegetation communities and other land cover types (e.g., ~~developed) within the City of Santee. Table 4-3 presents all temporary impacts on all vegetation communities and other land cover types. Table 4-4 reiterates this information for only sensitive upland communities. Table 4-5 highlights permanent impacts on wetland and riparian communities and Table 4-6 presents temporary impacts on wetland and riparian communities.~~developed) within the City of Santee. Impacts were categorized into the following:

- **Permanent Impact – Residential**. These permanent impacts would result from the hardscape development of the residential development and any associated infrastructure of the proposed~~-~~ project.
- **Permanent Impact – Clubhouse/Hotel.** These permanent impacts would result from the hardscape development of the hotel and hotel cottages, restaurant, event space, golf clubhouse, learning center, and parking lot portions of the proposed project. This also includes an outdoor swimming pool and deck area, a patio, and a courtyard.
- **Permanent Impact – Golf Course Redesign.** These permanent impacts would result from the redesign of the golf course.
- **Permanent Impact – Fuel Modification Zone.** Areas outside of permanent impacts from grading that are subject to fuel modification zone requirements for vegetation thinning and removal. Fuel modification zones are considered a permanent impact unless the community would either not be considered impacted by fuel modification (non-native grassland) or would not be subject to fuel modification because of the wetness of the community (e.g., open water, non-native riparian).
- **Permanent Impact – Spillway/Dam Along San Diego River (North Channel).** During the dewatering activities the existing concrete spillway and earthen dam for the large, ponded area along the San Diego River (North Channel) would be repaired. The permanent impacts for the concrete spillway/earthen dam repair are based on the site's topographic contours and high-resolution aerial imagery and therefore represent an approximate impact footprint (i.e. not based on a field survey or spillway design). These impacts may vary slightly during final design and discussions with the aquatic resource agencies; however, the impact footprint provided in this analysis represents the greatest extent (i.e. impacts may be refined to reduce the impact footprint once design is finalized).
- **Permanent Impacts Proposed Resort Bridge and Proposed Golf Cart Bridge.** Footings and FMZ for the Proposed Resort Bridge and the footings for the Proposed Golf Cart Bridge across the San Diego River (North Channel) are included in the permanent impact footprint to avoid impacts to jurisdictional aquatic resources associated with the San Diego River (North Channel) to the greatest extent feasible. No temporary impacts from shading are anticipated due to the Proposed Resort Bridge and the Proposed Golf Cart Bridge occurring over fresh water.
- **Temporary Impacts Along San Diego River (North Channel).** These impacts include all of the natural habitat along San Diego River (North Channel) that could be temporarily impacted during construction but will be restored in the same location along San Diego River (North Channel). The majority of this area will only be subject to dewatering; the pond is currently an

intermittent feature, drying up when water is not coming from Sycamore Canyon or high water flows from the San Diego River, so effects of dewatering will be similar to existing variation in hydrology. These areas may also be subject to sediment removal from unvegetated areas; no sediment will be removed from freshwater marsh areas. ~~Temporary~~ In addition, temporary impacts may also occur from a ~~temporary access road and bent/footing installation associated with bridge construction over~~work area to repair the spillway within the ponded area of the San Diego River (North Channel~~).~~) these impacts are considered temporary because the work area would be restored to pre-project conditions after the spillway repair is complete.

- ~~**Temporary Impacts within Golf Course.** These impacts represent temporary impacts in the emergency access road in the northeast corner of the project site. These areas are adjacent to other native habitat and will be revegetated after construction of the emergency access road.~~

- ~~**Avoidance Areas.** These are areas of natural habitat that would be fully avoided from direct disturbance.~~**Temporary Impacts for the Temporary Railcar Crossing.** While the Proposed Resort Bridge is under construction, the Temporary Railcar Crossing would be placed at an existing golf cart bridge located west of the Proposed Resort Bridge to provide vehicular access to the golf course. Temporary steel beams and plates would be placed on top of the existing golf cart bridge to allow for a road wide enough to provide access for construction equipment. Once construction is complete the natural habitat areas would be restored in-place. To be conservative the entire area for the Temporary Railcar Crossing was analyzed as a temporary impact; however, impacts to sensitive habitat communities may not occur within the entire area based on the actual placement of the steel beams and plates on top of the existing golf cart bridge.

- **Avoidance Areas.** These are natural habitat areas associated with the major drainage feature bisecting the project site (i.e. Sycamore Canyon Creek and the San Diego River (North Channel)) and riparian habitat areas along the southern boundary of the project site associated with the San Diego River (South Channel). The golf course was designed to avoid these areas to the maximum extent feasible because these avoidance areas are highly valuable biological resources that are occupied by special-status species. Additionally, the project's grading and golf course layout were specifically designed to maintain river capacity and avoid adverse changes to the portion of Sycamore Canyon Creek and the San Diego River within the project site as well as the upstream or downstream reaches of Sycamore Canyon Creek and the San Diego River and their associated riparian vegetation communities. Therefore, the overall function and value of these areas will be maintained after project implementation.

- **Off Site.** Permanent impacts on areas outside of the project footprint, which may be directly affected. Descriptions of off-site activities are provided in Section 1.4.9.

Table 4-1. Summary of the Project's Permanent and Temporary Impacts on Vegetation Communities and Land Cover Types (acres)

	Permanent Impact Total[1]			Temporary Impact Total[2]			
Vegetation Community/Land Cover Type	**On-Site**	**Off-Site**	**Total**	**Railcar Crossing**	**Dewatering**	**Spillway Repair**	**Total**
Sensitive Vegetation Communities							
Coastal and Valley Freshwater Marsh	0.55	0	0.55	0.03	0.47	0.05	0.54
Diegan Coastal Sage Scrub – disturbed	0.50	0.11	0.61	0	0	0	0
Disturbed Wetland	0.29	0	0.29	0	0	0	0
Fresh Water	0.02	0	0.02	0.01	2.36	0.04	2.41
Mule Fat Scrub-disturbed	0.29	0	0.29	0	0	0	0
Non-Native Grassland	0.13	0	0.13	0	0	0	0
Non-Native Riparian	0	0	0	0	0.05	0	0.05
Southern Cottonwood-Willow Riparian Forest	1.19	0	1.19	0	0.12	<0.01	0.13
Southern Cottonwood-Willow Riparian Forest – disturbed	0.34	0	0.34	0	0	0	0
Southern Willow Scrub	0.17	0	0.17	0	0	0	0
Sensitive Vegetation Community Subtotal	*3.49*	*0.11*	*3.60*	*0.04*	*3.00*	*0.09*	*3.13*
Land Cover Types							
Developed	7.06	3.30	10.36	0	0	0	*0*
Developed-Golf Course	113.63	0.02	113.66	0.03	0.09	0.03	0.15
Developed – Culvert	<0.01	0	<0.01	0	0	0	0
Developed – Spillway	0.03	0	0.03	0	0	<0.01	<0.01
Disturbed Habitat	0.52	0.12	0.64	0	0	0	0
Eucalyptus Woodland	0.10	0	0.10	0	0	0	0
Non-Native Woodland	5.05	<0.01	5.05	0	0	0	0
Land Cover Types Subtotal	*126.39*	*3.44*	*129.83*	*0.03*	*0.09*	*0.03*	*0.15*
Total	**129.88**	**3.55**	**133.42**	***0.07***	***3.10***	***0.12***	***3.28***

Notes: Totals may not sum due to rounding.
[1]Permanent impacts include residential development, FMZ, golf course redesign, and clubhouse/hotel.
[2]Temporary impacts would all occur on site.

Table 4-2. Permanent Impacts on Vegetation Communities and Land Cover Types (acres) – City of Santee

Jurisdiction	Vegetation Community/Land Cover Type	On Site				Permanent Off Site	*Total Impacts*
		Residential	Clubhouse/ Hotel	Golf Course Redesign	Fuel Modification Zone		
City of Santee	Developed*	7.07		0.10		1.81	*8.98*
	Developed – Golf Course*	20.29	6.31	42.71			*69.31*
	Diegan Coastal Sage Scrub – disturbed	0.41					*0.41*
	Disturbed Habitat*	2.14	0.19	1.77			*4.10*
	Disturbed Wetland	0.12			0		*0.12*
	Eucalyptus Woodland*	1.19		0.04			*1.25*
	Mule Fat Scrub-disturbed		0.01	0.29	0.04		*0.34*
	Non-Native Grassland			0.01			*0.01*
	Non-Native Riparian		0.01	0.01	0.02		*0.04*
	Non-Native Woodland*	0.15		0.14	0.23		*0.52*
	S. Cottonwood-Willow Riparian Forest	0.35		0.10	0.05		*0.50*
	Southern Cottonwood-Willow Riparian Forest – disturbed	0.02	0.20	0.06	0.02		*0.30*
	Sensitive Habitat Subtotal	0.90	0.22	0.48	**0.13**	**0**	**1.73**
	City of Santee Subtotal	**31.74**	**6.72**	**45.24**	**0.36**	**1.81**	***85.88***

* = non-sensitive vegetation community or land cover type

~~**Table 4-1. Impacts on Vegetation Communities and Land Cover Types (acres) – City of San Diego**~~

~~Jurisdiction~~	~~Vegetation Community/ Land Cover Type~~	~~On Site~~			~~*Total Permanent On Site*~~	~~Permanent Off Site~~	~~*Total Impacts*~~
		~~Residential~~	~~Clubhouse/ Hotel~~	~~Golf Course Redesign~~			
~~City of San Diego~~	~~Developed*~~					~~1.57~~	~~*1.57*~~
	~~Developed-Golf Course*~~		~~0.41~~	~~58.48~~	~~*58.89*~~		~~*58.89*~~
	~~Diegan Coastal Sage Scrub – disturbed~~	~~0.08~~			~~*0.08*~~	~~0.11~~	~~*0.19*~~
	~~Disturbed Habitat*~~			~~1.40~~	~~*1.40*~~	~~0.12~~	~~*1.52*~~
	~~Eucalyptus Woodland *~~	~~0.10~~			~~*0.10*~~	~~0.02~~	~~*0.12*~~
	~~Sensitive Habitat Subtotal~~	~~0.08~~			~~*0.08*~~	~~0.11~~	~~*0.19*~~
	~~**City of San Diego Totals**~~	~~**0.18**~~	~~**0.41**~~	~~**59.88**~~	~~***60.47***~~	~~**1.82**~~	~~***62.29***~~

~~* = non-sensitive vegetation community or land cover type~~

Table 4-2. Permanent Impacts on Vegetation Communities and Land Cover Types (acres) – City of Santee

Jurisdiction	Vegetation Community/Land Cover Type	On Site				Permanent Off Site	*Total Impacts*
		Residential	Clubhouse/ Hotel	Golf Course Redesign	Fuel Modification Zone		
City of Santee	Developed*	7.07		0.10		1.81	*8.98*
	Developed – Golf Course*	20.29	6.31	42.71			*69.31*
	Diegan Coastal Sage Scrub – disturbed	0.41					*0.41*
	Disturbed Habitat*	2.14	0.19	1.77			*4.10*
	Disturbed Wetland	0.12			0		*0.12*
	Eucalyptus Woodland*	1.19		0.04			*1.25*
	Mule Fat Scrub-disturbed		0.01	0.29	0.04		*0.34*
	Non-Native Grassland			0.01			*0.01*
	Non-Native Riparian		0.01	0.01	0.02		*0.04*
	Non-Native Woodland*	0.15		0.14	0.23		*0.52*
	S. Cottonwood-Willow Riparian Forest	0.35		0.10	0.05		*0.50*
	Southern Cottonwood-Willow Riparian Forest – disturbed	0.02	0.20	0.06	0.02		*0.30*
	Sensitive Habitat Subtotal	0.90	0.22	0.48	**0.13**	**0**	**1.73**
	City of Santee Subtotal	**31.74**	**6.72**	**45.24**	**0.36**	**1.81**	***85.88***

* = non-sensitive vegetation community or land cover type

Table 4-3. Summary of Permanent and Temporary Impacts on Sensitive Vegetation Communities and Land Cover Types within the City of Santee (acres)

Vegetation Community/Land Cover Type	Perm Impact[1]			Temp Impact[2]
	On-Site	Off-Site	Total	On-Site
Sensitive Vegetation Communities				
Coastal and Valley Freshwater Marsh	0.55	0	0.55	0.54
Diegan Coastal Sage Scrub – disturbed	0.41	0	0.41	0
Disturbed Wetland	0.29	0	0.29	0
Fresh Water	0.02	0	0.02	2.41
Mule Fat Scrub-disturbed	0.29	0	0.29	0
Non-Native Grassland	0.13	0	0.13	0
Non-Native Riparian	0	0	0	0.05

Southern Cottonwood-Willow Riparian Forest	1.19	0	1.19	0.11
Southern Cottonwood-Willow Riparian Forest – disturbed	0.34	0	0.34	0
Southern Willow Scrub	0.17	0	0.17	0
Sensitive Vegetation Community Subtotal	*3.40*	*0*	*3.40*	*3.11*
Land Cover Types				
Developed	7.06	1.73	8.79	0
Developed-Golf Course	62.55	0	62.55	0.15
Developed-Culvert	<0.01	0	<0.01	0
Developed-Spillway	0.03	0	0.03	<0.01
Disturbed Habitat	0.52	0	0.52	0
Eucalyptus Woodland	0.09	0	0.09	0
Non-Native Woodland	4.60	<0.01	4.60	0
Land Cover Types Subtotal	*74.88*	*1.73*	*76.59*	*0.15*
Total	**78.27**	**1.73**	**80.00**	**3.26**

Notes: Totals may not sum due to rounding; Perm = permanent; Temp = temporary.
[1] Permanent impacts include residential development, FMZ, golf course redesign, and clubhouse/hotel.
[2] Temporary impacts include Temporary Railcar Crossing, dewatering and spillway repair work area.

Table 4-3. Temporary Impacts on Vegetation Communities and Land Cover Types – City of Santee (acres)

Jurisdiction	Vegetation Community/Land Cover Type	Temporary Impacts along San Diego River	Temporary Impacts within Golf Course Emergency Access Road	Total
City of Santee	Coastal and Valley Freshwater Marsh	0.56		*0.56*
	Developed – Golf Course*	0.26	0.01	*0.27*
	Fresh Water	2.43		*2.43*
	Mule Fat Scrub-disturbed		0.02	*0.02*
	Non-Native Riparian	0.05		*0.05*
	S. Cottonwood-Willow Riparian Forest	0.01		*0.01*
	Southern Cottonwood-Willow Riparian Forest – disturbed		0.06	*0.06*
	City of Santee Total	**3.31**	**0.09**	***3.40***

* = non-sensitive vegetation community or land cover type

Table 4-4. Summary of Impacts on Sensitive Upland Vegetation Communities (acres)

		On Site					
Jurisdiction	Vegetation Community/Land Cover Type	Residential	Clubhouse /Hotel	Golf Course Redesign	*Total Permanent On Site*	Permanent Off Site	Total Impacts
City of San Diego†	Diegan Coastal Sage Scrub – disturbed	0.08			*0.08*	0.11	0.19
	City of San Diego Subtotal	**0.08**			***0.08***	**0.11**	**0.19**
City of Santee	Diegan Coastal Sage Scrub – disturbed	0.41			*0.41*		0.41
	Non-Native Grassland			0.01	*0.01*		0.01
	City of Santee Subtotal	0.41	0	0.01	*0.42*	0	0.42
	Project Totals	**0.49**	**0**	**0.01**	***0.50***	**0.11**	**0.61**

† = All impacts outside of the MHPA

Table 4-5. Permanent Impacts on Wetland and Riparian Vegetation Communities (acres)

Jurisdiction	Vegetation Community/Land Cover Type	Residential	Clubhouse/ Hotel	Golf Course Redesign	Fuel Modification Zone	*Total Permanent Impacts*
City of Santee†	Disturbed Wetland	0.12				*0.12*
	Mule Fat Scrub-disturbed		0.01	0.29	0.04	*0.34*
	Non-Native Riparian		0.01	0.01	0.02	0.04

	Southern Cottonwood-Willow Riparian Forest	0.35		0.10	0.05	*0.50*
	Southern Cottonwood-Willow Riparian Forest – disturbed	0.02	0.20	0.06	0.02	*0.30*
	Project Totals	**0.49**	**0.22**	**0.46**	**0.13**	***1.30***

† = no wetland impacts in City of San Diego

Table 4-6. Temporary Impacts on Wetland and Riparian Vegetation Communities (acres)

Jurisdiction	Vegetation Community/Land Cover Type	Temporary Impacts along San Diego River	Temporary Impacts within Golf Course Emergency Access Road	Total Temporary Impacts
City of Santee†	Coastal and Valley Freshwater Marsh	0.56		*0.56*
	Fresh Water	2.43		*2.43*
	Mule Fat Scrub-disturbed		0.02	*0.02*
	Non-Native Riparian	0.05		*0.05*
	Southern Cottonwood-Willow Riparian Forest	0.01		*0.01*
	Southern Cottonwood-Willow Riparian Forest – disturbed		0.06	*0.06*
	Project Totals	**3.05**	**0.08**	***3.13***

† = no wetland impacts in City of San Diego

4.2.1.1 City of San Diego

The project will result in a direct, and permanent impact, totaling 0.19 acres, including on-site impacts on 0.08 acres of Diegan coastal sage scrub – disturbed and direct permanent off-site impacts on 0.11 acres of Diegan coastal sage scrub – disturbed, within the City of San Diego, as ~~shown~~described in Table 4-~~1,~~2 and shown on Figure 10, and would represent a significant adverse effect on sensitive natural communities. Mitigation measure **(MM)-BIO-1,** which would require mitigation at ratios based on the City of San Diego Biology Guidelines (City of San Diego 2018) as summarized in Table 5-1, inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6** would be implemented to reduce this impact to less than significant.

~~A total of 0.19 acres of Diegan coastal sage scrub (disturbed) would be impacted in the western residential area by the proposed project within the limits of the City of San Diego, outside of the MHPA. This patch of coastal sage scrub is connected to 0.41 acres of Diegan coastal sage scrub (disturbed) within Santee, for a total patch size of 0.59 acres. This patch is located on the eastern shoulder of West Hills Parkway embankment and is vegetated primarily with disturbance-adapted broom baccharis (*Baccharis sarothroides*) and does not have a structural or species diversity of shrubs. This habitat is isolated between the existing golf course and West Hills Parkway. Focused surveys were conducted within this habitat for California gnatcatcher in 2019 and 2022 and did not detect occupancy by this California gnatcatcher.~~

~~No sensitive vegetation communities would be~~The project's temporary dewatering footprint overlaps 0.02 acres of sensitive riparian vegetation communities (i.e. coastal and valley freshwater marsh and southern cottonwood-willow riparian forest) associated with the impounded portion of the San Diego River (North Channel) (Figure 10). Dewatering activities are proposed only during the project's construction phase, and the ponded area would be rehydrated after removal of the dewatering weirs. No vegetation or tree removal, fill, or grading would occur as part of the temporary dewatering activities. The pond is an intermittent feature, drying up when water is not coming from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing variation in hydrology. Therefore, the vegetation communities located within the impounded portion of the San Diego River (North Channel) would not be significantly impacted by dewatering activities. However, these areas would be passively restored as directed by Table 5-3 and **MM-BIO-4** and included in the project's HMMP as directed by **MM-BIO-5**. It should be noted that based on project-specific discussions with the City of San Diego, dewatering activities would not require a wetland deviation from the City of San Diego ESL wetland regulations.

No sensitive vegetation communities would be permanently or temporarily impacted within the City of San Diego MHPA.

4.2.1.2 City of Santee

~~**Impact BIO-**~~A total of 3.40 acres of permanent impacts and 3.11 acres of temporary impacts to sensitive vegetation communities would occur within the City of Santee with project implementation as summarized in Table 4-3 and shown on Figure 10. Permanent impacts to sensitive uplands, including 0.41 acres of disturbed coastal sage scrub and 0.13 acres of non-native grassland, total 0.55 acres and permanent impacts to sensitive riparian and wetland vegetation communities total 2.~~ **Permanent Impacts on Sensitive Communities.**~~** 86 acres. Temporary

impacts from project implementation would only occur within sensitive riparian and wetland vegetation communities totaling 3.11 acres, including 0.03 acres from the Temporary Railcar Crossing, 0.09 acres from the spillway repair, and 2.99 acres from dewatering activities during construction.

Direct permanent impacts ~~on~~to 0.55 acres of sensitive ~~natural or naturalized~~upland vegetation communities within the City of Santee, including 0.41 acres of disturbed coastal sage scrub and 0.13 acres of non-native grassland as shown in Table 4-~~2~~3, would represent a significant adverse effect on sensitive ~~natural and riparian communities~~upland vegetation communities. These impacts would be reduced to less than significant through the mitigation proposed in Table 5-1 and Table 5-2B and implementation of **MM-BIO-2** and **MM-BIO-3** inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

~~**Impact BIO-3. Temporary Impacts on Sensitive Communities.**~~ Direct permanent impacts to 2.86 acres and direct temporary impacts to 0.12 acres from the Temporary Railcar Crossing and spillway repair work area on sensitive ~~natural or naturalized~~riparian and wetland vegetation communities within the City of Santee, as shown in Table 4-3, would represent a significant adverse effect on sensitive natural and riparian communities. These impacts would be reduced to less than significant through implementation of the mitigation ratios described in Tables 5-2A and 5-4 and **MM-BIO-3**, inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

The project's temporary dewatering footprint overlaps 2.99 acres of sensitive riparian vegetation communities (i.e. coastal and valley freshwater marsh, fresh water, non-native riparian, and southern cottonwood-willow riparian) associated with the impounded portion of the San Diego River (North Channel). Dewatering activities are proposed only during the project's construction phase, and the ponded area would be rehydrated after removal of the dewatering weirs. No vegetation or tree removal, fill, or grading would occur as part of the temporary dewatering activities. The pond is an intermittent feature, drying up when water is not coming from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing variation in hydrology. Therefore, the vegetation communities located within the impounded portion of the San Diego River (North Channel) would not be significantly impacted by dewatering activities. However, these areas would be passively restored as directed by Table 5-3 and **MM-BIO-4** and included in the project's HMMP as directed by **MM-BIO-5**.

~~4.3~~4.2.2 Jurisdictional Waters and Wetlands

~~4.3.1 Jurisdictional Waters and Wetlands~~

The project has been designed to avoid direct impacts on waterways~~, except~~ to the greatest extent feasible. Exceptions include areas for linear stream crossings (primarily culvert improvements of the existing river crossing at the northeast side of the project area [NWW5~~1~~]), residential development and golf course impacts, and localized, temporary, summer stream dewatering associated with construction ~~(allowing for access for bridge construction).~~, the Temporary Railcar Crossing, and the spillway repair work area within NWW 1. Areas of riparian vegetation ~~less than 100 feet from buildings will be considered~~ impacted by fuel management zones ~~and~~ were considered permanent and shall be mitigated accordingly; no impacts will occur to the channel topography in these fuel management zones, so there will ~~not~~ be ~~a~~no negative effect on water

channel function. ~~All other buildings, including all residential buildings, are positioned at least 100 feet back from riparian habitat, providing buffers for wetlands. All stream courses within the redeveloped golf course will include a 10-foot-wide strip of planted native vegetation. This strip will have an emphasis on saltgrass (*Distichlis spicata*), a native, wetland tolerant grass species. There is currently no buffer between the existing golf course and existing waterways.~~

The project would not result in permanent negative development of jurisdictional waterways relative to flood conveyance (i.e., no direct alteration of stream elevation); improvements at ~~NWW5~~the culvert connecting NWW5 into NWW 1 would improve water conveyance at that location. The hydrology section of this EIR states that the project would not: (i) result in substantial erosion or siltation on or off site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site; (iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater-drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows.

The *Drainage Report for Carlton Oaks Country Club & Resort TM 2019-1/DR 2019-5* states that "there would be a substantial lag time between the time the peak flows from the proposed development outlet to the San Diego River and time the peak flows along the San Diego River reach the proposed outlet locations since the tributary area to the San Diego River is several thousand acres. Due to this lag time, there is no net increase of flows to the San Diego River from the development of Carlton Oaks Country Club and Resort when compared to existing conditions." Potential indirect impacts from project implementation to hydrology are discussed in detail in Chapter 4.3.2.

Regarding the driving range, soil was placed within the driving range in 2023-2024. There is an existing silt-fence along the chain-link fence on the outer boundary of the driving range, where it abuts Sycamore Canyon Creek. The silt fence was in good condition in 2024 and would have prevented any sediment from entering the adjacent waterway. Soil was removed in 2024 and the site was returned to original conditions prior to soil deposition. No impacts occurred on Sycamore Canyon Creek from activities at the driving range.

~~4.3.1.1~~4.2.2.1 USACE/RWQCB/CDFW Jurisdictional Impacts

~~The proposed project would have no impact (temporary or permanent) on USACE/RWQCB jurisdictional wetlands; WW1 and WW2 are within designated Avoidance Areas and would not be affected.~~

The proposed project would result in direct permanent ~~loss of~~impacts to 0.~~289~~35 acres ~~of USACE/RWQCB jurisdictional non-wetland waters and 0.575~~and temporary impacts 2.84 acres of ~~permanent impact on~~ USACE~~/RWQCB~~ jurisdictional ~~non-wetland waters~~aquatic resources (Table 4-~~7; Figure 11).~~4). The proposed project would result in direct permanent impacts to 0.60 acres and temporary impacts ~~on 2.373 acres of USACE/RWQCB non-wetland waters (Table 4-8). This includes~~ 2.~~339~~84 acres of RWQCB jurisdictional aquatic resources (Table 4-5). The proposed project would result in direct permanent impacts to 3.75 acres and temporary impacts ~~associated with the dewatering of a pond in San Diego River (North Channel) (NWW1) during construction. The remainder of the temporary impacts are NWW5 around the emergency exit road in the northeast corner of the project area. Note that the determination of impacts as permanent, permanent loss, and temporary will vary slightly~~3.13 acres of CDFW jurisdictional aquatic resources (Table 4-6). The impact totals presented in Tables 4-4 through 4-6 should not be summed due to overlap between ~~jurisdictions. For example, bridged areas will result in temporary impacts on non-wetlands and~~

~~streambeds (e.g., at NWW5), but permanent impacts on the wetland vegetation that was previously present at those locations. Unmitigated impacts on state and federal~~ aquatic resources.

Impacts to jurisdictional ~~wetlands~~aquatic resources are shown on Figure 11. Permits from the aquatic resource agencies (USACE, RWQCB, and CDFW) would be obtained prior to any ground disturbances occurring on the project site so as to ensure that the impacts are mitigated in compliance with state and federal water laws as directed by **MM-BIO-11**. The manner in which the permanent impact mitigation will be met will be determined during the permitting process in accordance with permitting requirements of the applicable resource agencies (i.e., USACE, CDFW, and RWQCB).

Direct permanent impacts from the golf course redesign and development and direct temporary impacts from the Temporary Railcar Crossing and spillway repair work area on jurisdictional aquatic resources would represent a significant impact~~; mitigation to reduce the level of significance is proposed in Chapter 5, *Avoidance and Mitigation Measures*. Non-wetland waters are not a resource described in Section IV. C. of the CEQA checklist; however, non-wetland waters~~. These impacts would be ~~avoided to the maximum extent practicable.~~ reduced to less than significant through implementation of **MM-BIO-3** and inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

~~Figure 11~~

Temporary impacts would occur to jurisdictional aquatic resources (i.e. coastal and valley freshwater marsh, fresh water, non-native riparian, and southern cottonwood-willow riparian) associated with the impounded portion of the San Diego River (North Channel) from dewatering activities during construction. The pond is an intermittent feature, drying up when water is not flowing from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing seasonal variation in hydrology. Therefore, temporary dewatering impacts would not require habitat mitigation as the vegetation communities would not be significantly impacted. However, these areas would be passively restored as directed by **MM-BIO-4** and included in the project's HMMP as directed by **MM-BIO-5**.

Table 4-4. Permanent and Temporary Impacts to USACE Jurisdictional Aquatic Resources (acres)

Feature[1]		Temporary			
	Permanent	Railcar Crossing	Dewatering	Spillway Repair	Total
NWW 1	0.26	0.03	2.74	0.07	2.84
NWW 3	<0.01	0	0	0	0
NWW 5	0.09	0	0	0	0
Total	**0.35**	**0.03**	**2.74**	**0.07**	**2.84**

Notes: Table describes the project's impacts to USACE aquatic resources, and additional areas within the site under USACE jurisdiction included in Table 3-2 would be avoided by the project.

[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both non-wetland waters and wetlands.

Table 4-5. Permanent and Temporary Impacts to RWQCB Jurisdictional Aquatic Resources (acres)

Feature[1]		Temporary			
	Permanent	Railcar Crossing	Dewatering	Spillway Repair	Total
NWW 1	0.26	0.03	2.74	0.07	2.84
NWW 2	0.23	0	0	0	0
NWW 3	<0.01	0	0	0	0
NWW 5	0.09	0	0	0	0
WW 3	0.01	0	0	0	0
WW 4	0.01	0	0	0	0
Total	**0.60**	**0.03**	**2.74**	**0.07**	**2.84**

Notes: Table describes the project's impacts to RWQCB aquatic resources, and additional areas within the site under RWQCB jurisdiction included in Table 3-3 would be avoided by the project.

[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both non-wetland waters and wetlands.

~~**Table 4-7. Permanent Impacts on USACE/RWQCB Jurisdictional Waters (acres)**~~

~~Aquatic Resource~~	~~Permanent Impact*~~	~~Permanent Loss**~~
	~~**Clubhouse/Hotel**~~	
~~NWW 1~~	~~0.570~~	~~0.000~~
	~~**Residential**~~	
~~NWW 2~~	~~0.000~~	~~0.235~~
~~NWW 3~~	~~0.000~~	~~0.003~~
	~~**Golf Course Redesign**~~	
~~NWW 1~~	~~0.000~~	~~0.000~~
~~NWW 5~~	~~0.000~~	~~0.051~~
	~~**Fuel Modification Zone**~~	
~~NWW 5~~	~~0.005~~	~~0.000~~
~~**Total**~~	~~**0.575**~~	~~**0.289**~~

~~*= A permanent impact to an aquatic feature is where a permanent discharge of fill material (e.g., rip rap) would occur, but the feature would retain some aquatic function.~~

~~** = A permanent loss was designated to an aquatic feature where it would be converted to concrete or uplands, thereby eliminating any aquatic function. No impacts to wetland waters.~~

~~**Table 4-8. Temporary Impacts on USACE/RWQCB Jurisdictional Waters (acres)**~~

~~Aquatic Resource~~	~~Temporary Impact~~
	~~**Golf Course Redesign**~~
~~NWW 5~~	~~0.010~~
	~~**Temporary Impacts Along San Diego River (North Channel)**~~
~~NWW 1~~	~~2.339~~
	~~**Temporary Impacts Within Golf Course Emergency Access Road**~~
~~NWW5~~	~~0.024~~

~~Total~~	~~2.373~~

Table 4-6. Permanent and Temporary Impacts to CDFW Jurisdictional Aquatic Resources (acres)

Feature[1]		Temporary			
	Permanent	Railcar Crossing	Dewatering	Spillway Repair	Total
NWW 1	0.91	0.03	3.00	0.09	3.13
NWW 2	0.61	0	0	0	0
NWW 3	0.01	0	0	0	0
NWW 4	0.45	0	0	0	0
NWW 5	0.51	0	0	0	0
NWW 6	0.07	0	0	0	0
RIP 1	1.18	0	0	0	0
WW 3	0.01	0	0	0	0
WW 4	0.01	0	0	0	0
Total	**3.75**	**0.03**	**3.00**	**0.09**	**3.13**

Notes: Table describes the project's impacts to CDFW aquatic resources, and additional areas within the site under CDFW jurisdiction included in Table 3-4 would be avoided by the project.

[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both streambeds and riparian habitat.

~~4.3.1.2 CDFW Jurisdictional Impacts~~

~~The proposed project would have permanent direct impacts on up to 0.929 acres of CDFW-jurisdictional vegetated streambed and 0.148 acres of CDFW jurisdictional riparian habitat (Table 4-9, Figure 11). The proposed project would have temporary direct impacts on up to 0.758 acres of CDFW jurisdictional vegetated streambed, 2.355 acres of unvegetated streambed, and 0.095 acres of CDFW riparian habitat (Table 4-10).~~

~~**Impact BIO-4. Wetland Impacts.** Impacts on wetlands (including marsh, riparian, etc.), as detailed in Tables 4-9 and 4-10, would represent a significant adverse effect on state wetlands.~~

Table 4-9. Permanent Impacts on CDFW Jurisdictional Resources (acres)

Aquatic Resource	Riparian	Unvegetated Stream	Vegetated Stream
Clubhouse/Hotel			
NWW 1	0	0	0.206
Residential			
NWW 1	0.012	0	0.008
NWW 2	0	0	0.606
NWW 3	0	0	0.006
Golf Course Redesign			
NWW 1	0	0	0.018
NWW 5	0.101	0	0.077
Fuel Modification Zone			
NWW 5	0.035	0	0.008
Total	**0.148**	**0**	**0.929**

* = No impacts to NWW 4

Table 4-10. Temporary Impacts on CDFW Jurisdictional Resources (acres)

Aquatic Resource	Riparian	Unvegetated Stream	Vegetated Stream
Golf Course Redesign			
NWW 5	0.013	0	0.014
Temporary Impacts Along San Diego River (North Channel) (Dewatering)			
NWW 1	0.068	2.355	0.722
Temporary Impacts Within Golf Course			
NWW 5	0.014	0	0.036
Total	**0.095**	**2.355**	**0.758**

4.3.1.34.2.2.2 City of San Diego Wetlands

No impacts would occur on City of San Diego ESL wetlands. Within the project site, potential City of San Diego ESL wetlands are all demarcated avoidance areas and will not be impacted or redeveloped (Figure 11).No significant or permanent impacts on City of San Diego ESL wetlands would occur. Within the project site, potential ESL wetlands are designated avoidance areas and will not be impacted or redeveloped by the proposed project (Figure 11). The project's temporary dewatering footprint overlaps 0.02 acres of sensitive riparian vegetation communities (i.e. coastal and valley freshwater marsh and southern cottonwood-willow riparian forest) associated with the impounded portion of the San Diego River (North Channel). Dewatering activities are proposed only during the project's construction phase, and the ponded area would be rehydrated after removal of the dewatering weirs. No vegetation or tree removal, fill, or grading would occur as part of the temporary dewatering activities. The pond is an intermittent feature, drying up when water is not

coming from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing variation in hydrology. Therefore, the vegetation communities located within the impounded portion of the San Diego River (North Channel) would not be significantly impacted by dewatering activities. However, these areas would be passively restored as directed by Table 5-3 and **MM-BIO-4** and included in the project's HMMP as directed by **MM-BIO-5**. It should be noted that based on project-specific discussions with the City of San Diego, dewatering activities would not require a wetland deviation from the City of San Diego ESL wetland regulations.

~~4.3.2~~4.2.3 Special-Status Species

The proposed project has potential to affect 12 special-status and/or MSCP covered animal species, including six special-status and/or MSCP covered bird species observed within the BSA: Cooper's hawk, least Bell's vireo, vermilion flycatcher, western bluebird, yellow warbler, and yellow-breasted chat; MSCP-covered southern mule deer observed in the BSA; as well as three species determined to have a high potential to occur: Belding's orange-throated whiptail, two-striped garter snake, and white-tailed kite. ~~Southern mule deer is not considered special status but has aesthetic and intrinsic values, thereby being an important species to protect (City of San Diego 1998).~~ Mule deer is a covered species under the MSCP and is known to use the project site. Although western spadefoot and western burrowing owl were determined to have a low potential to occur, these species are addressed below due to their possible future listing at the federal level and future presence. Double-crested cormorant (*Phalacrocorax auritus*) is not a special-status or MSCP-covered species, but the on-site rookery is a CDFW-protected wildlife nursery site and is therefore discussed in the Wildlife Nursery Sites section. Avoidance and minimization measures are proposed to ensure no direct or indirect impacts occur to breeding individuals. Loss of occupied habitat would be fully compensated in-kind through on- and off-site preservation, as detailed in Chapter 5, Avoidance and Mitigation Measures. No special-status plant species would be directly impacted by project construction.

~~4.3.2.1~~4.2.3.1 Least Bell's Vireo

~~**Impact BIO-5. Least Bell's Vireo Breeding Habitat.**~~ The proposed project would have permanent direct impacts of up to ~~0.77~~1.96 acres of occupied least Bell's vireo breeding habitat within designated critical habitat within the City of Santee, within the clubhouse/hotel, golf course redesign, and fuel modification areas (~~riparian habitat in Residential North was unoccupied).~~Figure 12). The ~~0.77~~1.96 acres includes ~~0.43~~1.50 acres of southern cottonwood-willow riparian forest (including disturbed~~)~~), 0.17 acres of southern willow scrub, and 0.~~34~~29 acres of mule fat scrub – disturbed (Table 4-~~5~~1). The loss of ~~0.77~~1.96 acres of occupied breeding habitat for least Bell's vireo species would be a potentially significant impact. ~~The proposed project would have temporary direct impacts of up to 0.09 acres of occupied least Bell's vireo breeding habitat within designated critical habitat within the City of Santee, including 0.07 acres of southern cottonwood-willow riparian forest (including disturbed) and 0.02 acres of mule fat scrub – disturbed (Table 4-6).~~This impact would be reduced to less than significant through implementation of **MM-BIO-3**, which requires habitat mitigation at the ratios included in Table 5-2A, and inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

The proposed project would have temporary direct impacts of up to 0.13 acres of occupied least Bell's vireo breeding habitat (i.e. southern cottonwood-willow riparian forest) as a result of dewatering activities (0.12 acres) and spillway repair work area (0.01 acres) (Table 4-1). Temporary impacts associated with the impounded portion of the San Diego River (North Channel) from dewatering activities during construction would not require habitat mitigation as the vegetation communities would not be significantly impacted. However, these areas would be passively restored as directed by **MM-BIO-4** (Table 5-3) and included in the project's HMMP as directed by **MM-BIO-5**. Impacts from the spillway repair work area would be reduced to less than significant with implementation of **MM-BIO-3** (Table 5-4) and inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

No direct permanent impacts on potentially suitable or occupied least Bell's vireo habitat would occur within in the preserve areas of the San Diego MHPA or any other areas within the City of San- Diego. Various state and federal laws protect breeding birds, including least Bell's vireo, and their nests and eggs, from destruction. This project includes avoidance measures to ensure that breeding success of least Bell's vireo are not adversely affected ~~(Section 5.1.3).~~as directed by **MM-BIO-14.**

~~Riparian vegetation associated with the storm drain outfall to the west of the existing clubhouse did not support least Bell's vireo in 2019 or 2022. While this habitat is considered unoccupied by least Bell's vireo, impacts to riparian habitat will be mitigated according to Santee mitigation ratios as described in MM-BIO-3.~~

MSCP conditions of coverage in the MSCP Plan (City of San Diego 1998) require that surveys using appropriate protocols be conducted in suitable habitat proposed to be impacted. No suitable habitat for least Bell's vireo would be permanently impacted within the City of San Diego, but surveys were conducted in all suitable habitat in the BSA in 2019. The San Diego River was considered occupied and was not resurveyed in 2022. Surveys were conducted for least Bell's vireo in 2022 in potential habitat within City of San Diego which are outside of the San Diego River (South Channel); south channel is known to be occupied and was therefore not resurveyed. The project would incorporate mitigation measures consistent with 404(b)1 guidelines. The project would not create conditions attractive to brown-headed cowbirds so the project does not need to monitor and control cowbirds.

~~4.3.2.2~~4.2.3.2 Other Special-Status Animal Species

~~Impact BIO-6. Non-Listed Special-Status Species Habitat.~~ The project would have direct permanent ~~direct~~ and temporary impacts ~~on up~~ to ~~0.80 acres of southern cottonwood-willow riparian forest (including disturbed)~~ potentially suitable ~~as~~ breeding habitat for yellow warbler, yellow-breasted chat, vermilion flycatcher, western bluebird, Cooper's hawk, and white-tailed kite; suitable as habitat for two-striped garter snake; and suitable as habitat for mule deer (Table 4-~~5). The loss of 0.80 acres of~~1; Figure 12). Impacts to potentially suitable breeding habitat for these species would be a potentially significant impact on special-status species.

~~Conditions of MSCP coverage for Cooper's hawk include a 300-foot impact avoidance buffer around active nests and minimization of disturbance to oak riparian forests (City of San Diego 1998). No Cooper's hawk nests, or nesting activities were observed within the BSA during project surveys. The project has been redesigned to minimize disturbance to riparian forests within City of Santee and would completely avoid impacts on riparian forests within the City of San Diego.~~

~~Impact~~ These impacts would be reduced to less than significant through implementation of **MM-BIO-1** through **MM-BIO-~~4~~,** which requires mitigation for impacts to sensitive vegetation communities at the ratios presented in Tables 5-1 through 5-4 and inclusion in the project's HMMP as directed by **MM-BIO-5**, and long-term management as directed by **MM-BIO-6**.

Conditions of MSCP coverage for Cooper's hawk include a 300-foot impact avoidance buffer around active nests and minimization of disturbance to oak riparian forests (City of San Diego 1998). **MM-BIO-12** would be implemented to avoid impacts to Cooper's hawk nests. No Cooper's hawk nests, or nesting activities were observed within the BSA during project surveys. The project has been redesigned to minimize disturbance to riparian forests within City of Santee and would completely avoid impacts on riparian forests within the City of San Diego.

~~7. Nesting Birds.~~ Impacts on native or naturalized vegetation during the breeding season have the potential to kill nesting birds or their eggs or young, including special-status birds such as least Bell's vireo, yellow warbler, yellow-breasted chat, vermilion flycatcher, western bluebird, Cooper's hawk, and white-tailed kite. Any project related activities that result in the death of nesting birds could be a violation of state and federal laws and would be a significant impact under CEQA.~~Any project related activities that result in the death of nesting birds could be a violation of state and federal laws and would be a significant impact under CEQA.~~ To comply with state and federal protections on nesting birds, clearing, trimming, and grubbing of vegetation shall occur outside of the general bird breeding season as directed by **MM-BIO-13**.

~~4.3.2.3~~4.2.3.3 Cormorant Rookery

The eucalyptus tree located adjacent to the pond on San Diego River (North Channel) serves as a rookery (i.e., breeding colony) for the native seabird double-crested cormorant. This site is one of the only known double-crested cormorant rookeries in San Diego County (Unitt 2004). To avoid significant impacts to breeding colonies, this pond-side tree would not be removed during golf course redesign grading (Figure 12). Therefore, no direct permanent impacts to the rookery are anticipated. Because double-crested cormorants are only considered CDFW sensitive at nesting sites, potential ~~indirect~~ effects are discussed in Section 4.2.4.2, Wildlife Nursery Sites~~.~~, Section 4.3.1.5, Dewatering Activities on Wildlife Nursery Sites, and Section 4.3.2.8, Wildlife Movement and Nursery Sites.

~~4.3.2.4~~4.2.3.4 Crotch's Bumble Bee

Although the project site ~~does not have high~~has low potential with respect to supporting nesting or foraging Crotch's bumble bee, and Crotch's bumble bee was not observed during focused surveys in 2024, if the species is present underground during ground disturbance, impacts on a Crotch's bumble bee nest would be potentially significant.

~~Impact BIO-8. Crotch's Bumble Bee.~~ ~~Although~~Therefore, the project would implement **MM-BIO-15** to avoid impacts to Crotch's bumble bee ~~is not known from the BSA, and the project site has low potential to support nesting or foraging~~. Coastal sage scrub and non-native grassland impacted by the proposed project would be mitigated as directed by **MM-BIO-1, MM-BIO-2,** and **MM-BIO-3** in accordance with the mitigation ratios presented in Table 5-1 and Table 5-2B, regardless of whether the site is occupied by Crotch's bumble bee~~, if the species were present, and underground during ground disturbance, then impacts on a Crotch's bumble bee nest would be significant.~~.

4.2.3.5 Western Spadefoot

Although the project site has only low potential with respect to western spadefoot occurrence and minimal potential breeding habitat exists within the impact area, if this primarily subterranean species is present during ground disturbance, impacts on upland western spadefoot would be potentially significant. Therefore, the project would implement **MM-BIO-16** to avoid impacts to western spadefoot. Coastal sage scrub and non-native grassland impacted by the proposed project would be mitigated as directed by **MM-BIO-1 , MM-BIO-2,** and **MM-BIO-3** in accordance with the mitigation ratios presented in Table 5-1 and Table 5-2B, regardless of whether the site is occupied by western spadefoot.

~~4.3.2.5~~1.1.1.1 ~~Western Spadefoot~~

~~Although the project site has only low potential with respect to western spadefoot occurrence and minimal potential breeding habitat exists within the impact area, if this primarily subterranean species is present during ground disturbance, impacts on upland western spadefoot would be potentially significant.~~

~~**Impact BIO-9. Western Spadefoot.** Although western spadefoot is not known from the BSA, the project site has low potential to support breeding or estivating western spadefoot, and a survey in 2025 was negative, if the species were present, then impacts to western spadefoot would be significant.~~

~~4.3.2.6~~4.2.3.6 Western Burrowing Owl

~~**Impact BIO-10. Western Burrowing Owl.** Although western~~Western burrowing owl is not known from the BSA~~,~~ and suitable habitat (i.e., open habitat that is flat to slightly rolling AND includes potential burrow resources such as minimum 11 cm diameter burrows or rock crevices) was not found within the BSA, ~~and~~therefore the project site has low potential to support wintering or breeding western burrowing owl. However, because burrowing owls can move into new areas, if suitable burrows become present within the open habitats on site, then there is potential for them to colonize the BSA. Burrowing owl may colonize during any time of the year~~. If~~ so if the species were present, then impacts to western burrowing owl would be significant. Therefore, the project would implement **MM-BIO-17** to avoid impacts to western burrowing owl. Coastal sage scrub and non-native grassland impacted by the proposed project would be mitigated as directed by **MM-BIO-1**, **MM-BIO-2**, and **MM-BIO-3** in accordance with the mitigation ratios presented in Table 5-1 and Table 5-2B, regardless of whether the site is occupied by western burrowing owl.

4.2.3.7 Coastal California Gnatcatcher

A total of 0.19 acres of Diegan coastal sage scrub (disturbed) would be permanently impacted in the western residential area by the proposed project within the limits of the City of San Diego, outside of the MHPA. This patch of coastal sage scrub is connected to 0.41 acres of Diegan coastal sage scrub (disturbed) within Santee, for a total patch size of 0.59 acres. This patch is located on the eastern shoulder of West Hills Parkway embankment and is vegetated primarily with disturbance-adapted broom baccharis (*Baccharis sarothroides*) and does not have a structural or species diversity of shrubs. This habitat is isolated between the existing golf course and West Hills Parkway. Focused surveys were conducted within this habitat for coastal California gnatcatcher in 2019 and 2022 and did not detect occupancy by coastal California gnatcatcher. Although coastal California gnatcatcher

is not expected to occur within the project site, the project would implement a pre-construction survey as directed by **MM-BIO-18** to confirm presence or absence. If California gnatcatcher are detected during the pre-construction surveys, then consultation with the USFWS and necessary permitting (Section 7 or 10) would occur as directed. Any measures within that incidental take permit would also be required in addition to the CEQA measures within this document. Coastal sage scrub habitat impacted by the proposed project would be mitigated as directed by **MM-BIO-1** and **MM-BIO-2**.

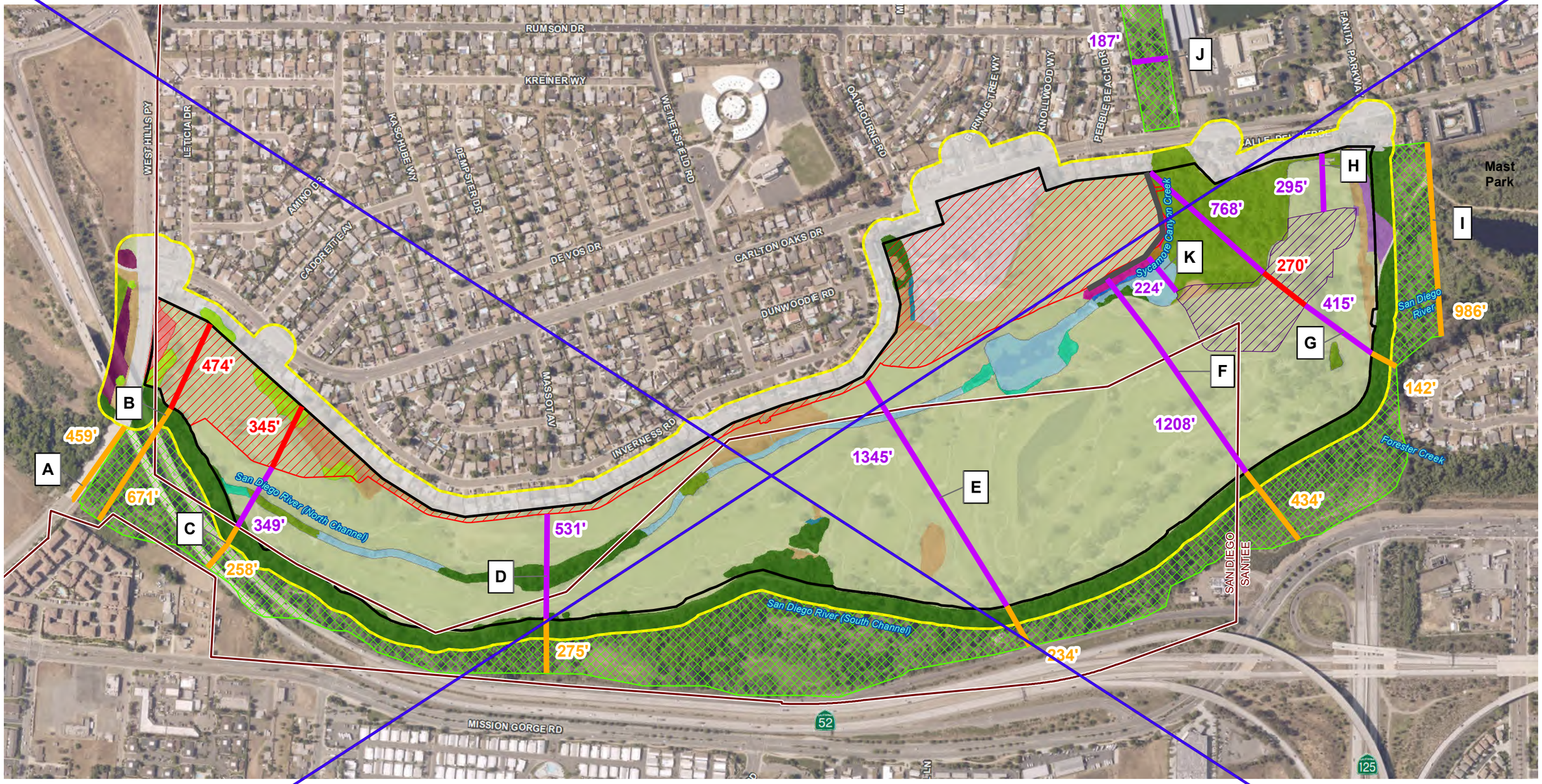
~~4.3.3~~4.2.4 Wildlife Corridor and Nursery Sites

~~4.3.3.1~~4.2.4.1 Wildlife Corridor

Wildlife corridors are intended to allow for genetic flow of microfauna and macrofauna at a landscape level. Currently, the project site functions as both live-in and foraging habitat for a wide variety of large and small wildlife and partial territory for larger mammals (i.e., mule deer). As discussed in Section 3~~.3.2~~.4, *Habitat Connectivity and Wildlife Corridors*, the BSA is situated directly adjacent to and parallel with of San Diego River and is part of the habitat connectivity that exists in this area. The San Diego River through the City of Santee is not identified in the MSCP Plan as a Habitat Linkage or in the California Essential Habitat Connectivity Project as an Essential Connectivity Area. The San Diego River (South Channel) is primarily within the City of San Diego MHPA, a Biological Core Area under the MSCP Plan (City of San Diego 1998), and is considered the primary wildlife corridor for this analysis, while the golf course and San Diego River (North Channel) are considered a secondary movement corridor (Figure ~~12~~13).

Figure ~~12~~13 presents a depiction of the existing primary and secondary wildlife movement corridor widths through the San Diego River and Carlton Oaks Golf Course, and the widths of the secondary wildlife movement corridors that would result from the proposed project. The project would have no direct development of the primary wildlife movement corridor (The San Diego River [South Channel] riparian corridor). Figure ~~12~~13 depicts the proposed development boundaries of the clubhouse and hotel area, Residential North, and Residential West. This figure depicts the approximate widths of the riparian corridor, the width of the golf course, and widths of associated development. Residential North is situated within the limits of the current clubhouse and driving range. The back of the existing driving range faces Sycamore Canyon Creek and San Diego River (North Channel) with a 6-foot-tall chain link fence against a ball-fence, a net that varies from 15- to 30-feet tall. The existing fence is depicted on Figure ~~12~~13. Because of the height of the fences, it is considered an existing barrier to wildlife movement, therefore representative corridor width "F" terminates at the fence.

At the proposed Residential West area, the existing conditions include the San Diego River to the south, existing residential development with backyard fences to the northeast, and West Hills Parkway to the west. West Hills Parkway includes a steep slope from the golf course to a highly trafficked four-lane, with chain link fences at portions of the top and bottom. While wildlife may utilize this area for nighttime movement, any existing east-west movement is expected to occur along the adjacent San Diego River riparian corridor. The proposed Residential West area would be tucked into this pocket between existing residential and West Hills Parkway embankment.



Project Site
Biological Study Area
City of Santee/San Diego Municipal Boundary

Source: Biological Resources-ICF (2022); Hunsaker & Associates (2023); Imagery-SANGIS (2023)

0 225 450 Feet
1 in = 500 feet

Wildlife Corridor
- Primary Movement Corridor
- Secondary Movement Corridor
- Proposed Project Development in Secondary Corridor
- Existing Fence at Driving Range

- Permanent Impact: Clubhouse/Hotel/Other
- Permanent Impact: Residential

Vegetation Classification (Holland Code)

Riparian
- Mule Fat Scrub-disturbed (63310)
- Non-Native Riparian (65000)
- Southern Cottonwood-Willow Riparian Forest (61330)
- Southern Cottonwood-Willow Riparian Forest-disturbed (61330)
- Southern Riparian Scrub (63320)

Wetlands
- Coastal and Valley Freshwater Marsh (52410)
- Disturbed Wetland (11200)
- Fresh Water (64140)

Upland
- Diegan Coastal Sage Scrub-disturbed (32500)
- Non-Native Grassland (42200)
- Non-Native Woodland (79000)

Developed/Disturbed
- Developed (12000)
- Developed-Golf Course
- Disturbed Habitat (11000)
- Eucalyptus Woodland (79100)
- Unmapped Riparian Corridor

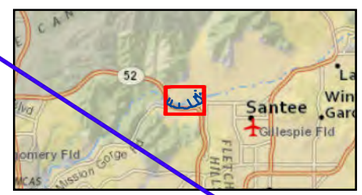


Figure 12
Wildlife Corridor Analysis
Carlton Oaks Country Club and Resort

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The primary wildlife corridor from Mission Trails toward the City of Santee constricts to approximately 459 feet as it passes under West Hills Parkway (Figure ~~11~~13, cross-section A). Cross--section B is immediately downstream of the confluence of San Diego River (South Channel) and San Diego River (North Channel) and the width of the riparian corridor expands to 670 feet. Under the proposed development, while the "secondary" wildlife movement corridor would reduce to zero at this location, the primary wildlife movement corridor expands to the widest extent since Mast Park to the east (Cross-section I). Cross-section C shows the width of the primary wildlife corridor as 258 feet as it passes under the tall SR-52 bridges, a proposed width of the secondary corridor of 349 feet, including the San Diego River (North Channel) and development of approximately 345 feet. The proposed west residential area is tucked into a pocket of the existing golf course, bounded to the west by West Hills Parkway (with existing, associated chain-link fencing over much of that length) and suburban residential development to the north, both of which restrict wildlife movement to the west or north.

Cross-sections D and E show representative widths in the existing and proposed golf course area. While the depicted widths of the secondary corridor stop at the "Permanent: Impact Residential" line, the development in this area is a maintenance-vehicles-only road which would not constrain wildlife movement.

From the east side of the site, the river corridor and associated riparian areas are nearly 1,000 feet wide within Mast Park (Cross-section I). Moving west from there, the main channel of the San Diego River turns south and constricts to 142 feet at Cross-section G before widening to 434 feet downstream of the confluence with Forester Creek (Cross-section F). Dirt trails in Mast Park feed into the trail along the north edge of the primary wildlife corridor (following the berm), allowing for focused wildlife movement along this trail adjacent to the shelter of the riparian corridor. The secondary wildlife corridor would remain 415 feet wide at cross-section G, providing a wide buffer from the clubhouse and hotel to the trail and primary wildlife movement corridor. To the north of the clubhouse and hotel (Cross-section H), a very narrow tributary of the San Diego River passes through an existing culvert, eventually meeting up with Sycamore Canyon Creek. The area north of the clubhouse and hotel would remain as golf course (putting green and a private emergency access road), allowing secondary movement of wildlife from Mast Park to the internal avoided riparian area and the narrow Sycamore Canyon Creek channel to the north. Downstream from the proposed clubhouse and hotel, the secondary movement corridor would remain over 1,000 feet wide with the golf course serving as a buffer area between primary movement corridor and the proposed- development.

Sycamore Canyon Creek to the north of the project, is constrained at generally less-than 200 feet wide (Cross Section J), with residential areas to the west and a chain-link fence to the east separating the creek from Santee Lakes and is constrained for approximately 1.5 miles. Because of the distance of constraint, Sycamore Canyon Creek from Santee Lakes to Carlton Oaks provides potential for limited, constrained local wildlife movement, but is not considered a wildlife corridor. The MSCP Plan and the California Essential Habitat Connectivity Project determined that the main wildlife linkage from northern Santee is through the large upland open spaces of East Elliott into Mission Trails. The proposed project would allow for local wildlife movement out of Sycamore Canyon Creek to the east through the golf course (Cross-Section H) and to the southeast along the San Diego River (South Channel) and into the golf course. Cross Section K). With the proposed project, a road would be constructed in the golf course between Residential North and the clubhouse, with ~~a bridge~~the Proposed Resort Bridge over the San Diego River (North channel). The area under the ~~bridge~~Proposed Resort Bridge would vary between 5 and 12 feet, with 90% of the

length being 8 feet or greater in height. Assuming a bridge deck length of 265 feet, deck width of 36 feet (30 feet of travel lanes and 6 feet of trail a 6-foot-wide enhanced sidewalk), and a conservative average clearance of 8 feet, this would result in an openness ratio of 300:1, which would be tall and open enough to accommodate even the largest expected or potential species (i.e., mule deer, mountain lion, coyote), and certainly any smaller species (e.g., bobcat, gray fox). The structure will become inundated during 100-year flood flows, but it will still provide ample opportunity for wildlife movement in this otherwise constrained area.

4.3.3.24.2.4.2 Wildlife Nursery Sites

A wildlife nursery site was identified within the golf course. TreesThe eucalyptus tree located adjacent to the pond on San Diego River (North Channel) serve as a rookery (i.e., breeding colony) for the native seabird double-crested cormorant. serves as a rookery (i.e., breeding colony) for the native seabird double-crested cormorant. This site is one of the only known double-crested cormorant rookeries in San Diego County (Unitt 2004). Double-crested cormorant return to this site annually to raise their young; therefore, this site is considered a native wildlife nursery site. TheseThis pond-side treestree would not be removed during golf course redesign grading (Figure 12). Therefore, no direct permanent impacts to the rookery are anticipated. However, construction noise and activity associated with the regrading and redesign of the golf course and construction of the golf resort, if they were to occur during the breeding season, have the potential to disrupt the breeding activities of double-crested cormorants. Disruption or loss of breeding at this rookery would result in a significant impact on a wildlife nursery site (Impact BIO-11). Therefore, the project would implement **MM-BIO-12,** which would minimize indirect construction noise impacts on the double-crested cormorant rookery and **MM-BIO-7** and **MM-BIO-8**, which would ensure avoidance of direct impacts on or around the cormorant rookery trees.

Impact BIO-11. Cormorant Rookery. Construction noise and activity associated with the regrading and redesign of the golf course and construction of the golf resort, if they occur during the breeding season, have potential to disrupt the breeding activities of double-crested cormorants. Disruption or loss of breeding at this rookery would be a significant impact on a wildlife nursery site.

4.3 Indirect Impacts

Various temporary indirect impacts may result from project construction activities. Development of the project would result in a variety of permanent indirect impacts on surrounding sensitive biological resources. Residential development can promote habitat loss and fragmentation; degrade soil, air, water, and visual quality; promote brood parasitism, by increasing cowbird populations; introduce nonnative species; alter the composition of wildlife communities; and increase predation by domestic animals. Commercial development may have fewer indirect impacts, although lighting impacts can be greater (City of San Diego 1998). The following sections describe the potential level of indirect impacts that may occur as a result of the proposed project. Indirect impacts resulting from human access, domestic animals, exotic species, and lighting would be avoided through the following Project design featuresmitigation measures: (1) permanent safety fencing approximately 10 feet tall shall be installed around biological open space, which is currently unprotectedalong the Project Trail Segment adjacent to the golf course to protect hikers from errant golf balls, and signs precluding access shall be posted; (**MM-BIO-21**); (2) only non-invasive plant species would be included in the landscape plan for the site (species not listed on the California Invasive Plant

Inventory prepared by the California Invasive Plant Council (Cal-IPC; 2006) (**MM-BIO-20**); and (3) all project-related lighting would be required to adhere to Santee Municipal Code. (**MM-BIO-20**). Lighting within the proposed Project footprint adjacent to undeveloped habitat would be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from these areas.

4.2.5 Short-Term (Construction-Related) Indirect Impacts

~~4.3.4~~4.2.5.1 Construction Noise

Construction activities would comply with local agency construction noise requirements of the Cities of Santee and San Diego, as contained in Section 5.04 of the Santee Municipal Code and Section 59.0404 of the City of San Diego Municipal Code. These restrictions prohibit construction activities between the hours of 7:00 p.m. and 7:00 a.m. and on Sundays and legal holidays, and limit construction noise levels to not exceed an average of 75 A-weighted decibels (dBA) at the property line of a residential use over an 8- or 12-hour period.

~~**Impact BIO-12. Construction Noise.**~~ Indirect, temporary impacts on special-status animal species could occur during project construction due to construction-related noise from such sources as clearing, grubbing, and grading. Nesting special-status bird species can be adversely affected by construction noise levels that exceed a 60 dBA ~~leq~~ equivalent sound level hourly average (l_{eq}) or ambient conditions (whichever is greater). Construction noise could cause an indirect, temporary impact on special-status animal species even with compliance with the noise requirements of the Cities of Santee and San Diego. These indirect, temporary impacts from noise could be potentially significant, particularly if they occur during the breeding season of special-status avian species. Therefore, the project would implement measures **MM-BIO-12, MM-BIO-13, MM-BIO-14,** and **MM-BIO-18** to reduce impacts from construction noise to special-status avian species to less than significant.

4.2.5.2 Invasive Plants

Invasive exotic (nonnative) plant species can be introduced into adjacent habitat by several means. Invasive exotic plant species can be planted as part of the ornamental landscaping of development or plantings of new residences. Weeds can be introduced by increased movement of people or domestic animals along native areas. Weeds can also be introduced from construction vehicles brought onto the site, tracking in soil containing weed seeds.

The proposed project would not indirectly affect natural vegetation communities with invasive plants. The vegetation palette of the proposed project would not include invasive plant species, and no invasive plant species would be planted in or adjacent to the MHPA as directed by **MM-BIO-20**. All stream courses within the redeveloped golf course will include a 10-foot-wide strip of planted native vegetation in the Landscape Plans as directed by **MM-BIO-20**. This strip will have an emphasis on saltgrass (*Distichlis spicata*), a native, wetland tolerant grass species. **MM-BIO-20** would ensure that there would be no potentially significant indirect impacts from invasive plants.

4.2.5.3 Water Quality

Water and sediment runoff from the construction area has the potential to temporarily impact local water quality, and sediment deposition can negatively affect wetland vegetation communities.

Erosion of sediments during rain events during construction could deposit into waterways or wetlands and negatively affect the hydrology and associated ecology of the system. Temporary indirect impacts on sensitive wetland vegetation communities would be a potentially significant impact. Therefore, the project would implement measures **MM-BIO-7,** which requires construction monitoring, **MM-BIO-8,** which requires delineation of environmentally sensitive areas, and **MM-BIO-9**, which requires a stormwater pollution prevention plan, to reduce impacts to water quality during construction to less than significant.

4.2.5.4 Fugitive Dust

Dust resulting from heavy equipment grading the project could settle on nearby vegetation and interfere with the photosynthetic process of native vegetation, which could result in a potentially significant impact on sensitive vegetation communities. Therefore, the project would implement measures **MM-BIO-7,** which requires construction monitoring, **MM-BIO-9,** which requires a stormwater pollution prevention plan, and **MM-BIO-10**, which requires speed limits, to reduce impacts from dust during construction to less than significant.

4.2.5.5 Dewatering Activities on Wildlife Nursery Sites

No short-term indirect impacts are anticipated from the temporary dewatering activities associated with the project to wildlife nursery sites (i.e. double-crested cormorant rookery). The on-site ponds may support non-native fish of varying species and age classes, and additional fish occur nearby in other waters such as the Santee Lakes located approximately 2,000 feet northeast of the rookery. The distance between Santee Lakes and the rookery is well within the normal foraging range for cormorants (USFWS 2020). Santee Lakes as well as the Pacific Ocean will remain available during the entire nesting period; therefore, no short-term indirect impacts from dewatering activities are anticipated to this species.

4.2.6 Long-Term (Operational-Related) Indirect Impacts

~~4.3.5~~4.2.6.1 Human Activity

A goal of site development is to increase the active recreational use of the golf course. Active recreation may be an acceptable use adjacent to the MHPA (City of San Diego 1998). The MHPA was mapped over the existing golf course, which was established in 1958. There are other places within the City of San Diego where the MHPA overlaps with golf courses. Golf course users are expected to remain on the golf course and not enter undeveloped areas of the adjacent MHPA because of the presence of a physical existing berm up to 12 feet tall, fencing, and the density of adjacent riparian forest. Therefore, there would be no potentially significant indirect impacts from active recreation.

The existing path along the berm between the golf course and the San Diego River (South Channel) currently allows for recreational use along the riparian boundary. Improvements of this path to the multi-use San Diego River Trail have been planned by SANDAG (SANDAG 2017).

~~**Impact BIO-13. Indirect Human Activity.**~~ The proposed project would increase human activity in the vicinity of sensitive habitat, including occupied vireo habitat, on the western and northeastern sides of the project as the existing golf course land use adjacent to the San Diego River habitat is converted to residential and commercial land uses. Project design features such as fences and retaining walls would help reduce potential indirect impacts from human activity. However,

additional measures, such as signage, are required to reduce indirect human activity impacts to a less than significant level. The project would also implement measure **MM-BIO-19,** which requires homeowner education program and signage to minimize impacts from human activity within the MHPA and adjacent open space areas, which would reduce impacts to less than significant.

~~4.3.6~~4.2.6.2 Invasive Plants

Invasive exotic (nonnative) plant species can be introduced into adjacent habitat by several means. Invasive exotic plant species can be planted as part of the ornamental landscaping of development or plantings of new residences. Weeds can be introduced by increased movement of people or domestic animals along native areas. Weeds can also be introduced from construction vehicles brought onto the site, tracking in soil containing weed seeds.

The proposed project would not indirectly affect natural vegetation communities with invasive plants. The vegetation palette of the proposed project would not include invasive plant species, and no invasive plant species would be planted in or adjacent to the MHPA~~. Since the golf course will be planted with a hybrid Bermuda grass species per industry standards, a 10-foot buffer has been established to separate all golf turf from riparian areas. The buffer zone will be planted with native bunch grasses which will contain the Bermuda grass within the playable golf boundary. The buffer zones are noted on the Grassing Plan for the golf course. The golf course redesign would remove existing ornamental trees, such as Brazilian peppertree, that are considered invasive. Project design features~~ as directed by **MM-BIO-20**. All stream courses within the redeveloped golf course will include a 10-foot-wide strip of planted native vegetation in the Landscape Plans as directed by **MM-BIO-20**. This strip will have an emphasis on saltgrass (*Distichlis spicata*), a native, wetland tolerant grass species. **MM-BIO-20** would ensure that there would be no potentially significant indirect impacts from invasive plants.

~~4.3.7~~4.2.6.3 Nuisance Animals

Argentine ants (*Linepithema humile*) are a nonnative species of ant that are promoted by irrigation and urbanization (USFWS 2006). Argentine ants may pose a problem to the least Bell's vireo in the riparian-urban interface of the San Diego River. The current conditions of irrigation needed to sustain a golf course may contribute to Argentine ant populations; conversion of a portion of the golf course to residential and commercial development is not expected to significantly increase water use and Argentine ant populations compared to the existing conditions. Therefore, because the project's irrigation would be similar to or reduced as compared to the existing conditions, and the proposed project would include a series of catch basins and biofiltration basins to manage stormwater runoff, an increase in the potential indirect impacts to special-status species from Argentine ants is not anticipated.

Brown-headed cowbirds are nest parasites of native songbirds including special-status species such as least Bell's vireo. Brown-headed cowbirds were observed in low numbers during the surveys for least Bell's vireo and southwestern willow flycatcher in 2019. Brown-headed cowbird populations can be augmented by golf courses that serve as foraging habitat. The total area of golf course would be reduced within the proposed project, so the project is not expected to promote the increase of brown-headed cowbird populations.

~~**Impact BIO-14. Domestic Animals.**~~ Animals associated with residential development can have a negative effect on wildlife. Free-ranging cats and off-leash dogs can prey on wildlife and have

potential to spread zoonotic diseases to wildlife and other domestic animals. Because least Bell's vireo normally constructs nests at the low height of approximately 3 feet, there is the potential for increased predation of adult and nestling least Bell's vireo by an increased abundance of free-range cats. Increased predation of special-status bird species would represent a potentially significant impact. Homeowner education shall be required to reduce the potential increase of domestic pets generated due to the proposed residential homes adjacent to existing open space. as directed by **MM-BIO-19**.

~~4.3.8~~4.2.6.4 Nighttime Lighting

Artificial nighttime lighting can cause negative effects on wildlife, including disrupting foraging and dispersal patterns, increasing predation risk, disrupting biological clocks, and increasing mortality risks along roads (Beier 2006). Nighttime lighting within the golf course would be compliant with City of San Diego Outdoor Lighting Regulations Section 142.0740 (f), so that any exterior lighting would be limited to low-level lights and shielded to minimize the amount of light entering the adjacent sensitive biological resource areas. as directed by **MM-BIO-20**. All development within the City of Santee is required to conform with the City of Santee Municipal Code 13.30.030 performance standards, which state in part "All lighting shall be designed and adjusted to reflect light away from any road or street, and away from any adjoining premises. All lights and illuminated signs shall be shielded or directed so as to not cause glare on adjacent properties or to motorists." Development within the City of Santee would be designed so that project lighting does not cast light into natural or revegetation areas. Conformance with Santee Municipal code and implementation of project design features would prevent significant indirect impacts of nighttime lighting on adjacent sensitive habitat.

~~4.3.9~~4.2.6.5 Water Quality and Hydrology

The project incorporates several design features intended to protect the proposed structures and preserve the integrity of the overall river corridor, ensuring that stream functions, flood risk, erosion potential, flow velocity, and sediment transport are not adversely impacted or altered by the proposed improvements. Therefore, long-term indirect impacts to water quality and hydrology are not anticipated. The project would also be consistent with the Santee General Plan principles related to water quality and hydrology as detailed below.

As stated in Section 1.5.3.2, the City of Santee's Land Use Element of the General Plan includes guiding principles that would apply to the proposed project as they relate to the protection of the San Diego River:

- Guiding Principle #5: Development should respect the river environment, including protection of the riparian habitat and protected species.

Hydrology modeling, as summarized in Appendix O, was conducted to evaluate potential changes in water surface elevation and flow velocity associated with the proposed project, with particular focus on small storm events and the wetland areas located both downstream and upstream of the project boundary. The study also assessed whether it was necessary to extend the analysis farther upstream and downstream to ensure that any potential effects on adjacent parcels and sensitive habitat areas were fully captured. The modeling was extended 0.28 miles upstream and 0.22 miles downstream of the project limits, confirming that the project does not cause any hydraulically significant changes in water surface elevations or flow velocities within or adjacent to sensitive habitat areas that could

negatively affect inundation patterns, sediment transport, or erosion processes. The project's grading and golf course layout were specifically designed and confirmed by the hydrology modeling to maintain river capacity and avoid adverse changes to the portion of Sycamore Canyon Creek and the San Diego River within the project site as well as the upstream or downstream reaches of Sycamore Canyon Creek and the San Diego River and their associated riparian vegetation communities. Additionally, potential re-establishment mitigation areas within project site (refer to Appendix K, Proposed On-Site Mitigation Overview) were also evaluated in Appendix O for changes to base flood elevations and surface water elevations. Based on the hydraulic modeling summarized in Appendix O, the re-establishment areas would provide beneficial flood storage and would not measurably influence flood conveyance or water surface elevations, and flow paths would remain unchanged. Therefore, the project would be consistent with this guiding principle related to the San Diego River environment of the Land Use Element (City of Santee 2003) because the overall function and value of Sycamore Canyon Creek and the San Diego River will be maintained after project implementation.

- Guiding Principle #6: Development should protect natural drainage and ensure protection of water quality.

Water runoff from urban development has potential to permanently impact local water quality and the ecological systems associated with riparian and wetland vegetation communities. The development of the country club and resort is required by state laws to comply with current regulations promulgated by the RWQCB for water quality. Proprietary water quality systems have been included within the project design to collect runoff and stormwater to allow on-site treatment of water flows. Implementation of project design features are expected to prevent a permanent impact on local water quality. As required by MM-BIO-9, a SWPPP would include best management practices (BMPs) to reduce runoff into the river and reduce impacts to surface water quality. The proposed updates to the golf course have been designed to follow the contours of the existing natural topographical features of the San Diego River valley. Twelve of the new golf holes would maintain the original contours, and all 18 holes would maintain the characteristics of the existing contours, drainage, and floodway and, most importantly, protect natural drainage patterns. Additionally, these contours would respect the interior Sycamore Canyon Creek area that flows through the center of the golf course. Most of the proposed grading for the golf course has been designed around the San Diego River (North Channel) and Sycamore Canyon Creek. Only a few limited areas of the San Diego River (North Channel) and Sycamore Canyon Creek would be permanently or temporarily affected by the construction of the golf course; however, the project proposes to not only restore and enhance these areas but also widen the natural drainage. Therefore, the project would be consistent with this guiding principle related to water quality of the Land Use Element (City of Santee 2003).

~~**Impact BIO-15. Water Quality**. Water and sediment runoff from the construction area has the potential to temporarily impact local water quality, and sediment deposition can negatively affect wetland vegetation communities. Erosion of sediments during rain events during construction could deposit into waterways or wetlands and negatively affect the hydrology and associated ecology of the system. Temporary indirect impacts on sensitive wetland vegetation communities would be a potentially significant impact.~~

~~4.3.10 Fugitive Dust~~

~~**Impact BIO-16. Fugitive Dust**. Dust resulting from heavy equipment grading the project could settle on nearby vegetation and interfere with the photosynthetic process of native vegetation, which could be a potentially significant impact on sensitive vegetation communities.~~

4.2.6.6 Wetland Buffer

The City of San Diego Biology Guidelines (City of San Diego 2018) requires that a wetland buffer be maintained around all City wetlands as appropriate to protect the function and values of the wetland. The wetland buffer width, along with characteristics of the buffer area (vegetation communities present, etc.), provides protection for the functions and values of the City wetlands, according to the City's Biology Guidelines (City of San Diego 2018a) and Section 320.4(b)(2) of the USACE General Regulatory Policies (33 CFR 320–330), including wildlife habitat, food chain productivity (i.e. foraging areas for wildlife), water quality, ground water recharge, and protection from storm and flood waters. Because the golf course is the existing land use occurring within the wetland buffer surrounding the City of San Diego wetlands, there would be no change to the wetland buffer width or characteristics with project implementation.

All stream courses within the redeveloped golf course will include a 10-foot-wide strip of planted native vegetation in the Landscape Plans as directed by **MM-BIO-20**. This strip will have an emphasis on saltgrass (*Distichlis spicata*), a native, wetland tolerant grass species. There is currently no buffer between the existing golf course and existing waterways.~~The impacts within the City of San Diego would be mitigated following the requirements of the MSCP City of San Diego subarea plan; therefore, cumulative impacts from impacts within the City of San Diego would be less than significant.~~

~~Unmitigated impacts on 1.73 acres of native and naturalized habitat within the City of Santee would be a cumulatively significant impact. However, this project would be consistent with the MSCP and would provide compensatory habitat-based mitigation. The project has been designed to avoid direct impacts on existing or proposed undeveloped preserve areas. Development is clustered near existing residential development, and the golf course will remain as a buffer in many areas between development and open space. Development has been situated to avoid impacting movement corridors.~~

~~Mitigation measures have been identified and, if implemented, would reduce the direct impacts on habitat and vegetation communities and reduce the cumulative impact to less than significant.~~

4.2.6.7 Operational Noise

Overall, the operational noise would not substantially change with project implementation. Golf is generally considered a low-intensity activity with minimal disruption to wildlife, especially during the breeding season. Golf operations typically involve quiet, dispersed human presence and do not generate the kind of sustained noise or disturbance associated with more intensive recreational and residential uses. Because the project site is surrounded by development, there are existing ambient noise levels resulting from surrounding activities (e.g., traffic on State Route 52, aircraft overflights from/to Gillespie Field, general neighborhood sources [e.g., air conditioners, landscaping activities], and various ground-maintenance activities). As detailed in Table 3.12-2 of the Draft EIR for the

Carlton Oaks Country Club and Resort Project, existing ambient noise at the Project site ranges from 50.6 to 61.4 hourly dBA L_{eq}.

Project-related operational noise levels would be associated with golf tournaments and exterior activities at the pool and patio. All operational noise from the Residential North and Hotel/Clubhouse is predicted to be less than 60 dBA L_{eq} along the interface between the development and riparian habitat areas (Ldn Consulting, Inc. 2025), which is typically used by the Wildlife Agencies (i.e., USFWS and CDFW) as the noise threshold for wildlife species. Predicted noise levels at the Residential West development are anticipated to result in noise levels slightly exceeding the 60 dBA L_{eq} threshold (Ldn Consulting, Inc. 2025). However, this is due to the existing ambient noise levels from traffic along State Route 52 and not a result of the operational noise from the project. Therefore, special-status wildlife species, including least Bell's vireo, are already being subjected to ambient noise that is slightly higher than the 60 dBA L_{eq} threshold at the interface between Residential West and the adjacent riparian habitat due to the existing conditions. Therefore, long-term operational noise impacts from the project would be less than significant to special-status wildlife species, including least Bell's vireo.

4.2.6.8 Wildlife Movement and Nursery Sites

To prevent exclusion of the wildlife usage of the secondary movement corridor (golf course area), the project would include a wildlife-friendly fence design so that it is wildlife-permeable friendly while still performing hiker protection goals. This fencing design is outlined in measure **MM-BIO-21**, which would allow wildlife through the fence and through the secondary wildlife corridor, including deer with antlers that could crawl under the fence.

Long-term indirect impacts to the double-crested cormorant rookery from the redesign of the golf course and the addition of the hotel, clubhouse, and residential area are not anticipated. This species is known to be tolerant of proximate human activities, particularly in urban areas (Iguchi et al. 2015) and can occur in human-modified environments (USFWS 2020). Currently the rookery is located in the heart of the golf course near the central hub of activity, approximately 500 feet from the clubhouse and 650 feet from residences along Inverness Road. The tree and rookery are situated over a cart path and on the fairway. A large, roughly 1-foot by 2-foot upward-facing high-powered accent light sits at the base of the neighboring tree and currently illuminates this tree at night. It appears that the cormorants are accustomed to constant daytime human activity and nighttime illumination. After implementation of the project, the rookery would be approximately 450 feet from residences and equidistance between the new clubhouse and residences along Inverness Drive. Due to project-proposed protections from light and resident trespass, as well as maintenance of the existing food source, in addition to current tolerance of humans, activity, and light, long-term indirect impacts from the proposed project to the rookery are not anticipated.

~~4.4~~4.3 MSCP San Diego Subarea Plan Consistency

The City of San Diego Land Development Biology Guidelines (City of San Diego 2018) outlines the methods for analyzing impacts to biological resources, one of which is ensuring that a project is consistent with the MSCP (Appendix II, Guidelines for Conducting Biology Surveys in City of San- Diego 2018). The following criteria are established in Section VI.G of the Guidelines for Conducting Biology Surveys and describe how a project should be analyzed against the MSCP to determine if the project will provide for the long-term viability of wildlife and sensitive habitats.

Appendix II, Guidelines for Conducting Biology Surveys in City of San Diego, Section VI.G**:**

G. Discuss the following consistency issues with the MSCP (Discuss how the project will provide for the long-term viability of wildlife and sensitive habitats):

1. Whether or not the project lies within or adjacent to the MHPA (see interactive mapping feature on the following web site: www.sangis.org; Page 12, MSCP).

   - *Project Analysis:* MHPA ~~exists~~occurs within the proposed project site. The original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. MHPA was designated over the existing golf course along the southern edge of the project site. Within the project site, permanent impacts to the MHPA ~~covers 12.86~~total 6.96 acres of developed golf course ~~and 0.33 acres of riparian habitat~~. The golf course was established in 1958 and renovated in 1989, long before the original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. The proposed development will not change any of the current uses within the portions of the site that overlap with the MHPA boundary. The golf course will continue to exist in its current state and the project will not impact the ~~0.33~~ 1.80 acres of MHPA riparian habitat. Therefore, the proposed project is consistent with the MSCP and would be considered a compatible land use (passive recreation) per Section 1.4.1 of the MSCP.

2. Describe any relevant MHPA Guidelines (map notes).

   - *Project Analysis:* No relevant MHPA Guidelines in the map notes.

3. Assess compliance with the planning policies and guidelines (is the project an allowed use within the MHPA ~~?~~).

   - *Project Analysis:* Any redevelopment of golf course within the MHPA would occur within existing developed areas; no sensitive habitat would be impacted within the MHPA by the project.

4. Address, if applicable, the land use adjacency guidelines (as shown on Page 48, the MSCP Subarea Plan).

   - *Project Analysis:* Land Use Adjacency Guidelines are addressed in ~~Section 5.1.4~~**MM-BIO-20**.

5. Identify any appropriate management issues per Section 1.5, MSCP Subarea Plan.

   - *Project Analysis:* Section 1.5.6 of MSCP San Diego Subarea Plan details specific management directives for the Eastern Area. The project site is within the Eastern Area (Mission Trails and East Elliott). No specific management directives are applicable to the project site.

6. Assess whether any special conditions of coverage apply to the species affected by the project (per Covered Species list, Appendix A, MSCP Subarea Plan).

   - *Project Analysis:* Special conditions of coverage for MSCP-covered least Bell's vireo are addressed in Section 3.5.1.~~1~~

7. Discuss any boundary adjustments to the MHPA. If proposed, evaluate for functional equivalency per Sections 1.1.1 and 5.4.2 of the MSCP Subarea Plan.

    - *Project Analysis:* The project is located within the least sensitive portion of the site. The project would not impact any sensitive habitat within the MHPA. The only impacts to sensitive habitat within the City of San Diego are 0.19 acre of impacts to roadside Diegan coastal sage scrub (disturbed) associated with the entrance to the Residential West area.

8. Discuss whether or not the project is located on the least sensitive portion of the site (see Page 5, Biology Guidelines).

    - *Project Analysis:* Any redevelopment of golf course within the MHPA would occur within existing developed areas; no sensitive habitat would be impacted within the MHPA by the project and the project is located on the least sensitive portion of the site.

MSCP Subarea Plan Section 1.4.1 Compatible Land Uses

The following land uses are considered conditionally compatible with the biological objectives of the MSCP and thus will be allowed within the City's MHPA:

- Passive recreation
- Utility lines and roads in compliance with policies in 1.4.2 below
- Limited water facilities and other essential public facilities
- Limited low density residential uses
- Brush Management (Zone 2)
- Limited agriculture

Under the proposed revised environmental land use regulations described in Section 1.6, development on private property in the MHPA will not exceed 25 percent of the parcel, with 75 percent remaining as open space. When combined with the 100 percent preservation in negotiated areas on private lands, the approximately 94 percent preservation on publicly owned lands in the MHPA, and strategic acquisitions, the overall 90 percent preservation goal within the City's MHPA can be met.

Some disturbed lands within the MHPA may be targeted for enhancement and restoration in order to more fully contribute to the functioning of the MHPA. Existing development within the MHPA such as single-family residences on A-1-10 lots are considered conditionally compatible. Expansion of existing permitted uses within the MHPA would need to be in compliance with applicable land use regulations and should provide measures to minimize impacts on the MHPA including lighting, noise, or uncontrolled access. Expansion of uses should be generally restricted to the existing approved development areas. Other existing uses within the MHPA which are not listed above may be managed for compatibility as noted above in Section 1.2 or phased out in the long term.

Project Analysis: The golf course was established in 1958, and the 1959 Lease was entered into by the City of San Diego and the then current golf course operator for the operation and maintenance of the golf course. The golf course has been in existence since that time under the 1959 Lease until it was superseded by the 2012 Lease. The golf course was renovated in 1989, long before the original

MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. ~~-~~Moreover, the City of San Diego subsequently entered into the 2012 Lease that allowed for the continued use as a golf course after the MSCP was established by the City. The project has been reviewed in accordance with the MSCP, specifically sections 1.4.1, 1.4.2, 1.4.3, 1.5.2 and 1.5.6 (see ~~Appendix E,~~ Section 4.5).

The proposed development within the portions of the site that overlap with the MHPA boundary will not change any of the current uses that have been under continued existence since 1959 ~~within the portions of the site that overlap with the MHPA boundary~~. The golf course will continue to exist in its current state as allowed pursuant to the 2012 Lease. Moreover, the project will not impact the ~~0.33~~1.80 acres of MHPA riparian habitat. Since the proposed project will not result in any impacts to the MHPA, and all uses within the MHPA will remain the same, the project is considered a compatible land use per Section 1.4.1 of the MSCP and the golf course land use is what was envisioned by the city prior to the adoption of the MHPA.

Since the ~~proposed project~~portions of the site that overlap with the MHPA boundary will not result in any impacts to the MHPA, and all uses within the adjacent to the MHPA will remain the same, the ~~project~~golf course is considered a compatible land use per Section 1.4.1 of the MSCP. The existing and redesigned golf course does not require any brush management zones within or adjacent to the MHPA.

MSCP Subarea Plan Section 1.4.2 General Planning Policies and Design Guidelines

The following general planning policies and design guidelines should be applied in the review and approval of development projects within or adjacent to the MHPA. More specific policies and guidelines which are unique to individual MHPA areas are identified under Sections 1.2.2 - 1.2.5, and management policies and directives are in Section 1.5.

Roads and Utilities – Construction and Maintenance Policies:

1. All proposed utility lines (e.g., sewer, water, etc.) should be designed to avoid or minimize intrusion into the MHPA. These facilities should be routed through developed or developing areas rather than the MHPA, where possible. If no other routing is feasible, then the lines should follow previously existing roads, easements, rights-of-way and disturbed areas, minimizing habitat fragmentation.
    a. *Project Analysis:* Since the proposed project will not place utility lines within or adjacent to the MHPA, these design guidelines do not apply.
2. All new development for utilities and facilities within or crossing the MHPA shall be planned, designed, located and constructed to minimize environmental impacts. All such activities must avoid disturbing the habitat of MSCP covered species, and wetlands. If avoidance is infeasible, mitigation will be required.
    a. *Project Analysis:* The proposed project will not place any utilities or associated facilities within the MHPA.
3. Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat unless determined to be unavoidable. All such activities must occur on existing agricultural lands or in other disturbed areas rather than in habitat. If temporary habitat disturbance is unavoidable, then restoration of, and/or mitigation for, the disturbed area after project completion will be required.

a. *Project Analysis:* The proposed project will not result in the permanent loss ~~of~~for temporary loss of habitat within the MHPA.

4. Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage. Environmental documents and mitigation monitoring and reporting programs covering such development must clearly specify how this will be achieved, and construction plans must contain all the pertinent information and be readily available to crews in the field. Training of construction crews and field workers must be conducted to ensure that all conditions are met. A responsible party must be specified.

    a. *Project Analysis:* As discussed in Section 4.2.4.1, the project would have no direct development of the primary wildlife movement corridor (The San Diego River [South Channel] riparian corridor). The existing Carlton Oaks Golf Course is functionally a savanna, with expansive 'lawns' of golf course features, with scattered ornamental trees throughout. The golf course provides for active recreation during the day, but is essentially unoccupied by humans at night, allowing for easy, additional wildlife movement through this savanna-like community. Post construction, the portions of the golf course within the MHPA will continue to function as this "savanna" habitat.

5. Roads in the MHPA will be limited to those identified in Community Plan Circulation Elements, collector streets essential for area circulation, and necessary maintenance/emergency access roads. Local streets should not cross the MHPA except where needed to access isolated development areas.

    a. *Project Analysis:* The proposed project does not include roads within or adjacent to the MHPA and therefore these design guidelines do not apply.

6. Development of roads in canyon bottoms should be avoided whenever feasible. If an alternative location outside the MHPA is not feasible, then the road must be designed to cross the shortest length possible of the MHPA in order to minimize impacts and fragmentation of sensitive species and habitat. If roads cross the MHPA, they should provide for fully-functional wildlife movement capability. Bridges are the preferred method of providing for movement, although culverts in selected locations may be acceptable. Fencing, grading and plant cover should be provided where needed to protect and shield animals, and guide them away from roads to appropriate crossings.

7. *Project Analysis:* The proposed project does not include roads within or adjacent to the MHPA and therefore these design guidelines do not apply.

8. Where possible, roads within the MHPA should be narrowed from existing design standards to minimize habitat fragmentation and disruption of wildlife movement and breeding areas. Roads must be located in lower quality habitat or disturbed areas to the extent possible.

    a. *Project Analysis:* The proposed project does not include roads within or adjacent to the MHPA and therefore these design guidelines do not apply.

9. For the most part, existing roads and utility lines are considered a compatible use within the MHPA and therefore will be maintained. Exceptions may occur where underutilized or duplicative road systems are determined not to be necessary as identified in the Framework Management Section 1.5.

    a. *Project Analysis:* The proposed project does not include roads within or adjacent to the MHPA and therefore these design guidelines do not apply.

Fencing, Lighting, and Signage

1. Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent to land uses incompatible with the MHPA. For example, use chain link or cattle wire to direct wildlife to appropriate corridor crossings, natural rocks/boulders or split rail fencing to direct public access to appropriate locations, and chain link to provide added protection of certain sensitive species or habitats (e.g., vernal pools).

    a. *Project Analysis:* Fencing, lighting and signage and materials storage are addressed as a part of Section 1.4.3 of the MSCP.

    2. Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife. Lighting in areas of wildlife crossings should be of low-sodium or similar lighting. Signage will be limited to access and litter control and educational purposes.

        a. *Project Analysis:* Fencing, lighting and signage and materials storage are addressed as a part of Section 1.4.3 of the MSCP.

Materials Storage

Prohibit storage of materials (e.g., hazardous or toxic, chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, especially due to potential leakage.

Project Analysis: Fencing, lighting and signage and materials storage are addressed as a part of Section 1.4.3 of the MSCP.

Mining, Extraction and Processing Facilities

Project Analysis: The project does not include any mining and therefore the guidelines related to mining, extraction, and processing facilities do not apply.

Flood Control

1. Flood control should generally be limited to existing agreements with resource agencies unless demonstrated to be needed based on a cost benefit analysis and pursuant to a restoration plan. Floodplains within the MHPA, and upstream from the MHPA if feasible, should remain in a natural condition and configuration in order to allow for the ecological, geological, hydrological, and other natural processes to remain or be restored.

    a. *Project Analysis:* A Flood Study (Draft CLOMR) has been completed for the proposed project. ~~The Preliminary Flood Study proposed revisions to FEMA~~ The analysis demonstrates that the remapping of the floodplain~~, a portion of the~~ and floodway ~~delineation, and~~ preserves or rebalances flood conveyance and volume, with no adverse impact on base flood elevations~~. Changes and revisions comply with FEMA regulations and ordinances. Approval of the~~ upstream or downstream of the project area. The project's grading and golf course layout are specifically designed to maintain river capacity and avoid adverse changes in flood risk, erosion, velocity, and sediment transport for the project site, upstream areas, or downstream communities, in compliance with FEMA, City of Santee, and City of San Diego standards. The Flood Study (Draft CLOMR) would ~~result in remapping of the affected floodplain. The placement of fill would raise the residential development areas out of~~ need to be approved by FEMA, the

floodplainCity of Santee, and the clubhouse and resort area above the 100-year flood levelsCity of San Diego prior to the issuance of a grading permit for the floodway. The golf course would be redesigned to allow more flow to pass in flooding situationsproject. The majority of the MHPA within the floodplain is currently golf course and will remain golf course after construction. The small portion of MHPA that consists of native riparian habitat will not be impacted by the proposed project.

2. No berming, channelization, or man-made constraints or barriers to creek, tributary, or river flows should be allowed in any floodplain within the MHPA unless reviewed by all appropriate agencies, and adequately mitigated. Review must include impacts to upstream and downstream habitats, flood flow volumes, velocities and configurations, water availability, and changes to the water table level.

    a. *Project Analysis:* The proposed project will not require any berming, channelization, or man-made constraints or barriers to a creek, tributary, or river within the MHPA and therefore this design criteria does not apply.

3. No riprap, concrete, or other unnatural material shall be used to stabilize river, creek, tributary, and channel banks within the MHPA. River, stream, and channel banks shall be natural, and stabilized where necessary with willows and other appropriate native plantings. Rock gabions may be used where necessary to dissipate flows and should incorporate design features to ensure wildlife movement.

    a. *Project Analysis:* The proposed project will not impact any river, creek, tributary, and channel banks within the MHPA and therefore this design criteria does not apply.

MSCP Subarea Plan Section 1.4.3 Land Use Adjacency Guidelines

The MSCP City of San Diego Subarea plansPlan addresses potential direct and indirect impacts on preserve areas from adjacent development in Section 1.4.3, Land Use Adjacency Guidelines (City of San Diego 1997). The Land Use Adjacency Guidelines provide requirements for land uses adjacent to the habitat preserve in order to minimize indirect impacts to the sensitive resources. City of San Diego MHPA exists along the southern boundary of the site. The redesign of the golf course within and adjacent to MHPA considers the guidelines to ensure consistency with them. This discussion can be found in Section 5.1.4.2 of this report.

The project would redesign the existing active recreation use (existing golf course) within and adjacent to the City of San Diego Multi-Habitat Preserve Area (MHPA). The existing golf course contains approximately 14 acres of land designated as MHPA and is adjacent to MHPA along the southern boundary of the site, within the City of San Diego. The MSCP San Diego Subarea Plan includes land use adjacency guidelines, addressed on a project-by-project basis, to minimize impacts and maintain function of the MHPA (City of San Diego 1997). The City of San Diego MSCP Land Use Adjacency Guidelines include the following topics: drainage, toxics, lighting, noise, barriers, invasives, brush management, and grading/land development (See Section 1.5.3). The following list describes how these guidelines relate to the portions of the proposed project within the City of San Diego.

Drainage/Toxics. No parking lots or developed areas are proposed in or adjacent to the MHPA. Developed areas within the project site are designed to drain to water quality detention basins.

Lighting. No lighting is proposed in the golf course in or adjacent to the MHPA.

Noise/Barriers. No land use changes are proposed in or adjacent to the MHPA. There will be a continuation of golf course uses along the southern boundary of the site. No changes in operational noise are expected as a result of the operation of the golf course. Golf course uses will continue along the southern boundary similar to present uses on the site.

Construction activities adjacent to the MHPA could result in temporary increases in noise. Implementation of MM-BIO-12 would avoid or substantially lessen indirect impacts on nesting birds due to construction noise, to below a level of significance.

Brush Management. The existing and redesigned golf course does not require any brush management zones within or adjacent to the MHPA.

Grading/land development. No slopes are proposed within or adjacent to the City of San Diego MHPA. All project grading will be contained within the project site.

Invasive species shall not be introduced into areas immediately adjacent to the preserve areas. All open space slopes immediately adjacent to the preserve should be planted with native species that reflect the adjacent native habitat.

The project will be required to comply with the City of San Diego Land Use Adjacency Guidelines listed above which is a requirement of the project's condition of project approval and included in the Covenants, Permit Conditions, and Restrictions. With implementation of MM-BIO-12 and conformance with the MSCP Land Use Adjacency Guidelines, the project would not conflict with local policies (i.e., the MSCP) and would not result in a potentially significant impact.

MSCP Subarea Plan Section 1.5.2 General Management Directives

The following general management directives apply to all areas of the City of San Diego's MSCP Subarea Plan, as appropriate.

Mitigation

Mitigation, when required as part of project approvals, shall be performed in accordance with the City of San Diego Environmentally Sensitive Lands Ordinance and Biology Guidelines.

Project Analysis: All mitigation proposed for the project is discussed in Section 5.1. Mitigation has been developed in accordance with the City of San Diego Environmentally Sensitive Lands Ordinance and Biology Guidelines.

Restoration

Restoration or revegetation undertaken in the MHPA shall be performed in a manner acceptable to the City. Where covered species status identifies the need for reintroduction and/or increasing the population, the covered species will be included in restoration/revegetation plans, as appropriate. Restoration or revegetation proposals will be required to prepare a plan that includes elements addressing financial responsibility, site preparation, planting specifications, maintenance, monitoring and success criteria, and remediation and contingency measures. Wetland restoration/revegetation proposals are subject to permit authorization by federal and state agencies.

Project Analysis: The proposed project does not require any restoration or revegetation within the MHPA.

Public Access, Trails, and Recreation

Priority 1:

1. Provide sufficient signage to clearly identify public access to the MHPA. Barriers such as vegetation, rocks/boulders or fencing may be necessary to protect highly sensitive areas. Use appropriate type of barrier based on location, setting and use. For example, use chain link or cattle wire to direct wildlife movement, and natural rocks/boulders or split rail fencing to direct public access away from sensitive areas. Lands acquired through mitigation may preclude public access in order to satisfy mitigation- requirements.

    a. *Project Analysis:* A portion of the golf course is located within the MHPA and will remain as an operating golf course following construction. An existing manufactured berm is located along most of the southern and eastern boundary, generally outside the project site and separates the golf course from native- habitat.

2. Locate trails, view overlooks, and staging areas in the least sensitive areas of the MHPA. Locate trails along the edges of urban land uses adjacent to the MHPA, or the seam between land uses (e.g., agriculture/habitat), and follow existing dirt roads as much as possible rather than entering habitat or wildlife movement areas. Avoid locating trails between two different habitat types (ecotones) for longer than necessary due to the typically heightened resource sensitivity in those locations.

    a. *Project Analysis:* The proposed project does not propose any new trails within the MHPA.

3. In general, avoid paving trails unless management and monitoring evidence shows otherwise. Clearly demarcate and monitor trails for degradation and off-trail access and use. Provide trail repair/maintenance as needed. Undertake measures to counter the effects of trail erosion including the use of stone or wood ~~crossjoints~~cross-joints, edge plantings of native grasses, and mulching of the trail.

    a. *Project Analysis:* The proposed project does not propose any new trails within the MHPA.

4. Minimize trail widths to reduce impacts to critical resources. For the most part, do not locate trails wider than four feet in core areas or wildlife corridors. Exceptions are in the San Pasqual Valley where other agreements have been made, in Mission Trails Regional Park, where appropriate, and in other areas where necessary to safely accommodate multiple uses or disabled access. Provide trail fences or other barriers at strategic locations when protection of sensitive resources is required.

    a. *Project Analysis:* The proposed project does not propose any new trails within the MHPA.

5. Limit the extent and location of equestrian trails to the less sensitive areas of the MHPA. Locate staging areas for equestrian uses at a sufficient distance (e.g., 300-500 feet) from areas with riparian and coastal sage scrub habitats to ensure that the biological values are not impaired.

    a. *Project Analysis:* The proposed project does not ~~propose~~include any equestrian trails within the MHPA.

6. Off-road or cross-country vehicle activity is an incompatible use in the MHPA, except for law enforcement, preserve management or emergency purposes. Restore disturbed areas to native habitat where possible or critical, or allow to regenerate.

    a. *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction. No off-road or cross-country vehicle activity will occur within the proposed project boundaries, and specifically the MHPA.

7. Limit recreational uses to passive uses such as birdwatching, photography and trail use. Locate developed picnic areas near MHPA edges or specific areas within the MHPA, in order to minimize littering, feeding of wildlife, and attracting or increasing populations of exotic or nuisance wildlife (opossums, raccoons, skunks). Where permitted, restrain pets on leashes.

    a. *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction

8. Remove homeless and itinerant worker camps in habitat areas as soon as found pursuant to existing enforcement procedures.

    a. *Project Analysis:* A small portion of native riparian habitat associated with the north channel of the San Diego River overlaps with the MHPA. This area is surrounded by existing golf course, and it is unlikely that homeless and itinerant worker camps will occur within the project, and specifically this portion of the project. However, should these camps become established, they will be removed in accordance with this general management directive.

9. Maintain equestrian trails on a regular basis to remove manure (and other pet feces) from the trails and preserve system in order to control cowbird invasion and predation. Design and maintain trails where possible to drain into a gravel bottom or vegetated (e.g., grass-lined) swale or basin to detain runoff and remove pollutants.

    a. *Project Analysis:* The proposed project does not propose any equestrian trails within the MHPA.

Litter/Trash and Materials Storage

Priority 1:

1. Remove litter and trash on a regular basis. Post signage to prevent and report littering in trail and road access areas. Provide and maintain trash cans and bins at trail access points.

2. Impose penalties for littering and dumping. Fines should be sufficient to prevent recurrence and also cover reimbursement of costs to remove and dispose of debris, restore the area if needed, and to pay for enforcement staff time.

3. Prohibit permanent storage of materials (e.g., hazardous and toxic chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, due to potential leakage.
4. Keep wildlife corridor under-crossings free of debris, trash, homeless encampments, and all other obstructions to wildlife movement.
    a. *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction. The 0.33 acre of riparian habitat within the MHPA will not be impacted by the proposed project. Therefore, these priorities related to trails, trash, material storage and wildlife corridors do not apply to the proposed project.

Priority 2:

1. Evaluate areas where dumping recurs for the need for barriers. Provide additional monitoring as needed (possibly by local and recreational groups on a "Neighborhood Watch" type program), and/or enforcement.
    a. *Project Analysis:* The project site is not subject to dumping issues and therefore this priority does not apply.

Adjacency Management Issues

The following management directives are in addition to those outlined in Section 1.4.3~~,~~ of the MSCP and refer more specifically to management and monitoring requirements.

Priority 1:

1. Enforce, prevent and remove illegal intrusions into the MHPA (e.g., orchards, decks, etc.) on an annual basis, in addition to complaint basis.
2. Disseminate educational information to residents adjacent to and inside the MHPA to heighten environmental awareness, and inform residents of access, appropriate plantings, construction or disturbance within MHPA boundaries, pet intrusion, fire management, and other adjacency issues.
3. Install barriers (fencing, rocks/boulders, vegetation) and/or signage where necessary to direct public access to appropriate locations.
    a. *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction. Houses will not be located within or adjacent to the MHPA. An existing manufactured berm is located along most of the southern and eastern boundary of the golf course, generally outside the project site and separates the golf course from native habitat and therefore additional barriers are not needed.

Invasive Exotics Control and Removal

Priority 1:

1. Do not introduce invasive non-native species into the MHPA. Provide information on invasive plants and animals harmful to the MHPA, and prevention methods, to visitors and adjacent residents. Encourage residents to voluntarily remove invasive exotics from their landscaping.

a. *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction.

2. Remove giant reed, tamarisk, pampas grass, castor bean, artichoke thistle, and other exotic invasive species from creek and river systems, canyons and slopes, and elsewhere within the MHPA as funding or other assistance becomes available. If possible, it is recommended that removal begin upstream and/or upwind and move downstream/downwind to control reinvasion. Priorities for removal should be based on invasive species' biology (time of flowering, reproductive capacity, etc.), the immediate need of a specific area, and where removal could increase the habitat available for use by covered species such as the least Bell's vireo. Avoid removal activities during the reproductive seasons of sensitive species and avoid/ minimize impacts to sensitive species or native habitats. Monitor the areas and provide additional removal and apply herbicides if necessary. If herbicides are necessary, all safety and environmental regulations must be observed. The use of heavy equipment, and any other potentially harmful or impact-causing methodologies, to remove the plants may require some level of environmental or biological review and/or supervision to ensure against impacts to sensitive species.

    a. *Project Analysis:* The portion of the golf course located within the MHPA will remain as an operating golf course following construction. There are no areas of MHPA within the project site that would benefit from invasive removal.

Priority 2:

1. If funding permits, initiate a baseline survey with regular follow-up monitoring to assess invasion or re-invasion by exotics, and to schedule removal. Utilize trained volunteers to monitor and remove exotic species as part of a neighborhood, community, school, or other organization's activities program (such as Friends of Peñasquitos Preserve has done). If done on a volunteer basis, prepare and provide information on methods and timing of removal to staff and the public if requested. For giant reed removal, the Riverside County multi-jurisdictional management effort and experience should be investigated and relevant techniques used. Similarly, tamarisk removal should use the Nature Conservancy's experience in the Southern California desert regions, while artichoke thistle removal should reference the Nature Conservancy's experience in Irvine. Other relevant knowledge and experience is available from the California Exotic Pest Plant Council and the Friends of Los Peñasquitos Canyon Preserve.

    a. *Project Analysis:* Not applicable.

2. Conduct an assessment of the need for cowbird trapping in each area of the MHPA where cattle, horses, or other animals are kept, as recommended by the habitat management technical committee in coordination with the wildlife agencies.

    a. *Project Analysis:* Not applicable.

3. If eucalyptus trees die or are removed from the MHPA area, replace with appropriate native species. Ensure that eucalyptus trees do not spread into new areas, nor increase substantially in numbers over the years. Eventual replacement by native species is preferred.

    a. *Project Analysis:* Not applicable.

4. On a case by case basis some limited trapping of non-native predators may be necessary at strategic locations, and where determined feasible to protect ground and shrub-nesting birds, lizards, and other sensitive species from excessive predation. This management directive may be considered a Priority 1 if necessary to meet the conditions for species coverage. If implemented, the program would only be on a temporary basis and where a significant problem has been identified and therefore needed to maintain balance of wildlife in the MHPA. The program would be operated in a humane manner, providing adequate shade and water, and checking all traps twice daily. A domestic animals release component would be incorporated into the program. Provide signage at access points and noticing of adjacent residents to inform people that trapping occurs, and how to retrieve and contain their pets.

    a. *Project Analysis:* Not applicable.

Flood Control

The following management directives are in addition to the general planning policies and guidelines outlined in Section 1.4.2.

Priority 1:

1. Perform standard maintenance, such as clearing and dredging of existing flood channels, during the non-breeding or nesting season of sensitive bird or wildlife species utilizing the riparian habitat. For the least Bell's vireo, the non-breeding season generally includes mid-September through mid-March.

    a. *Project Analysis:* Not applicable.

Priority 2:

1. Review existing flood control channels within the MHPA periodically (every five to ten years) to determine the need for their retention and maintenance, and to assess alternatives, such as restoration of natural rivers and floodplains.

    a. *Project Analysis:* Not applicable.

MSCP Subarea Plan Section 1.5.6 Specific Management Policies and Directives for the Eastern- Area

Mission Trails Regional Park

Priority 1:

A Natural Resource Management Plan (NRMP) will be prepared for the park to preserve and protect natural resources while encouraging public use and implementation of the Master Development Plan. Coordinate the preparation of the NRMP with MSCP planners.

1. Maintain and clearly demarcate trails around the visitors center and other areas of high public use to minimize habitat destruction.
2. Limit future equestrian trails to specified trails which minimize trail edge disturbances and are no greater than 25 percent gradient.
3. Seasonally restrict, if necessary, areas along the San Diego River, including riparian restoration areas (except along established trails) to prevent disturbance of breeding- areas.

4. As envisioned by the Master Development Plan, revegetate areas with erosion or denuded slopes.
5. Incorporate adequate setbacks into future plans to develop an equestrian center near the San Diego River to minimize impacts associated with cowbird parasitism. Establish a cowbird trapping program to minimize effects on the least Bell's vireo and other- songbirds.
6. Minimize lighting for the campground and collect garbage frequently to reduce nuisance wildlife (raccoons, opossums, skunks).
7. Establish signs to direct access and provide educational information at the periphery of sensitive resource areas and at points of access. Post signs to prohibit campfires, pets, firearms and camping (except where allowed). Also post road signs to identify wildlife corridors to help reduce road kills. Priority 2: 1. Reclaim active and abandoned mineral extraction areas as required by the State's Surface Mining and Reclamation Act of 1975.
    a. *Project Analysis:* Not applicable.

East Elliott

Priority 1:

Protect the remaining populations of San Diego ambrosia in the private property area immediately to the east of the Kumeyaay Lake campground. Explore methods to protect and enhance the San Diego ambrosia population in the area such as transplanting to more remote areas, or the use of split rail fencing and signage.

2. If the eastern area develops with urban uses, implement programs to educate future adjacent landowners pursuant to the general adjacency management guidelines in Section 1.5.2.
    a. *Project Analysis:* Not applicable.

4.4 Consistency with Draft Santee MSCP Subarea Plan

Although the proposed project is NAP of the draft Santee MSCP Subarea Plan, the project is consistent with the draft Santee MSCP Subarea Plan to the greatest extent feasible. The project would not compromise future implementation of the Draft Santee MSCP Subarea Plan because the City of Santee's MSCP Subarea Plan is not reliant on the golf course to meet its objectives. However, the project will conform to the Preserve Land Use Adjacency Guidelines developed in the draft plan to ensure that there are no conflicts with establishment of the subarea plan as described below in Section 4.5.1, as well as all applicable Policy Objectives of the City of Santee's General Plan as described in Section 4.5.2. In addition, the City of Santee's Land Use Element includes guiding principles that would apply to the proposed project as they relate to the protection of the San Diego River. Refer to Section 4.3.2.5 for project consistency with the applicable guiding principles of the City's Land Use Element.

4.4.1 City of Santee Land Use Adjacency Guidelines

Although the draft Santee MSCP Subarea Plan has not been approved, this project will conform to the Preserve Land Use Adjacency Guidelines developed in the draft plan to ensure that there are no conflicts with establishment of the subarea plan. The proposed project would introduce residential development as an accessory use to the area near West Hills Parkway that is adjacent to open space in the City of Santee. The proposed project would introduce the emergency access road and parking lot associated with the golf resort adjacent to the Mast Park West habitat preserve in Santee, in an area that is currently a golf course. However, the proposed project conforms and is consistent with the following guidelines:

Drainage. The new development areas have been designed to drain into on-site water detention basins and not flow directly into the habitat preserves.

Fuel modification zones. Santee Municipal Code Chapter 49 Section 4905.2 requires that all new development within the Wildland Urban Interface Area has fuel modified defensible space. A fire protection plan has been prepared to address impacts from Wildland Urban Interface. Potential impacts from fuel modification zones have been incorporated into the impact footprint of the project.

Noise generated during construction of the proposed project could affect nesting birds if construction occurs during the avian breeding season. **MM-BIO-12** provides a measure to reduce noise impacts on nesting birds in adjacent habitat to less than significant.

Project lighting will be shielded and directed away from the San Diego River to avoid spillover into the adjacent riparian habitat. Low-pressure sodium lighting shall be used whenever possible and incorporated into project design features and engineering site plan. The City of Santee will provide project oversight to ensure that the project lighting is consistent with Preserve Land Use Adjacency Guidelines.

Invasive species shall not be introduced into areas immediately adjacent to the preserve areas. All open space slopes immediately adjacent to the preserve should be planted with native species that reflect the adjacent native habitat. Invasive species will not be introduced from the project into the adjacent preserve lands. The City of Santee will approve the project's landscaping plans to ensure

that the applicable parts of the landscaping plant palette are consistent with Preserve Land Use Adjacency Guidelines.

Conformance with the City of Santee Land Use Adjacency Guidelines as described above are primarily project design features In addition, implementation of **MM-BIO-12** would avoid or substantially lessen indirect impacts on nesting birds due to construction to below a level of significance. With implementation of MM-BIO-12 and conformance with the MSCP Land Use Adjacency Guidelines, the project would not conflict with local policies (i.e., the MSCP) and would be less than significant with mitigation

4.4.2 Santee General Plan

The Conservation Element of the City of Santee's General Plan contains policies related to protection and preservation of sensitive biological resources (City of Santee 2003). The Conservation Element of the City of Santee's General Plan states that "all development proposals impacting biological resources should be consistent with the provisions of the City's future Multiple Species Conservation Program Subarea Plan and Implementing Agreement, and applicable State and Federal Regulations." The project is consistent with the applicable objectives and policies of the Santee General Plan Conservation Element (City of Santee 2003):

- Objective 1.0: Protect areas of unique topography or environmental significance to the greatest extent possible.
    - *Project Analysis:* The project site is an existing golf course and the proposed impacts would be primarily situated in areas currently mapped as developed or developed-golf course. Both the San Diego River south of the project and the Sycamore Canyon Creek/San Diego River (North Channel) bisecting the project site are being avoided to the greatest extent feasible (95% of these features within the project site would be avoided and 5% would be impacted by the proposed project).
- Objective 2.0: Protect floodways to reduce flood hazards, protect biological resources and preserve the aesthetic quality along water corridors.
    - *Project Analysis:* As directed by **MM-BIO-9**, runoff, sedimentation, and erosion shall be minimized through the use of BMPs such as water bars, silt fences, staked straw bales, wattles, and mulching and seeding of all disturbed areas. These measures shall be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water, and to preserve roadways and adjacent properties. Both the San Diego River south of the project and the Sycamore Canyon Creek/San Diego River (North Channel) bisecting the project site are being avoided to the greatest extent feasible (95% of these features within the project site would be avoided and 5% would be impacted by the proposed project). Hydrology modeling, as summarized in Appendix O, was conducted to evaluate potential changes in water surface elevation and flow velocity associated with the proposed project, with particular focus on small storm events and the wetland areas located both downstream and upstream of the project boundary. The project's grading and golf course layout were specifically designed and confirmed by the hydrology modeling to maintain river capacity and avoid adverse changes to the portion of Sycamore Canyon Creek and the San Diego River within the project site as well as the upstream or downstream reaches of Sycamore Canyon Creek and the San

Diego River and their associated riparian vegetation communities. Therefore, the overall function and value of these areas will be maintained after project implementation. As discussed further in Draft EIR Section 3.1, Aesthetics and Visual Resources, the renovation of the golf course and construction of the country club and hotel would not significantly affect public scenic views or resources. Impacts to public views would result in less-than-significant impacts because visibility of the project from public vantage points is generally brief, intermittent, and often screened by existing vegetation, topography, or intervening development, thereby limiting viewer exposure and sensitivity. In addition, where views are available, the project's scale, height, and design are compatible with the surrounding urbanized context and would not obstruct designated scenic vistas or conflict with applicable scenic quality policies and regulations, resulting in a minimal change to overall visual character.

- Objective 7.0: Preserve significant biological resources.
  - *Policy 7.1:* The City shall encourage the preservation and enhancement of significant biological resources in areas designated as permanent open space.
    - *Project Analysis:* The project would not impact any Existing Protected Open Space or Conservation Lands within the City of Santee.
  - *Policy 7.2:* The City shall require that all development proposals provide appropriate mitigation for identified significant biological resources including selective preservation, sensitive site planning techniques and in-kind mitigation for identified impacts.
    - *Project Analysis:* The proposed project would avoid or mitigate all impacts to less than significant through implementation of the mitigation measures outlined in Section 5. Permanent impacts on sensitive riparian and wetland vegetation communities are proposed to be mitigated through on-site restoration (i.e. creation), enhancement, and/or preservation of habitat at the mitigation ratios described in Table 5-2A.
  - *Policy 7.3:* The City shall require that, for all development proposals involving the setting aside of land for permanent open space either on-site or off-site, provisions are in place to ensure the long term management of the open space and biological resources.
    - *Project Analysis:* The proposed project shall record a conservation easement over any mitigation sites required by the mitigation measures outlined in Section 5. An RMP for long-term management shall also be prepared as described in **MM-BIO-6** and approved by the City of Santee and/or the City of San Diego, CDFW, and USFWS.
  - *Policy 7.4:* The City shall complete a Multiple Species Conservation Program Subarea plan that conserves a minimum of 2,600 acres in the City as permanent open space for preservation of habitats and species.
    - *Project Analysis:* The proposed project would not compromise future implementation of the Draft Santee MSCP Subarea Plan because the City

of Santee's MSCP Subarea Plan is not reliant on the golf course to meet its objectives for open space preservation.

- Objective 10.0: Preserve significant natural resources, such as mineral deposits, biological resources, watercourses, groundwater, hills, canyons, and major rock outcroppings, as part of a Citywide open space system.
    - *Policy 10.1:* The City should encourage the conservation of rare or unique plants and wildlife by identifying such resources through the environmental review process and by using open space preservation, where appropriate, to preserve the resources as a condition of a project approval, consistent with the City's future Multiple Species Conservation Program Subarea Plan.
        - *Project Analysis:* The project site is an existing golf course and the proposed impacts would be primarily situated in areas currently mapped as developed or developed-golf course. Both the San Diego River south of the project site and the Sycamore Canyon Creek/San Diego River (North Channel) bisecting the project site are being avoided to the greatest extent feasible (95% of these features within the project site would be avoided and 5% would be impacted by the proposed project). Furthermore, no special-status plant species would be directly impacted by project implementation and all impacts to special-status wildlife species would be avoided or reduced to less than significant. Because the project is NAP of the Draft Santee MSCP Subarea Plan, the project applicant will seek take authorization through Endangered Species Act (ESA) Section 7 or an individual Section 10 permit. The applicant will process all required permits and adhere to all relevant regulatory requirements. Impacts on listed species will utilize standard state and federal incidental take permit processes, with mitigation conducted in accordance with the permitting requirements of the applicable resource agencies (i.e., USFWS and CDFW) during the permitting process.

4.5 Cumulative Impacts

The proposed project is located within both the City of Santee and the City of San Diego. The City of San Diego MSCP Subarea Plan (City of San Diego 1997), the MSCP Plan (City of San Diego 1998), and the Draft Santee MSCP Subarea Plan (City of Santee 2025) all establish conservation goals and objectives to preserve critical biological resources at a sustainable level on a regional scale, and set mitigation standards to be applied at the project level to minimize the cumulative effects of projects in the MSCP planning area. Although the proposed project is NAP of the Draft Santee MSCP Subarea Plan, it is part of the overarching MSCP Plan (City of San Diego 1998) and partially overlaps the San Diego MSCP Subarea Plan (City of San Diego 1997). The proposed development will not change any of the uses within the portions of the site that overlap with the MHPA boundary that were established before the original MHPA boundaries were established. The golf course will continue to exist in its current state, and the project will not impact any sensitive habitats within the MHPA. The project would not compromise continued implementation of the MSCP Plan within other cities

across San Diego County or the City of Santee because their Subarea Plans do not rely on the project site for coverage of any species.

This project would develop and convert up to 0.19 acres of upland Diegan coastal sage scrub habitat within the City of San Diego but outside the MHPA (Table ~~4-1~~4-2). The City of San Diego impacts are entirely within the MSCP Plan (City of San Diego 1998). The EIR for the MSCP Plan (City of San Diego 1998) addressed cumulative impacts. Impacts within the City of San Diego may rely on the MSCP to determine that the project's impacts are not cumulatively considerable. The impacts within the City of San Diego would be mitigated following the requirements of the MSCP City of San Diego Subarea Plan (City of San Diego 1997); therefore, cumulative impacts from impacts within the City of San Diego would be less than significant with mitigation.

Unmitigated permanent impacts to sensitive vegetation communities (Table 4-3), jurisdictional aquatic resources (Tables 4-4 through 4-6), special-status species, and wildlife corridors and nursery sites within the City of Santee would be a cumulatively considerable impact prior to implementation of the project's proposed mitigation measures. However, this project would be consistent with the applicable policies of the City of Santee General Plan (refer to Section 4.5.2), and the draft Santee MSCP Subarea Plan (City of Santee 2025) in the following ways to reduce potential cumulative impacts:

- Although the project is NAP of draft Santee MSCP subarea plan, this project will conform to the Preserve Land Use Adjacency Guidelines developed in the draft plan to ensure that there are no conflicts with establishment of the subarea plan, no conflicts with local policies (i.e. the MSCP), and the project would not result in potentially significant impacts to the MSCP Preserve System. Refer to Section 4.5.1 for details.
- The project would provide compensatory habitat-based mitigation and jurisdictional aquatic resources shall be mitigated and permitted by the aquatic resource agencies (i.e. USACE, RWQCB, and CDFW).
- Because the proposed project is NAP of the draft Santee MSCP Subarea Plan, it is therefore not afforded take authorizations for listed species, and as such, the project will seek take authorization through Endangered Species Act (ESA) Section 7 or an individual Section 10 permit and will process all required permits and adhere to all relevant regulatory requirements. Therefore, project-related impacts on listed species will be required to follow the standard state and federal incidental take permit processes, and comply with related mitigation measures, therefore cumulative impacts to species are not anticipated.
- The proposed development was designed to be clustered near existing residential development, and the golf course would remain as a buffer in many areas between development and open space. Golf is generally considered a low-intensity activity typically involving quiet, dispersed human presence with minimal disruption to wildlife.
- Proposed development would be situated to avoid impacting primary movement corridors within undeveloped preserve areas of the MHPA and the golf course would remain as a buffer in many areas between development and open space. Golf is generally considered a low-intensity activity typically involving quiet, dispersed human presence with minimal disruption to wildlife. The MSCP Plan (City of San Diego 1998) and the City of Santee Subarea Plan (2025) identify a biological core area or wildlife movement corridor along the San Diego River between Mission Trails, through Santee, east toward the community of Lakeside as shown on Figure 13. The

project would have no direct impacts to the primary wildlife movement corridor (i.e., the San Diego River [South Channel] riparian corridor).

Project-specific mitigation measures to reduce significant impacts on sensitive biological resources, consistency with the Santee General Plan, and the Draft Santee MSCP Subarea Plan (City of Santee 2025) to the extent feasible would reduce the project's cumulative impact within the City of Santee to less than significant.

Chapter 5
Avoidance and Mitigation Measures

5.1 Mitigation Element

This section identifies avoidance, minimization, and compensatory mitigation measures for the proposed project's direct, indirect, and cumulative impacts on sensitive vegetation communities, jurisdictional waters and wetlands, and special-status plant and animal species within the BSA. This section also identifies measures that will be incorporated into the project to avoid impacts or reduce impacts on biological resources~~. However, complete avoidance of all sensitive biological resources is not feasible.~~ to less than significant. As a result, this section identifies compensatory mitigation measures ~~for impacts that cannot feasibly be avoided~~that include the required amount of habitat restoration, creation, or enhancement to reduce impacts to less than significant.

5.1.1 Riparian Habitat and Other Sensitive Natural Communities

Proposed habitat mitigation ratios and corresponding acreages for permanent impacts on sensitive upland vegetation communities are presented in Table 5-1 and permanent impacts on wetland and riparian vegetation and other aquatic resources are presented in Table 5-~~2. Mitigation ratios are based on the City of San Diego Biological Guidelines and the 2018 Wildlife Agency draft Santee MSCP Subarea Plan~~2A and Table 5-2B. Proposed habitat mitigation ratios and corresponding required mitigation acreages for temporary impacts on sensitive vegetation communities ~~(San Diego River (North Channel) and Golf Course Emergency Access Road Area)~~ are presented in Tables 5-3 and 5-4.

For impacts within the City of San Diego, mitigation ratios listed in Tables 5-1 and 5-3 below are based on the City of San Diego Biological Guidelines. For impacts within the City of Santee the mitigation ratios in Tables below are based on the standard regulatory agency ratios. However, the ultimate decision on the manner in which the mitigation ratio will be met will be made by the applicable regulatory agencies (i.e., USACE, CDFW, and RWQCB during the permitting process) pursuant to the regulatory agencies' requirements and regulations together with any permit/agreement conditions and mitigation measures imposed by the permitting agencies through the consultation process.

Table 5-1. Proposed Mitigation for Permanent Impacts on Sensitive Upland Vegetation Communities

Jurisdiction	Vegetation Community/ Land Cover Type	Total Impact (acres)[1]	Mitigation Ratio	Total Mitigation Required (acres)
City of San Diego	Diegan Coastal Sage Scrub – disturbed† Permanent On-Site Impact	0.08	1:1	0.08
	Diegan Coastal Sage Scrub – disturbed† Permanent Off-Site Impact	0.11	1:1	0.11
	City of San Diego Subtotal	**0.19**	**N/A**	**0.19**
City of Santee	Diegan Coastal Sage Scrub – disturbed Permanent Impact	0.41	1:1	0.41
	~~Non-Native Grassland~~ Permanent ~~Impact~~	~~0.01~~	~~1:1~~	~~0.01~~
	City of Santee Subtotal	**0.~~42~~41**	**N/A**	**0.~~42~~41**
	Project Totals	**0.~~61~~50**	**N/A**	**0.~~61~~50**

Notes: N/A = not applicable.
[1]If the coastal sage scrub habitat is determined to be occupied by coastal California gnatcatcher the project will ensure consistency with the Section 7 or Section 10 permitting process through implementation of MM-BIO-18.
†=MSCP Tier II; impacts outside MHPA, mitigation within MHPA through City of San Diego Habitat Acquisition Fund.

Table 5-2 A. Proposed Mitigation for Permanent Impacts on Wetland/~~ and~~ Riparian Vegetation Communities

Jurisdiction	Vegetation Community/ Land Cover Type	Total Permanent Impact (acres)	Mitigation Ratio	Total Mitigation Required (acres)
City of Santee~~‡~~	Coastal and Valley Freshwater Marsh	0.55	1:1	0.55
	Disturbed Wetland	~~0.12~~0.29	~~2:1~~1:1	0.~~24~~29
	Fresh Water	0.02	1:1	0.02
	Mule Fat Scrub – disturbed	0.29~~0.34~~	2:1~~3:1~~	0.59~~1.02~~
	S~~.~~outhern Cottonwood-Willow Riparian Forest	1.19~~0.50~~	~~3:1~~3:1	3.58~~1.50~~
	Southern Cottonwood-Willow Riparian Forest – disturbed	0.34~~0.30~~	~~3:1~~3:1	~~0.90~~1.03
	Southern Willow Scrub	0.17	3:1	0.50
	Project Totals	**2.86~~1.30~~**	**~~N/A~~N/A**	**~~3.74~~6.56**

Notes: Totals may not sum due to rounding. N/A = not applicable.
[1]. The mitigation ratios provided are based on the standard aquatic resource regulatory agency (i.e. USACE, RWQCB, and CDFW) ratios; however, the manner in which the mitigation ratio will be met will be determined during the permitting process pursuant to the aquatic resource regulatory agencies' requirements and with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e. USFWS and CDFW) through the consultation process.
[2]. Mitigation to be accomplished through a combination of on-site restoration (i.e. creation), enhancement, and/or preservation of habitat as determined during the permitting process.~~‡ = No impacts on wetland or riparian habitat within City of San Diego~~

Table 5-2B. Proposed Mitigation for Permanent Impacts to Vegetation Communities/Land Cover Types Occurring within Jurisdictional Aquatic Resources

Jurisdiction	Vegetation Community/ Aquatic Resource Feature	Permanent Impact (acres)	Mitigation Ratio[1]	Mitigation Required (acres)[2]
City of Santee	Developed-Golf Course (NWW 6, WW 3, WW 4)	0.03	0.5:1	0.02
	Developed – Culvert (NWW 5)	<0.01	N/A	N/A
	Disturbed Habitat (NWW 6)	<0.01	0.5:1	<0.01
	Eucalyptus Woodland (NWW 6)	0.01	0.5:1	<0.01
	Non-Native Grassland (NWW 1)	0.13	0.5:1	0.07
	Non-Native Woodland (NWW 2, NWW 3, NWW 6, RIP 1)	0.73	0.5:1	0.37
	Developed – Spillway (NWW 1)	0.03	N/A	N/A
	Project Totals	**0.94**	**N/A**	**0.45**

Notes: Totals may not sum due to rounding. N/A = not applicable.
[1] The mitigation ratios provided are based on the standard aquatic resource regulatory agency (i.e. USACE, RWQCB, and CDFW) ratios; however, the manner in which the mitigation ratio will be met will be determined during the permitting process pursuant to the aquatic resource regulatory agencies' requirements and with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e. USFWS and CDFW) through the consultation process. Ratios for the developed – culvert and developed – spillway are not provided as these two features would be replaced at their current location by the proposed project.
[2] Mitigation to be accomplished through on-site enhancement of mulefat scrub as determined during the permitting process.

Temporary impacts along San Diego River (North Channel) would occur as a result of dewatering the golf course pond within the mainstem of Sycamore Canyon Creek ~~during construction of the bridge~~ and are presented in Table 5-3. All 1:1 mitigation will occur in situ through ~~the re-establishment of preexisting channel bottom and removal of the dewatering weirs to allow for the~~ passive ~~re-establishment~~recovery of the open water, riparian and marsh habitat~~.~~ after removal of the dewatering weirs and pond rehydration. Temporary impacts within the ~~Golf Course Emergency Access Road Area~~Temporary Railcar Crossing and the spillway repair, and mitigation ratios and corresponding acreages for temporary impacts on vegetation communities are presented in Table 5-4.

Table 5-3. ~~Proposed Mitigation~~Passive Restoration for Temporary Dewatering Impacts Along San Diego River (North Channel) Impoundment

Jurisdiction	Vegetation Community/ Land Cover Type	Total Temporary Impact (acres)	~~Mitigation~~ Ratio‡	Total ~~Mitigation~~Restoration Required (acres)
City of San Diego	Coastal and Valley Freshwater Marsh	≤0.01	1:1	≤0.01 in situ
	Southern Cottonwood-Willow Riparian Forest	0.01	1:1	0.01 in situ
	City of San Diego Subtotal	**0.02**	**N/A**	**0.02 in situ**
City of Santee‡	Coastal and Valley Freshwater Marsh	0.~~56~~47	1:1‡	0.~~56~~47 in situ
	Fresh Water (Open Water)	2.~~43~~36	1:1	2.~~43~~36 in situ
	Non-Native Riparian	0.05	1:1	0.05 in situ
	Southern Cottonwood-Willow Riparian Forest	0.~~01~~11	~~2~~1:1	0.~~01~~11 in situ~~+ 0.01 enhancement~~
	City of Santee Subtotal	**2.98**	**N/A**	**2.98 in situ**
	Project Totals~~‡~~	**3.~~05~~00**	**N/A**	**3.~~05~~00 in situ~~+ 0.01 enhancement~~**

~~‡ = No impacts on wetland or riparian habitat within City of San Diego~~

Notes: ‡ = 1:1 mitigation for temporary impacts through re-watering of dewatered habitat at original location. N/A = not applicable.

Table 5-4. Proposed ~~Mitigation~~Restoration for Temporary Impacts within ~~Golf Course Emergency Access Road~~the Temporary Railcar Crossing and Spillway Repair Area

Jurisdiction	Vegetation Community/ Land Cover Type	Total Temporary Impact (acres)	Mitigation Ratio‡	Total Mitigation Required (acres)
City of Santee‡	~~Mule Fat Scrub-disturbed~~Coastal and Valley Freshwater Marsh	0.~~02~~07	~~2~~1:1	0.~~02~~07 in situ ~~+ 0.02 enhancement~~
	Fresh Water	0.05	1:1	0.05 in situ
	Southern Cottonwood-Willow Riparian Forest~~-disturbed~~	≤0.~~06~~01	~~3~~1:1	0.~~06~~01 in situ ~~+ 0.12 enhancement~~
	Project Totals~~‡~~	**0.~~08~~13**	**N/A**	**0.~~08~~13 in situ ~~+ 0.14 enhancement~~**

Notes: ‡ = 1:1 mitigation for temporary impacts at original location. N/A = not applicable.

MM-BIO-1 through **MM-BIO-10** have been identified to avoid impacts on sensitive vegetation communities to the extent feasible and to compensate for sensitive vegetation community impacts that ~~cannot feasibly be avoided.~~are unavoidable. Implementation of the restoration and preservation of habitat within the City of San Diego will be implemented consistent with the San Diego Subarea Plan ~~mitigation ratios would reduce the significance of impacts on sensitive vegetation within City of San Diego (Impact BIO-1) to below a level of significance. Implementation of restoration~~ and ~~preservation of habitat would~~within the City of Santee, consistent with the applicable regulatory agencies' requirements and regulations together with any permit/agreement conditions and mitigation measures imposed by the permitting agencies, to reduce the significance of impacts on sensitive vegetation ~~(Impact BIO-2 and Impact BIO-3) to below a level of significance~~to less than significant.

~~Impact BIO-1 is proposed to be mitigated through the City of San Diego's Habitat Acquisition Fund, for the 0.08 acres of impacts. This would be appropriate because of the small size of the habitat patch, the low quality and isolation, and lack of occupancy by sensitive species, as discussed in Section 4.2.1.1.~~

~~——~~**MM-BIO-1. ~~Mitigate~~ Permanent Impacts within City of San Diego on Sensitive Upland Vegetation Communities** ~~(see MM-BIO-2 for complementary~~. Within the City of ~~Santee measure). Direct~~San Diego, direct permanent impacts to ~~0.08 acre~~ disturbed Diegan coastal sage scrub (outside of Multi-Habitat Planning Area~~) and direct, temporary off-site impacts to 0.11 acre disturbed Diegan coastal sage scrub (outside of~~ [MHPA~~), 0.19 acre total~~]) within the City of San Diego, shall be mitigated at a 1:1 ratio in accordance with the Upland Mitigation Ratios in the City of San Diego Biological Guidelines (as specified in Table 3 of ~~the Biological Guidelines).~~ City of San Diego 2018) as summarized in Table 5-1, Proposed Mitigation for Permanent Impacts on Sensitive Upland Vegetation Communities.

Prior to ~~any~~ the issuance of any grading permit or ground disturbance ~~activities or issuance of grading permits by the City of San Diego, the~~activity impacting sensitive upland vegetation communities, the applicant shall ensure that:

- A qualified biologist shall perform relevant preconstruction surveys as required by MM-BIO-13 through MM-BIO-18.
- Sensitive upland vegetation communities shall be mitigated through either Option 1 or Option 2 as described below.

  Option 1: The applicant shall provide a contribution into the City of San Diego Habitat Acquisition Fund (HAF). The HAF fee calculated shall be based on the current market rate amount per acre set by Real Estate Assets Department (READ) each year at the trigger time. -Per the City of San Diego Municipal Code, an additional 10% administration fee is required to paid for HAF City staff administration and maintenance costs. The 10% fee is calculated and applied after the mitigation HAF amount is determined based upon the required mitigation acreage/ratio. Documentation of this contribution shall be provided to the City of San Diego by the applicant prior to the issuance of any ~~construction permit~~grading permit or ground disturbance activity impacting sensitive upland vegetation communities.

  Option 2: If habitat credit cannot be purchased at the HAF, then the applicant shall provide for the on-site creation, preservation, or restoration of Diegan coastal sage scrub at a 1:1 ratio that complies with the mitigation strategy outlined in Appendix

K, Proposed On-Site Mitigation Overview. Prior to issuance of the permit for any ground disturbance activities impacting sensitive upland vegetation communities the following shall occur:

a. **Conservation easement.** A conservation easement shall be recorded on site at a location approved by the City of San Diego for the on-site creation, preservation, or restoration of Diegan coastal sage scrub at a 1:1 ratio. The Conservation Easement shall be owned by a conservancy or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary.

b. **Upland Restoration Plan**. An Upland Restoration Plan shall be approved by the City of San Diego. The Upland Restoration Plan shall include the following:

1. Monitoring of the restoration areas shall occur for a minimum of 5 years, or until the 5th year performance/success criteria are met, to determine the successful completion of the 5-year mitigation and monitoring program.
2. The performance standards and success criteria to determine the successful completion of the 5-year mitigation and monitoring program. The criteria must be approved by the City of San Diego, and shall include requirements for 100% survival of native shrub container stock plantings at the first annual monitoring (or sufficient number of shrubs emerging from seed to replace the container stock), as well as Year 5 standards of native vegetation cover of at least 90% of that of a nearby Diegan coastal sage scrub reference site. Methods used to measure these performance standards shall be described, and if the restored areas fail to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed and implemented, and the monitoring and maintenance period shall be extended until all Year 5 standards are met or as otherwise provided in this document. The Upland Restoration Plan must be approved City of Santee prior to implementation.
3. The City of San Diego's *General Outline for Conceptual Revegetation/Restoration Plans* shall be used for guidance.
4. The Upland Restoration Plan shall detail the installation, maintenance, and monitoring that would occur as part of the restoration effort.
5. The Upland Restoration Plan shall include an evaluation of restoration suitability specific to proposed vegetation types, soil preparation, plant palettes, irrigation, erosion control, maintenance and monitoring program, and success criteria.

c. **Resource Management Plan (RMP)**. An RMP shall be prepared as described in MM-BIO-~~**2. Mitigate**~~6 and approved by the City of San Diego and CDFW. The RMP shall establish long-term monitoring, maintenance, management, and reporting directives and provide for long-term management funding through a non-wasting endowment (or equivalent acceptable funding mechanism) in an amount determined through the preparation of a Property Assessment Record or similar method. The RMP cannot be approved by the City of San Diego or CDFW until the following items have been completed: a qualified Resource

Manager has been selected and approved by the City of San Diego and CDFW, and the RMP funding mechanism has been established.

d. **Bonding**. The applicant shall secure performance bonds (if Option 2 is selected) for the restoration work under the plan, to secure the issuance of grading permits by the City of San Diego that would be released after the City of San Diego approves the final success of the restoration site.

MM-BIO-2. Permanent Impacts within City of Santee on Sensitive Upland Vegetation Communities. ~~Direct~~Within the City of Santee, direct permanent impacts to disturbed Diegan coastal sage scrub ~~and non-native grassland within the City of Santee shall~~ shall be mitigated at a 1:1 ratio as summarized in Table 5-1, Proposed Mitigation for Permanent Impacts on Sensitive Upland Vegetation Communities. Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities (i.e. disturbed Diegan coastal sage scrub) within the City of Santee, the applicant shall ensure that:

1) A qualified biologist shall perform relevant preconstruction surveys as required by MM-BIO-13 through MM-BIO-18.

2) Sensitive upland vegetation communities shall be mitigated through either Option 1, Option 2, or Option 3, as described below.

Option 1. On-Site Restoration. If on-site restoration is proposed, the applicant shall provide for the on-site restoration of land that meets the criteria for sensitive upland vegetation based on the ratios described in Table 5-1 and as outlined in mitigation strategy in Appendix K, Proposed On-Site Mitigation Overview. Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities (disturbed Diegan coastal sage scrub) within the City of Santee the applicant shall provide the following:

a. **Recordation of conservation easement.** A conservation easement shall be recorded over the site to be restored. The conservation easement shall be owned by a conservancy or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary.

b. **Upland Restoration Plan approved.** An Upland Restoration Plan shall be approved by the City of Santee. The Upland Restoration Plan shall include the following:

- Monitoring of the restoration areas shall be required for a minimum of 5 years, or until the 5th year performance/success criteria are met, to determine the successful completion of the 5-year mitigation and monitoring program.
- The performance standards and success criteria to determine the successful completion of the 5-year mitigation and monitoring program. The criteria shall include requirements for 100% survival of native shrub container stock plantings at the first annual monitoring (or sufficient number of shrubs emerging from seed to replace the container stock), as well as Year 5 standards of native vegetation cover of at least 90% of a nearby Diegan coastal sage scrub reference site. Methods used to measure these performance standards shall be described, and if the

restored area fails to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed and implemented, and the monitoring and maintenance period shall be extended until all final performance standards are met or as otherwise provided in this document. In the absence of any restoration plan guidance from the City of Santee, the City of San Diego's *General Outline for Conceptual Revegetation/Restoration Plans* shall be used for guidance.

- The Upland Restoration Plan shall detail the installation, maintenance, and monitoring that would occur as part of the restoration effort.
- The Upland Restoration Plan shall include an evaluation of restoration suitability specific to proposed vegetation types, soil preparation, plant palettes, irrigation, erosion control, maintenance and monitoring program, and performance standards.

c. **Resource Management Plan approved.** An RMP shall also be prepared as described in MM-BIO-6 and approved by the City of Santee and CDFW. The specifics regarding long-term management and management funding shall be included in the RMP that establishes long-term monitoring, management, and reporting directives. The RMP cannot be approved by the City of Santee or CDFW until the following items have been completed: a qualified Resource Manager has been selected and approved by the City of Santee and CDFW, and the RMP funding mechanism has been established.

d. **Bonding**. The applicant shall secure performance bonds (if Option 1 is selected) for the restoration work under the plan, to secure the issuance of grading permits by the City of Santee that would be released after the City of Santee approves the final success of the restoration site.

Option 2. Off-Site Preservation. ~~the purchase of mitigation bank credits of Diegan coastal sage scrub (Option 1) or through~~ Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive upland vegetation communities (disturbed Diegan coastal sage scrub) within the City of Santee the applicant shall provide for the off-site preservation ~~or on-site creation and preservation of Diegan coastal sage scrub (Option 2).~~ of land that meets the criteria for sensitive upland vegetation based on the ratios described in Table 5-1 above by providing the following:

a. **Recordation of Conservation Easement**. The recordation of a conservation easement for the off-site preservation of land, at a location approved by the City of Santee and the Wildlife Agencies and must be within one of the following areas: (1) preserve areas in the City of Santee, (2) City of San Diego Multi-Habitat Planning Area, or (3) County of San Diego Pre-Approved Mitigation Areas. The Conservation Easement shall be owned by a conservancy, or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary.

b. **Approval of a Resource Management Plan (RMP).** An RMP shall also be prepared as described in MM-BIO-6. The RMP shall establish long-term monitoring, maintenance, management, and reporting directives and provide for long-term management funding through a non-wasting endowment in an amount determined through the preparation of a Property Assessment Record or similar method. The RMP cannot be approved by the City of Santee or CDFW until the following items have been completed: a qualified Resource Manager has been selected and approved by the City of Santee and CDFW, and the RMP funding mechanism has been established.

Option ~~1~~3. The purchase of mitigation credits shall occur at a mitigation bank approved by the California Department of Fish and Wildlife (CDFW) in the local area or other location deemed acceptable by CDFW. The applicant shall provide evidence of purchase of credits to the City of Santee prior to issuance of ~~grading permits.~~any grading permit or ground disturbance activity impacting disturbed Diegan coastal sage scrub. Evidence of purchase shall consist of the following items:

~~A.~~a. A copy of the purchase contract referencing the project name and numbers for which the habitat credits were purchased.

~~B.~~b. If not stated explicitly in the purchase contract, a separate letter must be provided identifying the entity responsible for the long-term management and monitoring of the preserved land.

~~C.~~c. To ensure the land will be protected in perpetuity, evidence must be provided that a dedicated conservation easement or similar land constraint has been placed over the mitigation land.

~~D.~~d. An accounting of the status of the mitigation bank. This shall include the total amount of credits available at the bank, the amount required by this project, and the amount remaining after use by this project.

~~**Option 2**. If habitat credit cannot be purchased in a mitigation bank, then the applicant shall provide for the off-site preservation or on-site creation and preservation of Diegan coastal sage scrub habitat at a 1:1 ratio, as described below, prior to issuance of grading permits by the City of Santee.~~

~~A.~~a. ~~Off-Site Preservation.~~ ~~The applicant shall provide for the off-site preservation of land that meets criteria for sensitive upland vegetation community mitigation through the recordation of a conservation easement at a location approved by the City of Santee and the Wildlife Agencies (U.S. Fish and Wildlife Service and CDFW) that shall be managed in perpetuity under a Resource Management Plan (RMP) that establishes long-term monitoring, maintenance, management, and reporting directives. The RMP shall be prepared as described in MM-BIO-6. Off-site mitigation shall occur within one of the following areas: (1) preserve areas in the City of~~

Santee, (2) City of San Diego Multi-Habitat Planning Area, or (3) County of San Diego Pre-Approved Mitigation Areas. The off-site land being preserved must be at a location approved by the City of Santee and the Wildlife Agencies. Long-term management shall be funded through a non-wasting endowment in an amount determined through preparation of a Property Assessment Record or similar method for determining funding amount. The Conservation Easement shall be owned by a conservancy, or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary.

B.a.ii. **On-Site Restoration and Preservation.** Diegan coastal sage scrub shall be restored and preserved on site at a 1:1 ratio through the recordation of a conservation easement at a location approved by the City of Santee, granted to an entity approved by the City of Santee, and restored pursuant to an Upland Restoration Plan described below. The Conservation Easement shall be owned by a conservancy or other similar, experienced entity subject to approval by CDFW and CDFW shall be listed as a third-party beneficiary. The Upland Restoration Plan shall include the following:

1. Monitoring of the restoration areas shall occur for a minimum of 5 years, or until the 5th year performance/success criteria are met, to determine the successful completion of the 5-year mitigation and monitoring program. The performance standards and success criteria must be approved by the City of Santee and CDFW, and shall include requirements for 100% survival of native shrub container stock plantings at the first annual monitoring (or sufficient number of shrubs emerging from seed to replace the container stock), as well as Year 5 standards of native vegetation cover of at least 90% of that of a nearby Diegan coastal sage scrub reference site. Methods used to measure these performance standards shall be described, and if the restored areas fail to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed and implemented, and the monitoring and maintenance period shall be extended until all Year 5 standards are met or as otherwise provided in this document. The Upland Restoration Plan must be approved City of Santee and CDFW prior to implementation.

    2.1. In the absence of any restoration plan guidance from the City of Santee, the City of San Diego's *General Outline for Conceptual Revegetation/Restoration Plans* shall be used for guidance.

    3.1. The Upland Restoration Plan shall detail the installation, maintenance, and monitoring that would occur as part of the restoration effort.

    4.1. The Upland Restoration Plan shall include an evaluation of restoration suitability specific to proposed vegetation types, soil preparation, plant palettes, irrigation, erosion control, maintenance and monitoring program, and success criteria.

MM-BIO-3. ~~Mitigate~~ Permanent Impacts and ~~Certain~~ Temporary Impacts within City of Santee on Sensitive Riparian and Wetland Vegetation Communities. ~~The applicant shall also secure performance bonds prior to issuance of grading permits by the City of Santee that would be released after the City of Santee approves the final success of the restoration site. The specifics regarding long-term management and management funding shall be included in the RMP that establishes long-term monitoring, maintenance, management, and reporting directives. The RMP shall be prepared as described in MM-BIO-6. The final RMP cannot be approved by the City of Santee or CDFW until the following items have been completed: easements shall be dedicated, a qualified Resource Manager approved by the City of Santee shall be selected, and the RMP funding mechanism shall be in place.~~Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive riparian and wetland vegetation communities within the City of Santee, mitigation shall occur in accordance with the following: (1) The applicant shall obtain a permit or authorizations as directed by MM-BIO-11 from the applicable regulatory agencies (e.g., U.S. Army Corps of Engineers [USACE], California Department of Fish and Wildlife [CDFW], and Regional Water Quality Control Board [RWQCB]) pursuant to the regulatory agencies' requirements and regulations together with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e. USFWS and CDFW) through the consultation process; and (2) provide evidence of these permits or authorizations, including all required conditions therein, or confirm that no such permits or authorizations are required, to the City of Santee; and (3) mitigate for permanent and temporary impacts in accordance with the mitigation ratios presented in Tables 5-2A, 5-2B, and 5-4.

a. For permanent impacts on sensitive riparian and wetland vegetation communities ~~shall~~and other aquatic resources, mitigation will be ~~mitigated~~accomplished through on-site restoration~~,~~ (i.e. creation), enhancement, and ~~preservation of habitat. The impacts to~~ /or preservation of habitat at the mitigation ratios described in Table 5-2A and Table 5-2B and as outlined in mitigation strategy in Appendix K, Proposed On-Site Mitigation Overview. If the mitigation for permanent impacts cannot be fully achieved on-site then the creation of the remaining acreage shall be met at an off-site location preferably within the Draft Santee MSCP Subarea Plan Area to be preserved in perpetuity through a dedicated conservation easement. If there are no off-site locations available within the Draft Santee MSCP Subarea Plan Area, then the site can be located outside of the Draft Santee MSCP Subarea Plan but preferably within the San Diego River to ensure mitigation occurs within the same watershed as the impact area.

b. All temporary impacts related to the placement of the Temporary Railcar Crossing and spillway repair area shall be restored in-place to pre-project conditions. The temporary impacts to sensitive riparian and wetland vegetation shall be mitigated at mitigation ratios described ~~below:~~in Table 5-4.

- ~~Direct~~For both permanent ~~impacts to disturbed wetland shall be mitigated at a 2:1 ratio through preservation of enhanced or restored native wetland habitat.~~
- ~~Direct permanent impacts to mule fat disturbed shall be mitigated at a 3:1 ratio through preservation of enhanced or restored riparian scrub habitat (mule fat~~ and~~/or willow scrub).~~
- ~~Direct permanent impacts to southern cottonwood willow riparian forest and southern cottonwood willow riparian forest disturbed shall be mitigated at a 3:1 ratio through preservation of enhanced or restored riparian forest habitat.~~

- ~~Direct~~ temporary impacts ~~to non-native riparian shall be mitigated at a 1:1 ratio through preservation of enhanced or restored riparian or wetland habitat.~~
- ~~Direct temporary impacts to southern cottonwood-willow riparian forest (including disturbed) shall be mitigated at a 3:1 ratio through in-situ re-establishment of riparian forest and preservation of enhanced or restored riparian forest.~~
- ~~Direct temporary impacts to mule fat scrub shall be mitigated at a 2:1 ratio through in-situ re-establishment of mule fat scrub and enhancement of riparian scrub habitat.~~

c. ~~The monitoring and restoration requirements for these sensitive riparian and wetland vegetation communities shall be identified in,~~ a Habitat Mitigation and Monitoring Plan (refer to MM-BIO-5) and Resource Management Plan (MM-BIO-6~~).~~) that include monitoring and restoration requirements for these sensitive riparian and wetland vegetation communities and aquatic resources shall also be prepared. The Habitat Mitigation and Monitoring Plan and the Resource Management Plan shall be approved by the appropriate resource agencies (U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife).

MM-BIO-4. Restoration of Temporary Dewatering Impacts within City of Santee and City of San Diego on Sensitive Riparian and Wetland Vegetation Communities. Prior to the issuance of any grading permit or ground disturbance activity the applicant shall obtain a permit or authorizations as directed by MM-BIO-11 from the applicable regulatory agencies (i.e., U.S. Army Corps of Engineers [USACE], Regional Water Quality Control Board, and California Department of Fish and Wildlife [CDFW]) pursuant to the regulatory agencies' requirements and regulations together with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e. USFWS and CDFW) through the consultation process; and provide evidence of these permits or authorizations, including all required conditions therein, or confirm that no such permits or authorizations are required, to the City of Santee. Riparian and wetland vegetation communities within the San Diego River (North Channel) impoundment would be temporarily impacted during dewatering activities during construction. Direct temporary impacts to coastal valley freshwater marsh, fresh water, southern cottonwood-willow riparian forest, and non-native riparian vegetation shall be replaced in accordance with the mitigation ratios provided in Table 5-3 through passive in-situ replacement of habitat to pre-dewatering conditions upon completion of the dewatering activities. The impacted areas shall be restored in place and monitored in accordance with the Habitat Mitigation and Monitoring Plan (refer to MM-BIO-5) until success criteria are achieved to ensure these areas fully recover to pre-dewatering conditions.

MM-BIO-5. Habitat Mitigation and Monitoring Plan (HMMP). Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive riparian and wetland vegetation communities as described in MM-BIO-3 and MM-BIO-4, a final HMMP must be approved by the resource agencies as relevant (U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife), ~~and the Resource Management Plan must be approved by the Wildlife Agencies (U.S. Fish and Wildlife Service and California Department of Fish and Wildlife) prior to issuance of grading permits by the City of Santee.~~City of San Diego, and the City of Santee. The HMMP shall comply with the following criteria and standards:

~~**MM-BIO-4. Mitigate Temporary Dewatering Impacts within City of Santee on Sensitive Riparian and Wetland Vegetation Communities.** Riparian and wetland vegetation communities~~

~~within Santee are considered sensitive by the California Department of Fish and Wildlife. Direct temporary impacts to coastal valley freshwater marsh, fresh water, and non-native riparian vegetation shall be mitigated through passive in-situ restoration of habitat to pre-dewatering conditions. The impacts shall be mitigated through implementation of the Habitat Mitigation and Monitoring Plan (refer to MM-BIO-5).~~

~~MM-BIO-5. Habitat Mitigation and Monitoring Plan (HMMP).~~ ~~To implement the restoration and enhancement of sensitive riparian and wetland vegetation communities as mitigation for loss of, or temporary impact to, those communities within the project site, as described in MM-BIO-3 and MM-BIO-4, a final HMMP must be approved by the resource agencies (U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife) and the City of Santee prior to issuance of grading permits by the City of Santee. The HMMP shall do the following:~~

- ~~The draft HMMP shall be used as a basis for the final HMMP.~~ The draft HMMP shall include details for the installation, maintenance, and monitoring ~~that would occur after approval of the HMMP.~~ Annual performance standards for native and non-native vegetation cover designed to assess progress toward final mitigation goals (e.g. by the end of Year 5, the establishment area is expected to achieve at least 75% absolute native vegetation cover, non-native plant cover should not exceed 10%, with perennial invasive species maintained at 0%) and long-term site protection and management.
- Monitoring shall include monitoring of the restoration/enhancement areas for a minimum of 5 years or until 5th year performance~~/success criteria~~ standards are met. The HMMP shall include performance standards to determine the successful completion of the 5-year mitigation and monitoring program. Attainment of these standards shall indicate the restoration area is progressing toward the habitat functions and services specified in the HMMP. Methods used to measure these performance standards shall be described, and if the ~~restored~~mitigation area fails to meet the Year 5 standards after the full monitoring term, a specific set of remedial measures shall be developed and implemented, and the monitoring and maintenance period shall be extended until all ~~Year 5~~final performance standards are met or as otherwise provided in the HMMP.
- The HMMP shall include performance bonds that would be released after the City of Santee approves the final success of the restoration site.

MM-BIO-6. Resource Management Plan (RMP). ~~To~~Prior to the issuance of any grading permit or ground disturbance activity impacting sensitive riparian and wetland vegetation communities, an RMP to provide for the long-term management of the mitigation sites (on-site wetland mitigation sites and potential Diegan coastal sage ~~preservation~~scrub sites~~), an RMP~~) shall be prepared by a qualified biologist to address long-term monitoring, maintenance, management, and reporting directives, in perpetuity. The qualified biologist shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of field experience. The RMP shall be approved by the City of Santee and/or City of San Diego, and Wildlife Agencies (U.S. Fish and Wildlife Service [USFWS] and California Department of Fish and Wildlife [CDFW~~]) and implemented prior to any ground disturbance activities or issuance of grading permits by the City of Santee.~~]). The RMP shall include the following:

- ~~Delineation~~The delineation of the limits of where the conservation easement will be recorded.
- Selection of a qualified ~~Preserve~~Resource Manager approved by the City of Santee ~~and Wildlife Agencies~~, and/or City of San Diego, and CDFW, as applicable.

- ~~Requirements of~~ Establishment of requirements for long-term monitoring~~, maintenance,~~ and management~~, and~~ actions, including reporting directives, in perpetuity, approved by the City of Santee and ~~Wildlife Agencies~~/or City of San Diego, and Resource Agencies (i.e. USFWS, U.S. Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB[, and California Department of Fish and Wildlife [CDFW]), as applicable, that will be managed by the ~~Preserve~~Resource Manager.
- ~~Monitoring requirements for the mitigation area for a minimum of 5 years or until fifth-year performance/success criteria are met.~~
- ~~Draft performance standards to determine the successful completion of the 5-year mitigation and monitoring program. Attainment of these standards shall indicate that the restoration area is progressing toward the habitat functions and services specified in the RMP. Methods used to measure these performance standards shall be described, and, if the restored area fail to meet the Year 5 standards after the full monitoring term, then a specific set of remedial measures shall be developed and implemented, and the monitoring and maintenance period shall be extended until all Year 5 standards are met, or as otherwise provided in the RMP.~~
- Preparation of a Property Analysis Record (prepared for endowment funding) or similar cost estimation to determine the size of a non-wasting endowment necessary to fund the annual costs for basic stewardship of the ~~preserve~~mitigation sites.
- Establishment of an endowment (or equivalent acceptable funding mechanism) for purposes of long-term monitoring and management actions including reporting directives, in perpetuity based on a Property Analysis Record or similar cost estimation. The funding mechanism shall approved by the applicable city agencies (City of Santee and/or City of San Diego) and Resource Agencies (i.e. USACE, RWQCB, CDFW, and USFWS).
- Identification of ~~what~~the entity that would hold the endowment (or be responsible for the equivalent acceptable funding mechanism).

~~The final RMP document must include the additional following items:~~

- Evidence of purchase of the mitigation land to be managed, if applicable.
- Evidence that a conservation easement has been dedicated to ~~CDFW, or other~~an entity approved by CDFW, to ensure that the land is protected in perpetuity.
- Acknowledgment that the ~~resource manager~~Resource Manager accepts ~~the~~ responsibility for the management of the site.
- ~~Establishment of an endowment or equivalent acceptable funding mechanism.~~
- Acknowledgment that the ~~City of Santee~~applicable city agency has approved the entity that will be responsible for holding the endowment.

MM-BIO-7. Qualified Biologist to Provide Construction Monitoring. ~~A qualified biologist shall be responsible for overseeing compliance with all laws, regulations, permit conditions, mitigation measures, and any other biological resources requirements during project construction. Prior to the start of construction~~Prior to the start of grading or other ground disturbing activity, a qualified biologist shall conduct environmental awareness training for all construction personnel. Topics to be included in the training include, but are not limited to, the construction limits; sensitive habitats, features, plants, and animal species to avoid; mitigation measure and/or permit condition requirements; seasonal or other time-related restrictions on construction; and measures related to

erosion control and spill prevention. Environmental awareness training shall be repeated for any new construction personnel working on the site. The qualified biologist shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of field experience.

During project vegetation removal or ground disturbing activities (e.g., grubbing, tree removals, grading, discing, soil deposition, etc.), a qualified biologist shall be on-site to oversee compliance with all laws, regulations, permit conditions, mitigation measures, and any other biological resources requirements. The qualified biologist shall review the entire site at least once weekly during other construction activities to ensure that full compliance occurs.

MM-BIO-8. Delineate Environmentally Sensitive Areas. ~~Sensitive vegetation communities, jurisdictional waters and wetlands,~~Prior to the issuance of any grading permit or ground disturbance activity impacting environmentally sensitive areas within the City of Santee and ~~other~~City of San Diego, "environmentally sensitive ~~biological resources located outside of permanent and temporary impact~~ areas" shall be identified on the final construction plans ~~as "environmentally sensitive areas"~~ and protected with temporary fencing (e.g., orange snow fencing). A qualified biologist shall monitor the installation of the temporary fencing and ensure it is installed prior to the start of clearing, brushing, grading, or other ground-disturbing construction activities. A qualified biologist shall inspect the temporary fencing at least twice weekly during grading, and monthly after grading is complete, to ensure it remains in place throughout construction.

MM-BIO-9. Stormwater Pollution Prevention Plan. ~~**To control erosion and sedimentation and to preserve water quality, the applicant will obtain coverage for the project under the Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ).**~~ **Prior to the issuance of grading permits, the applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) to** support coverage under the Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ) to **reduce the potential for water pollution and sedimentation from construction.** ~~Best management practices (~~**BMPs**~~)~~ **to be included in the SWPPP that must be submitted to the State Water Resources Quality Control Board shall include, but are not limited to, the following:**

- The applicant shall not stockpile brush, loose soils, excavation spoils, or other similar debris material within sensitive habitats.
- If visible dust is present during construction activities, standard dust suppression techniques (e.g., water spraying) shall be used in all ground-disturbance areas.
- During construction activities, measures shall be in place to ensure that contaminants are not discharged from construction sites. The SWPPP shall define areas where hazardous materials and trash shall be stored; where vehicles shall be parked, fueled, and serviced; and where construction materials shall be stored.
- Runoff, sedimentation, and erosion shall be minimized through the use of BMPs such as water bars, silt fences, staked straw bales, wattles, and mulching and seeding of all disturbed areas. These measures shall be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water, and to preserve roadways and adjacent properties.

- Equipment storage, fueling, and staging areas shall be located in upland sites away from riparian areas and other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Where vehicle maintenance (excluding fueling) cannot be avoided in areas outside those previously specified, these maintenance activities shall be performed at least 150 feet from all aquatic resources, or as specified by agency permits, on an impermeable bladder or tarp specified for such maintenance activities. Project-related spills of hazardous materials shall be cleaned up immediately, and contaminated soils removed to approved disposal areas.
- Measures such as sandbags, silt screens, cleanup of spills of hazardous materials, and cleanup of sediment shall be implemented to prevent polluted (with sediment or hazardous materials) runoff from work areas in paved streets from entering the storm drain- system.
- Measures such as silt screens, cleanup of spills of hazardous materials, cleanup of sediment, secondary containment for hazardous materials, and avoidance of activities that disturb sediment or have a high potential for hazardous materials spills shall be implemented immediately before or during rain to prevent polluted (with sediment or hazardous materials) runoff from staging areas from draining into water ways such as washes, drainages, and ditches, and from entering municipal storm drain systems.

The applicant shall comply with the City of Santee's Stormwater Pollution Prevention Program, the specifics of which can be found on the City of Santee's website. Verification of Construction General Permit coverage approval and the approved SWPPP(s) shall be provided to the City of Santee at least 30 days prior to start of construction. Updated SWPPPs shall be provided to the City of Santee on request during construction.

MM-BIO-10. Speed Limits During Construction. Vehicle speed limits within the project site shall not exceed 25 miles per hour during project construction.

5.1.2 Jurisdictional Waters and Wetlands

To comply with state and federal regulations protecting waters and wetlands, waterways and wetlands shall be avoided to the maximum extent practicable. For unavoidable impacts on waterways or wetlands, the following permit and agreements may be required.

A Clean Water Act, Section 401/404 permit issued by the California Regional Water Quality Control Board and the U.S. Army Corps of Engineers for all project related disturbances of waters of the U.S. and/or associated wetlands.

A Section 1602 Streambed Alteration Agreement issued by the California Department of Fish and Wildlife for all project related disturbances of any streambed or CDFW jurisdictional riparian habitat.

The proposed project would result in direct permanent loss of 0.289~~35~~ acres of USACE~~/RWQCB~~ jurisdictional ~~non-wetland waters and 0.575 acres of permanent impact on USACE/RWQCB jurisdictional non-wetland waters. The project would have no permanent loss of USACE/RWQCB jurisdictional wetlands)~~ aquatic resources (Table 4-~~7~~4; Figure 11~~).~~), 0.60 acres of RWQCB aquatic resources (Table 4-5; Figure 11), and 3.75 acres of CDFW jurisdictional aquatic resources (Table 4-

6; Figure 11). The proposed project would result in direct temporary impacts on 2.373384 acres of USACE/RWQCB non-wetland waters jurisdictional aquatic resources (Table 4-8).

The proposed project would have permanent direct impacts on up to 0.9294; Figure 11), 2.84 acres of CDFW vegetated streambed,RWQCB aquatic resources (Table 4-5; Figure 11), and 0.1483.13 acres of CDFW jurisdictional riparian habitataquatic resources (Table 4-9,6; Figure- 11). The proposed project would havemajority of temporary direct impacts on up to 0.758 acres of CDFW jurisdictional vegetated streambed, 2.355 acres of unvegetated streambed, and 0.095 acres of CDFW riparian habitat (Table 4-10). This includes 0.029 acres of temporary impacts at NWW5 around the emergency exit road, which will be revegetated/restored as described in the HMMP. The remainder of the temporary impacts are associated with the temporaryimpacts would occur from the project's dewatering ofactivities within the pond in San- Diego River (North Channel) (NWW1) (Table 4-10).

Prior to the issuance of grading permits, wetland and non-wetland water impacts shall be mitigated by MM-BIO-3NWW 1). The impact totals presented in Tables 4-4 through MM-BIO-11, on potential state and federal wetlands areas4-6 should not be summed due to below a level of significance. Ultimately, theoverlap between aquatic resources. Mitigation for impacts to jurisdictional waters/wetland mitigationaquatic resources shall proceedbe made in accordance with the permit and certification requirements of described in MM-BIO-11, which would ensure that any additional requirements from the the applicable resource agencies are met and would ensure that there would not be a significant adverse effect on state or federal wetlands(i.e., USACE, CDFW, and RWQCB) during the permitting process as outlined in Appendix K, Proposed On-Site Mitigation Overview.

MM-BIO-11. Wetland Permits. Prior to the issuance of any grading permit or ground disturbance activity impacting aquatic resources, the applicant shall: (1) obtain a permit or authorization from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and/or California Department of Fish and Wildlife jurisdiction as applicable pursuant to the regulatory agencies' requirements and regulations, together with any permit/agreement conditions and mitigation measures imposed through the consultation process; (2) provide evidence to the City of Santee of the permit or authorization, or confirmation that no such permits or authorizations are required; and 3) mitigate for permanent impacts to aquatic resources and restoration of temporary impact areas within aquatic resources for each sensitive wetland vegetation type in accordance with the mitigation ratios presented in Tables 5-2 through 5-4 in accordance with measures MM-BIO-3 and MM-BIO-4, in addition to the permit requirements of the applicable resource agencies (i.e., USACE, CDFW, and RWQCB)imposed during the permitting process. Temporary impacts shall occur in-place and shall be restored to pre-project conditions. The monitoring and restoration requirements shall be identified in a Habitat Mitigation and Monitoring Plan (refer to MM-BIO-5) that complies with the mitigation strategy outlined in Appendix K, Proposed On-Site Mitigation Overview, and Resource Management Plan as directed by MM-BIO-6.

MM-BIO-11. Wetland Permits. Impacts on jurisdictional wetland and waterway resources requires permits and authorizations by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife prior to impacts. The applicant shall provide the City of Santee with permits and authorizations from each resource agency demonstrating approval of project impacts on aquatic resources or shall provide evidence that no such permits are required, prior to the approval of the grading plans. Impacts on sensitive wetland communities shall be mitigated, at a minimum, as described in MM-BIO-3 and MM-BIO-4. The resource agencies could require mitigation ratios higher than those

~~described in MM-BIO-3 and MM-BIO-4, but ratios shall not be less than those described in MM-BIO-3.~~

~~5.1.3 Special-Status Species~~

~~Potentially significant direct and indirect impacts on habitat occupied by least Bell's vireo (Impact BIO-5) would be minimized through implementation of MM-BIO-3 through MM-BIO-10, and minimized and mitigated through implementation of MM-BIO-14.~~

~~Potentially significant direct impacts to the habitat of non-listed special status species (Impact BIO-6) would be minimized and mitigated through implementation of habitat-based mitigation and avoidance in MM-BIO-1 through MM-BIO-8.~~

Special-Status Species~~Potentially significant direct impacts on nesting birds (Impact BIO-7) and indirect effects of construction noise (Impact BIO-12) and human activity (Impact BIO-13) would be minimized through implementation of MM-BIO-12 and MM-BIO-13. Direct impacts on Crotch's bumble bee (Impact BIO-8) would be significant and minimized through implementation of MM-BIO-15. Direct impacts on western spadefoot (Impact BIO-9) would be significant and minimized through implementation of MM-BIO-16. Direct impacts to western burrowing owl (Impact BIO-10) would be significant and minimized through implementation of MM-BIO-17. Potentially significant impacts on sensitive wildlife from increased abundance of domestic pets (Impact BIO-14) would be minimized through implementation of MM-BIO-18.~~

5.1.3 Special-Status Species

Implementation of these measures would result in impact avoidance or a less than significant impact to special-status species with mitigation incorporated under CEQA.

MM-BIO-12. ~~Minimize~~ Indirect Noise Impacts on Non-Listed Riparian Birds and Raptors. The operation of construction equipment (e.g., backhoes, loaders, bulldozers, excavators, skid steers, graders) and construction activities (building construction) shall not occur within ~~a~~any suitable breeding habitat that overlap the "noise impact area" (~~as~~ defined ~~below~~as up to 300 feet from the noise source) during the breeding seasons for yellow warbler, yellow-breasted chat, and vermilion flycatcher (February 15 through August 31), ~~or~~ nesting raptors (January 15 through July 15), or cormorant (April 1 through July 31). If it is not feasible to avoid operation of construction equipment during any of these breeding seasons, then a pre-construction nesting survey shall be conducted within potential habitat of any of these species within 150, 300, or ~~300~~500 feet respectively of proposed construction equipment activity. Pre-construction surveys shall be conducted by a qualified biologist no more than 72 hours prior to the start of construction to determine if active nests of these species are present within the areas potentially impacted by noise. The qualified biologist conducting the survey(s) shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of experience conducting biological field surveys, including surveys for nesting birds.

The "noise impact area" is defined as up to 300 feet from the noise source to the nest for raptors, 500 feet from the noise source to the cormorant rookery, and up to 150 feet from the noise source to the nest ~~for the cormorant rookery and~~ for other sensitive riparian species, including yellow warbler, yellow-breasted chat, and vermilion flycatcher. If it is determined at the

completion of pre-construction surveys that active nests belonging to yellow warbler, yellow-breasted chat, vermilion flycatcher, or raptors are absent from the noise impact area, construction shall be allowed to proceed. If pre-construction surveys determine the presence of active nests belonging to any of these sensitive species, then construction shall ~~(1) be postponed within the noise impact area until a qualified biologist determines any nests are no longer active or until after the respective breeding season; (2) be conditionally allowed within portions of the noise impact area if intensive monitoring by the qualified biologist determines that nesting activities are not being substantially (i.e., adults appearing agitated, scolding more, attracting the attention of brown-headed cowbirds, or leaving the nest site more than average) disrupted by adjacent construction activity; or (3) not occur until a temporary noise barrier or berm is constructed at the edge of the construction limits and/or around the piece of equipment to ensure that noise levels within the noise impact area are reduced to below 1-hour average of 60 A-weighted decibels (dBA) leq or ambient noise levels, whichever is greater, at the nest location.: Decibel output shall be confirmed by a qualified noise specialist, and intermittent monitoring by a qualified biologist shall be required to ensure that conditions have not changed. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that construction of the noise attenuation feature does not itself result~~ disruption of nesting behavior. ~~Factors used to determine and guide the appropriate buffer distance shall include individual pair behavior responses, amount of buffering topography or structures, proximity to existing disturbance, and ambient noise levels.~~

~~**MM-BIO-13. Avoid Disturbance of Vegetation During Bird Nesting Season.** To comply with state and federal protections on nesting birds, clearing, trimming, and grubbing of vegetation shall occur September 1 through February 14 (i.e., outside of the general bird breeding season), and tree removal shall occur July 16 through January 14 (outside of the raptor breeding season). If tree or vegetation trimming, clearing, or grubbing cannot feasibly occur outside of these breeding seasons, then pre-construction nesting surveys, as described below, shall be conducted by a qualified biologist prior to initiating vegetation trimming, clearing, or grubbing activities.~~

~~The nesting survey for native birds protected under the Migratory Bird Treaty Act and Fish and Game Code shall consist of one pre-construction nesting survey conducted no more than 72 hours prior to the commencement of vegetation trimming, clearing, or grubbing to determine if active nests of these species are present in the affected areas. If pre-construction surveys determine the presence of active nests, then construction shall~~ (1) be postponed within the noise impact area until a qualified biologist determines any nests are no longer active or until after the respective breeding season; (2) be conditionally allowed within portions of the noise impact area if intensive monitoring by the qualified biologist determines that nesting activities are not being substantially (i.e., adults appearing agitated, scolding more, attracting the attention of brown-headed cowbirds, or leaving the nest site more than average) disrupted by adjacent construction activity; or (3) not occur until a temporary noise barrier or berm is constructed at the edge of the construction limits and/or around the piece of equipment to ensure that noise levels within the noise impact area are reduced to below 1-hour average of 60 A-weighted decibels (dBA) l_{eq} or ambient noise levels, whichever is greater, at the nest location. Decibel output shall be confirmed by a qualified noise specialist, and intermittent monitoring by a qualified biologist shall be required to ensure that conditions have not changed. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that construction of the noise attenuation feature does not itself result in disruption of nesting behavior. Factors used to determine and guide the appropriate buffer distance shall include

individual pair behavior responses, amount of buffering topography or structures, proximity to existing disturbance, and ambient noise levels. While the rookery is active, the qualified biologist shall monitor the rookery for any signs of disruption to breeding activities by ongoing construction activities (e.g., adults appearing agitated, leaving the nest more than average, etc.). If the qualified biologist determines breeding activities are disrupted, the avoidance buffer shall be expanded until the disruption is no longer observed.

MM-BIO-13. Disturbance of Vegetation During Bird Nesting Season. Construction activities occurring within all potential nesting resource areas within the Project site and areas within 500 feet of the Project site containing suitable nesting resources should be avoided during the migratory bird nesting season (typically January 15 through September 15). If construction activities (i.e., grading, tree removal, external construction involving heavy equipment generating noise in excess of 60 dBA [energy equivalent level] or ambient noise levels, whichever is greater, at the nest location) must occur during the bird nesting season, an avian nesting survey of all potential nesting resource areas within the Project site and areas containing suitable nesting resources within 500 feet of all impact areas must be conducted to determine the presence/absence of special-status species, protected migratory birds, and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours of initiation of construction activities in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If construction activities are on hold for more than 30 days, then pre-construction surveys would need to be reinitiated. If an active bird nest is found, the nest shall be flagged (flagging shall be attached to a nearby tree or shrub with distance and direction identified so as not to disturb nest) and mapped on the construction plans, along with an appropriate buffer established around the nest. The buffer will be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species), existing nearby conditions (e.g., natural habitat versus roads or existing noisy activities), existing buffering features (e.g., topography, tall and dense trees, buildings), legal status of species (i.e., listed versus non-listed), general sensitivities of the species (e.g., disturbance tolerant or urban versus not disturbance tolerant), and other variables. The nest buffer area shall be avoided until the nest is vacated and/or the juveniles have fledged. The nest buffer area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when an active nest buffer is in place. No project activities shall encroach into established buffers without the consent of a monitoring biologist.

Construction shall be conditionally allowed within portions of the noise impact area (i.e. buffer surrounding the nest) if a temporary noise barrier or berm is constructed at the edge of the construction limits and/or around the piece of equipment to ensure that noise levels within the noise impact area are reduced to below 1-hour average of 60 A-weighted decibels (dBA) equivalent sound level hourly average (l_{eq}) or ambient noise levels, whichever is greater, at the nest location. Decibel output shall be confirmed by a qualified noise specialist, and intermittent monitoring by a qualified biologist shall be required to ensure that conditions have not changed. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that construction of the noise attenuation feature does not itself result disruption of nesting behavior. Factors used to determine and guide the appropriate buffer distance shall include individual pair behavior responses, amount of buffering topography or structures, proximity to existing disturbance, and ambient noise levels.

The qualified biologist shall determine the appropriate nest avoidance distance based on species type, habitat location and condition, and behavior of the nesting pair. The qualified biologist conducting the survey(s) shall have, at a minimum, a bachelor's degree in biology, ecology, zoology, or a related field of science, and at least 2 years of experience conducting biological field surveys, including surveys for nesting birds.

MM-BIO-14. Mitigation, Monitoring, and Reporting Conditions for Potential Impacts to Occupied Least Bell's Vireo Habitat. ~~Prior to the issuance of grading permits, the Cities of Santee and San Diego shall verify that the following project requirements regarding least Bell's vireo are shown on the construction plans.~~ No clearing, grubbing, grading, or other construction activities shall occur during the least Bell's vireo breeding season (March 15 through September 15) until the following requirements have been met, to the satisfaction of the applicable jurisdiction issuing the grading permit:

~~A~~a. A qualified biologist shall perform a clearance survey in those wetland areas suitable for the presence of least Bell's vireo~~.~~, as shown on Figure 12 of the Revised Biological Survey Report. Surveys for the species shall be conducted within the current breeding season~~,~~ (i.e., when the impact is to occur – if ~~applicable,~~it cannot wait until after the breeding season), and include at least 3 weekly surveys ~~and monthly follow-up surveys~~with the last survey occurring 24 hours before any clearing, grubbing, grading, or other construction activities commences. If least Bell's vireo is present, then the following conditions must be met:

1. Occupied habitat shall be staked or fenced under the supervision of a qualified biologist;~~-~~ and

2. From March 15 through September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 A-weighted decibels (dBA) ~~leq~~equivalent sound level hourly average (l_{eq}) hourly average (or to the ambient noise level if greater) at the edge of occupied least Bell's vireo habitat. An analysis showing that noise generated by construction activities would not exceed 60 dBA hourly average (or to the ambient noise level if greater) at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City of San Diego City Manager or the City of Santee City Planner (depending on applicable jurisdiction) at least 2 weeks prior to the commencement of construction activities in the affected area. Prior to the commencement of any ~~of~~ construction activities during the breeding season, areas restricted from such activities (avoidance buffers) shall be staked or fenced under the supervision of a qualified biologist. This noise analysis may include noise attenuation requirements, including altering grading operations, phasing grading, cessation of vehicle idling, and using quieter machinery near sensitive resources, to obtain the necessary noise levels; or

3. At least 2 weeks prior to the commencement of construction activities in the affected area, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dBA l_{eq} hourly average (or the ambient noise level if greater) at the edge of habitat occupied by least Bell's vireo. If a temporary noise barrier or berm is constructed, the qualified biologist must be present to ensure that the

construction of the noise attenuation feature does not itself result in disruption of nesting behavior. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring (as described below) shall be conducted at the edge of the occupied habitat to ensure that noise levels do not exceed 60 dBA l_{eq} hourly average (or ambient noise levels if greater). If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, or the nesting activities are being substantially disrupted by adjacent construction activity, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).

4. Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dBA l_{eq} hourly average or to the ambient noise level if greater. If not, other measures shall be implemented in consultation with the biologist, the City of San Diego City Manager, or the City of Santee City Planner (depending on the applicable jurisdiction), as necessary, to reduce noise levels to below 60 dBA l_{eq} hourly average or to the ambient noise level if greater. Such measures may include limitations on the placement of construction equipment and the simultaneous use of equipment.

MM-BIO-15. Crotch's Bumble Bee Pre-Construction Surveys. –Prior to any ground disturbance activity within non-developed areas (golf course areas are considered to be developed) during the Colony Active Period (April 1 through August 31), ~~then~~ pre-construction surveys for active Crotch's bumble bee nest colonies shall be required no more than 5 days prior to any ground disturbance or vegetation removal. The following method for nest surveys shall be used unless the Wildlife Agencies provide an updated method based on current understanding of bumble bee nests in the future:

- ~~Within non-developed habitats (golf course areas are considered to be developed), the~~The biologist shall look for nest resources (e.g., burrows) suitable for bumble bee use. If an area of bumble bee activity is detected, the biologist shall watch potential nest resources for a period of time (up to 30 minutes if early in the Colony Active Period, and up to 10 minutes during the peak of the Colony Active Period) looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, although the rate can vary depending on whether it is early/late or at the peak of the Colony Active Period. If a bumble bee worker is detected, then a representative bee shall be identified to species. This should be possible without capture in San Diego County. Biologists shall ensure that 100% visual coverage of all potential burrow resources are surveyed. Therefore, the biologist shall select a view that balances viewing multiple burrows while ensuring detection if bees are present. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point, but this limit shall not exceed 50 feet. The biologist shall reduce the 50-foot limit as necessary to ensure 100% visual coverage of potential burrow resources depending on topography, vegetation height and cover, and other factors. This approach shall allow the biologist to assess multiple burrows at one time to sufficiently determine if bees are entering/exiting them. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). A photo voucher of the bee species shall be collected, and the location mapped using GPS. If identification is not feasible without

capture, then the project proponent shall consult with the California Department of Fish and Wildlife prior to allowing the biologist to capture and identify to species (using the protocol for the California Bumble Bee Atlas project managed by the Xerces Society) to determine if a California Endangered Species Act Memorandum of Understanding and/or Scientific Collecting Permit would be required.

- A written survey report shall be submitted to the City of Santee and City of San Diego within 30 days of the pre-construction nest surveys. The report shall include survey methods, weather conditions, and survey results, including botanical results, a list of insect species observed, and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed (as appropriate for the level of survey required). The survey report shall include the qualifications of the surveyor(s) and approved biologist(s) for identification of photo vouchers and a detailed habitat assessment. If Crotch's bumble bee nests are observed, location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report. If Crotch's bumble bee is not detected during the surveys, no further action or mitigation would be required.
- If a Crotch's bumble bee nest is detected, the project biologist shall establish, monitor, and maintain a no-work buffer around the nest. The size and configuration of the no-work buffer shall be based on best professional judgement of the project biologist in consultation with the Wildlife Agencies. The buffer shall provide at least 50 feet of clearance around nest entrance(s). Construction activities shall not occur within the no-work buffer until the colony is no longer active. To determine that a nest is no longer active, the nest shall be observed for a minimum of 60 minutes each day across a minimum of 3 days during suitable flight weather (i.e., ambient air temperature between 60°F and 90°F, winds under 10 miles per hour, and no precipitation higher than a drizzling rain). If no bees are seen flying in or out of the nest by the end of the observation period, it shall be determined that the nest is no longer active. If project activities occur outside of the Colony Active Period, then pre-construction surveys for active bee nest colonies and avoidance measures are not required.
- If required, based on positive identification during the preconstruction survey, mitigation for direct impacts to Crotch's bumble bee nesting habitat shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project to be provided through implementation of the project's mitigation measures MM-BIO-1 and MM-BIO-2. If required by the California Department of Fish and Wildlife (CDFW) 2081 incidental take permitting process, additional mitigation measures may be required through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, a cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of a conservation easement area(s) in perpetuity for the Crotch's bumble bee, in coordination with CDFW. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall account for all management activities required to fulfill the requirements of the conservation easement(s), which are currently under review and development by CDFW.

MM-BIO-16. Western Spadefoot Pre-Construction Survey. During the rainy season (typically begins with the first rains in October) prior to ~~the issuance~~any ground-disturbance activities which impact potentially suitable western spadefoot ponded habitat in the project's biological study area (BSA), south of the ~~grading permit,~~San Diego River (North Channel), the project must either perform an egg mass/larval survey for western spadefoot ~~within standing water in the biological study area (BSA)~~ or perform nocturnal eyeshine surveys for adults ~~across the BSA~~. If performed, egg mass/larval surveys must be performed in March and/or April. If performed, nocturnal adult surveys must be performed during or the night after the first three large (0.25-inch or greater) rain events of the winter. If the standing water or nocturnal survey is negative, then no additional measures are required. If the surveys find western spadefoot, then a 1,500-foot buffer shall be applied, originating from the breeding resource. The buffer area between the BSA open space limit and farthest project impact limit shall be enclosed by exclusion fencing. That interior area shall be surveyed during the first three rain events, and western spadefoot shall be relocated outside of the buffer area within the BSA. ~~A~~If detected, a relocation plan shall be prepared prior to grading or relocation that identifies the specific methods and relocation areas, ~~shall be prepared prior to implementation,~~ and shall be approved by the lead agency~~.~~ and any relevant wildlife agencies (Note that if the species becomes listed, then that wildlife agency would also need to review and approve the relocation plan). Any relevant incidental take permits required (e.g., Section 7 or 10 under the Federal Endangered Species Act or scientific collecting permits or 2081 under California Department of Fish and Wildlife (CDFW) to perform this task shall be acquired~~.~~). If 100% avoidance of occupied habitat is not feasible AND the species is listed, consultation and possible incidental take permitting with U.S. Fish and Wildlife Service (USFWS) and/or CDFW shall be completed prior to implementation of any activities that may impact occupied habitat or animals, directly or indirectly.

~~This measure is not required north of the San Diego River (north) because that section of the San Diego River does not provide suitable habitat for western spadefoot and would provide a suitable buffer if spadefoot were found south of there.~~

MM-BIO-17. Western Burrowing Owl Pre-Construction Survey. Prior to ~~grading~~ground disturbance activities impacting suitable habitat for burrowing owl, the project shall determine if suitable burrowing owl nesting and overwintering habitat occurs within the project site based on a current habitat assessment. Suitable habitat generally consists of open habitats that are situated on flat to rolling slopes and include minimum 11-centimeter diameter burrows or other openings like rock crevices. The most important characteristic is the burrow. If suitable burrows are identified (e.g., greater than 11 centimeters in diameter and greater than 150 centimeters in depth), then the following shall be implemented:

- If suitable burrowing owl habitat ~~is~~with burrows are present, pre-construction burrowing owl surveys shall be ~~conduced~~conducted consistent with the 2012 California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation. No more than 14 days prior to the initiation of project activities, a qualified biologist shall conduct at least two surveys at least 7 days apart, with the final survey conducted no more than 48 hours prior to the initiation of project activities. A report of the survey results, including mapping of any occupied burrows (including natural or constructed), burrowing owls, or burrowing owl sign observed, shall be submitted to the Cities of Santee and San Diego for their review and approval prior to initiation of project activities. Pre-construction surveys are not seasonally dependent and shall be required whenever ground disturbance is planned to address potential impacts during both

overwintering and nesting seasons. If the survey is negative, then nothing more is required. ~~If an occupied burrow~~If a burrow with burrowing owl sign (e.g., feathers, white-wash, pellets, insect remains) or burrowing owl is found, then the following measures shall be implemented:

- ~~Depending on the jurisdiction (City of Santee/City of San Diego) and their respective Multiple Species Conservation Program requirements at the time, either those requirements shall be implemented, or a CDFW 2081 Incidental Take Permit shall be secured and the following shall be implemented unless superseded by the Multiple Species Conservation Program or Incidental Take Permit:~~
  - Project activities shall be restricted within occupied burrowing owl habitat (inclusive of the appropriate buffer) during the breeding season (February 1 through August 31) until nesting is complete (i.e., the young have dispersed and are fledged, independently foraging, and no longer using the burrows or burrow complex, and/or adults are no longer nesting).
  - During the breeding season, buffers shall be established by a qualified biologist consistent with guidance provided in the 2012 CDFW Staff Report on Burrowing Owl Mitigation. Appropriate buffer size shall depend on the time of year, level of disturbance, and project-specific site conditions. Buffers around active nesting sites shall be a minimum of 200 meters (656 feet) regardless of the time of year. The monitoring biologist shall have the authority to order stop work if burrowing owls exhibit distress or abnormal behavior and shall consult with the appropriate entities to determine next steps (e.g., stop work or increase buffers).
  - Where impacts to burrowing owl are unavoidable, the following measures shall be required:
    - If suitable but un-occupied burrows cannot be avoided, burrow exclusion may be appropriate. Burrow exclusion shall only be allowed after the burrow has been determined by a qualified biologist to be inactive. No exclusions shall be permitted during the nesting season when there is evidence of burrowing owl activity. Prior to the initiation of any burrow exclusions, a Burrow Exclusion Plan shall be submitted to the Cities of Santee and San Diego and CDFW for review and approval. Implementation of the plan may require a CDFW 2081 incidental take permit or an MOU/Scientific Collecting Permit.
    - Mitigation for impacts to occupied habitat shall occur through the conservation of occupied burrowing owl habitat at a ratio ~~of~~coordinated in consultation with CDFW but no less than 1:1 for the territory of the burrowing owl. If occupied burrowing owl habitat is not available for mitigation within the Santee Subarea Plan Area, lands with potential to be occupied through appropriate restoration, management, and enhancement of burrowing owl nesting and foraging requirements may be considered. The land to be conserved shall be approved by the Cities of Santee and San Diego and CDFW. The land to be conserved shall be secured by a legal instrument (e.g., conservation easement) to the satisfaction of CDFW.

- ~~MM-BIO-18. Homeowner Education Program. Prior to the issuance of a building permit for~~Respectively, the applicant shall secure a CDFW 2081 Incidental Take Permit or obtain issuance of required permit(s) based on the City of San Diego Multiple Species Conservation Program requirements for implementation of any activities that may impact occupied habitat, directly or indirectly.

MM-BIO-18. Avoidance of California Gnatcatcher Take. Prior to the grading or removal of coastal sage scrub, a California gnatcatcher pre-construction survey will be performed. A permitted biologist (i.e., possessing a valid Endangered Species Act Section 10(a)(1)(a) Recovery Permit) shall conduct a focused pre-construction survey for coastal California gnatcatcher (*Polioptila californica californica*) within all coastal sage scrub areas of the project site. If presence of coastal California gnatcatcher is determined to occur on the project site, the following measures shall be required to be implemented by the applicant:

- If habitat is occupied by coastal California gnatcatcher, no vegetation removal shall occur within occupied habitat during the coastal California gnatcatcher breeding season (March 15 to August 15).
- A 500-foot buffer will be required around the nest site until it is shown to be vacated.
- If 100% avoidance of occupied habitat and buffer is not feasible, consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife and possible receipt of an incidental take permit through Section 7 or 10 (FESA) shall be required prior to implementation of any activities that may impact occupied habitat, directly or indirectly.

MM-BIO-19. Homeowner Education Program and Signage. Prior to the first occupancy of the residential homes on the project site, a homeowner education program shall be prepared by a qualified biologist for approval by City of Santee and distributed by the applicant to inform homeowners of the need to keep pets outside of the adjacent open space areas. The homeowners' association shall incorporate signage, where appropriate, to inform residents of the importance of preservation of native flora and fauna and to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in proposed open space areas and/or suitable habitat for special-status wildlife.

~~5.1.4 Preserve Land Use Adjacency Guidelines~~

~~5.1.4.1 City of Santee~~

~~Although the draft Santee MSCP subarea plan has not been approved, this project will conform to the Preserve Land Use Adjacency Guidelines developed in the draft plan to ensure that there are no conflicts with establishment of the subarea plan. The proposed project would introduce residential development as an accessory use to the Residential West area near West Hills Parkway that is adjacent to open space in the City of Santee. The proposed project would introduce the emergency access road and parking lot associated with the golf resort adjacent to the Mast West habitat preserve in Santee, in an area that is currently a golf course. The proposed project would conform and be consistent with the following guidelines:~~

MM-BIO-20. Adjacency Guidelines. Prior to the commencement of any construction activities, the construction contractor shall prepare construction plans for submission to and approval by

the City of Santee that shall include the following to address potential indirect impacts to special-status species occurring within all suitable habitat associated with the San Diego River (i.e., within 500 feet of the project site):

a) Invasive Weeds. To reduce the spread of invasive plant species, landscape plants shall not be on the most recent version of the California Invasive Plant Council's Invasive Plant Inventory (https://www.cal-ipc.org/plants/inventory/). Landscape plans shall incorporate native species that occur in the region to the extent feasible and all stream courses within the redeveloped golf course shall include a 10-foot-wide strip of planted native vegetation. This strip shall have an emphasis on saltgrass (*Distichlis spicata*), a native, wetland tolerant grass species.

b) Night Work. All construction activities shall be conducted during the daytime, and lights shall not be kept on overnight in the construction area, as practicable. If night lighting is required during construction activities, all exterior lighting along undeveloped land shall be fully shielded and directed downward in a manner that shall prevent light spillage or glare into the adjacent open space.

c) Lighting. Project lighting shall be designed consistent with the requirements of Section 13.30.030(B) of the Santee Municipal Code. Night lighting shall be directed away from open space and/or suitable habitat for special-status species to protect species from direct night lighting. Shielding shall be incorporated in project designs to ensure that ambient lighting is not increased.

5.1.4 Wildlife Movement

Potentially significant direct and indirect impacts on wildlife movement would be reduced to less than significant through implementation of MM-BIO-21.

MM-BIO-21. Wildlife-Friendly Fencing. Prior to the issuance of a grading permit, the Applicant/Developer shall prepare a fencing plan to prevent the exclusion of wildlife usage of the secondary movement corridor (golf course area) for the approval of the City of Santee. The chain-link fencing shall include a 42-inch gap at the bottom that includes a bottom twisted wire strand at 20 inches above the ground within the gap. Up to three additional strands may be placed between the bottom wire and the protective fence. The resulting wire strands at 20 inches, 23 inches, 26 inches, and 38 inches. The fencing design shall allow wildlife through the fence and through the secondary wildlife corridor, including deer with antlers that could crawl under the fence. The fencing plan shall be approved by the City of Santee as part of design review and approval. The fencing shall be maintained in perpetuity through contractual obligation with the Homeowners' Association or other equivalent mechanism(s).

~~**Drainage**. The new development areas have been designed to drain into on-site water detention basins and not flow directly into the habitat preserves.~~

~~**Fuel modification zones.** Santee Municipal Code Chapter 49 Section 4905.2 requires that all new development within the Wildland Urban Interface Area has fuel modified defensible space. A fire protection plan has been prepared to address impacts from Wildland Urban Interface. Potential impacts from fuel modification zones have been incorporated into the impact footprint of the project.~~

Noise generated during construction of the proposed project could affect nesting birds if construction occurs during the avian breeding season. MM-BIO-12 provides a measure to minimize noise impacts on nesting birds in adjacent habitat.

Project lighting will be shielded and directed away from the San Diego River to avoid spillover into the adjacent riparian habitat. Low-pressure sodium lighting shall be used whenever possible and incorporated into project design features and engineering site plan. The City of Santee will provide project oversight to ensure that the project lighting is consistent with Preserve Land Use Adjacency Guidelines.

Invasive species shall not be introduced into areas immediately adjacent to the preserve areas. All open space slopes immediately adjacent to the preserve should be planted with native species that reflect the adjacent native habitat. Invasive species will not be introduced from the project into the adjacent preserve lands. The City of Santee will approve the project's landscaping plans to ensure that the applicable parts of the landscaping plant palette are consistent with Preserve Land Use Adjacency Guidelines. Conformance with the City of Santee Land Use Adjacency Guidelines listed above shall be made a condition of project approval and shall be included in applicable Covenants, Conditions, and Restrictions. Implementation of MM-BIO-12 would avoid or substantially lessen indirect impacts on nesting birds due to construction to below a level of significance. With implementation of these mitigation measures and conformance with the MSCP Land Use Adjacency Guidelines, the project would not conflict with local policies (i.e., the MSCP) and would not result in a potentially significant impact.

5.1.4.2 City of San Diego

The project would redesign the existing active recreation use (existing golf course) within and adjacent to the City of San Diego Multi-Habitat Preserve Area (MHPA). The existing golf course contains approximately 14 acres of land designated as MHPA and is adjacent to MHPA along the southern boundary of the site, within the City of San Diego. The MSCP San Diego Subarea Plan includes land use adjacency guidelines to address on a project-by-project basis to minimize impacts and maintain function of the MHPA (City of San Diego 1997). The City of San Diego MSCP Land Use Adjacency Guidelines include the following topics: drainage, toxics, lighting, noise, barriers, invasives, brush management, and grading/land development (See Section 1.5.3). The following list describes how these guidelines relate to the portions of the proposed project within the City of San Diego.

Drainage/Toxics. No parking lots or developed areas are proposed in or adjacent to the MHPA. Developed areas within the project site are designed to drain to water quality detention basins.

Lighting. No lighting is proposed in the golf course in or adjacent to the MHPA.

Noise/Barriers. No land use changes are proposed in or adjacent to the MHPA. There will be a continuation of golf course uses along the southern boundary of the site. No changes in operational noise are expected as a result of the operation of the golf course. Golf course uses will continue along the southern boundary similar to present uses on the site.

Construction activities adjacent to the MHPA could result in temporary increases in noise. Implementation of MM-BIO-12 would avoid or substantially lessen indirect impacts on nesting birds due to construction noise, to below a level of significance.

Brush Management. The existing and redesigned golf course does not require any brush management zones within or adjacent to the MHPA.

~~**Grading/land development.** No slopes are proposed within or adjacent to the City of San Diego MHPA. All project grading will be contained within the project site.~~

~~**Invasive species** shall not be introduced into areas immediately adjacent to the preserve areas. All open space slopes immediately adjacent to the preserve should be planted with native species that reflect the adjacent native habitat.~~

~~Conformance with the City of San Diego Land Use Adjacency Guidelines listed above shall be made a condition of project approval and shall be included in applicable Covenants, Permit Conditions, and Restrictions. With implementation of these mitigation measures and conformance with the MSCP Land Use Adjacency Guidelines, the project would not conflict with local policies (i.e., the MSCP) and would not result in a potentially significant impact.~~

5.2 Protection and Notice Element

Any on- or off-site mitigation will be protected with either a Conservation Easement to the CDFW or other entity approved by CDFW, or dedication in fee title to the City of Santee. The easement would be recorded prior to the approval of any plan, issuance of any permit, and prior to occupancy or use of the premises in reliance of a permit. Credits purchased through a CDFW-approved mitigation bank would be considered adequately protected.

5.3 Management Element

Mitigation can only be successful if there are assurances that on- or off-site mitigation will be adequately managed and monitored. Credits purchased through a CDFW-approved mitigation bank would be considered adequately managed. Applicant proposes on site wetland and riparian restoration and has included a ~~conceptual Habitat~~Proposed On-Site Mitigation ~~and Monitoring Plan~~Overview (Appendix K), to serve as a basis for the final Habitat Mitigation and Monitoring Plan, which would also be required in wetland permitting. Prior to the issuance of grading permits, City of Santee would need to approve the managing entity, the endowment funds determination (Property Analysis Record or equivalent), and the manager of endowment funds to ensure adequate funding for the long-term management and monitoring of the site (MM-BIO-6). Prior to issuance of grading permits, documentation would be provided to the City of Santee that the endowment had been funded for management in perpetuity.

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Chapter 6
Acknowledgements and Bibliography

6.1 Acknowledgements

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City of San Diego Reviewers: Kristi Forburger, City Planning, Biodiverse SD

Courtney Holowach, LDR-Environmental

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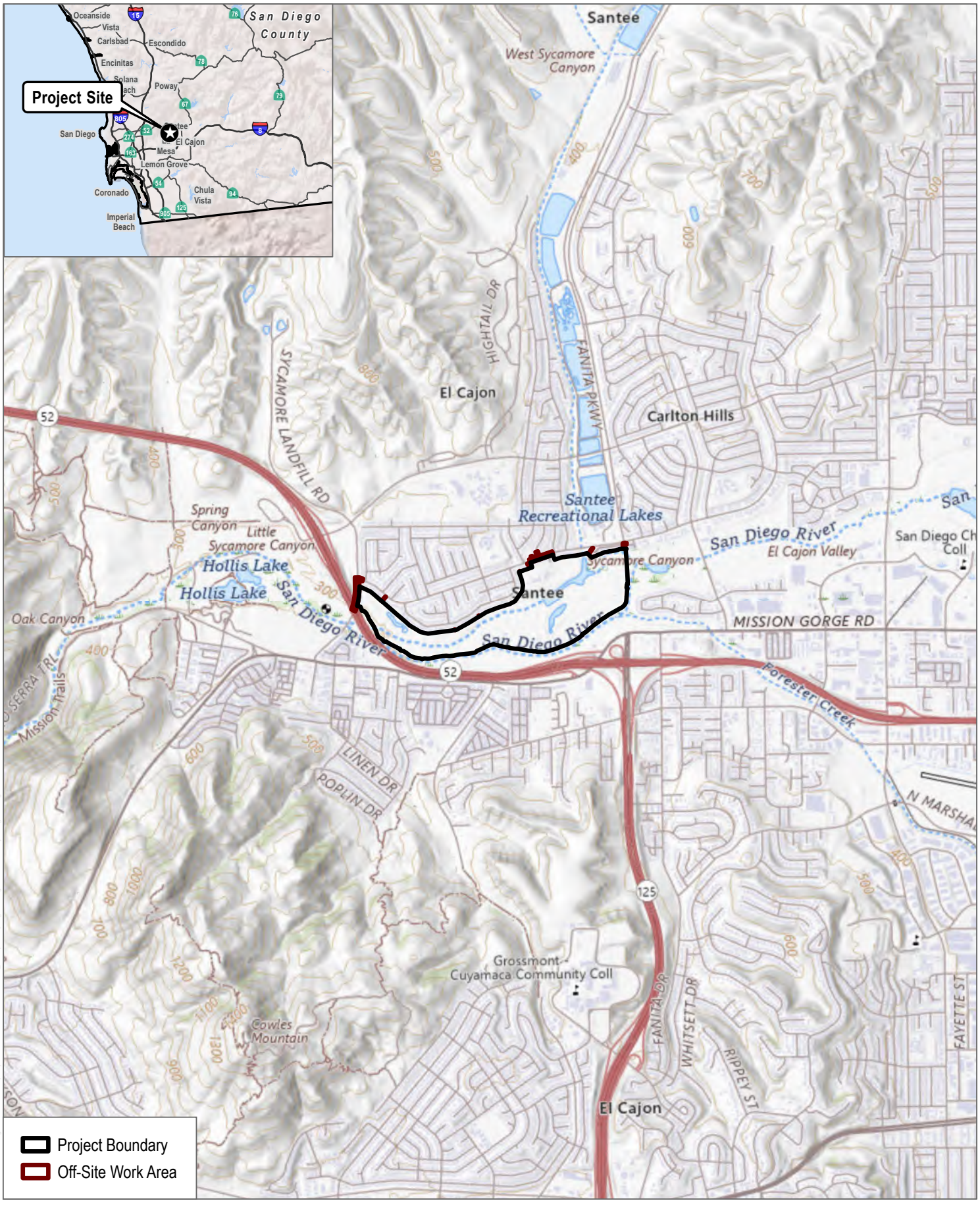

SOURCE: USGS National Map 2026

DUDEK

0 1,450 2,900 Feet

FIGURE 1

Regional Location

Carlton Oaks Golf Course Project

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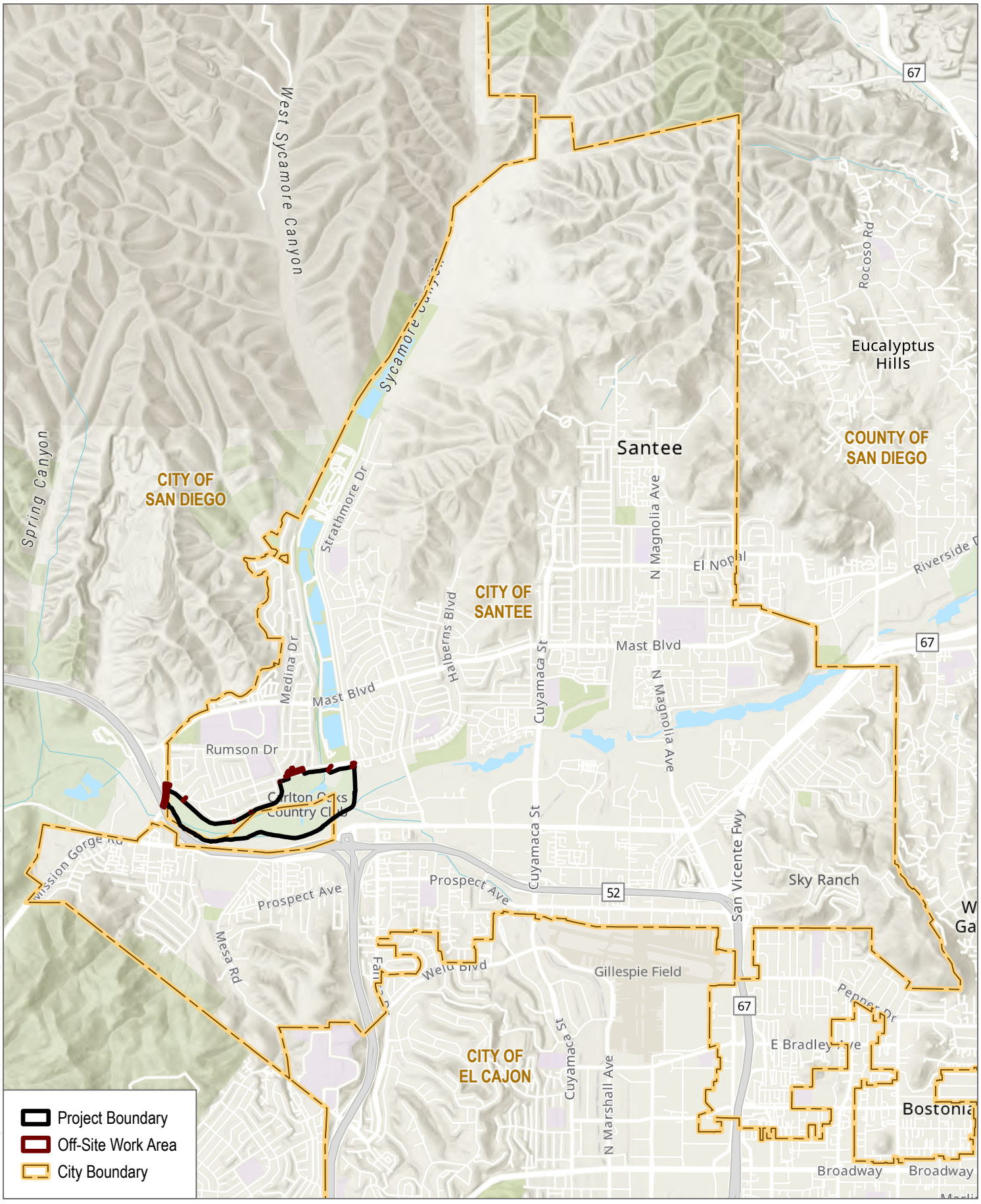

SOURCE: Esri Basemap 2025; SANGIS 2025

DUDEK

0 2,100 4,200 Feet

FIGURE 2

Project Vicinity

Carlton Oaks Golf Course Project

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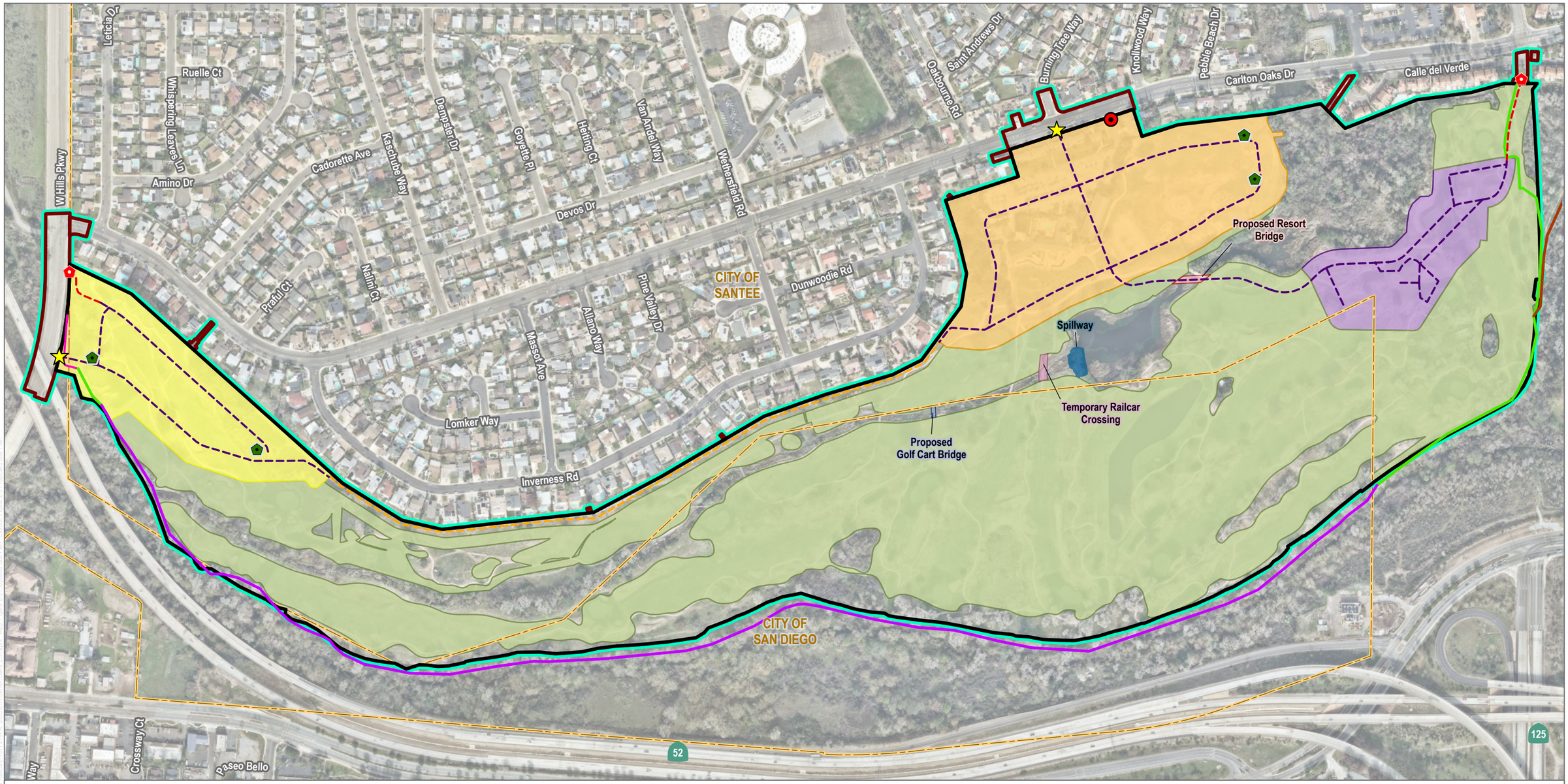

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 205 410 Feet

FIGURE 3A

Proposed Project

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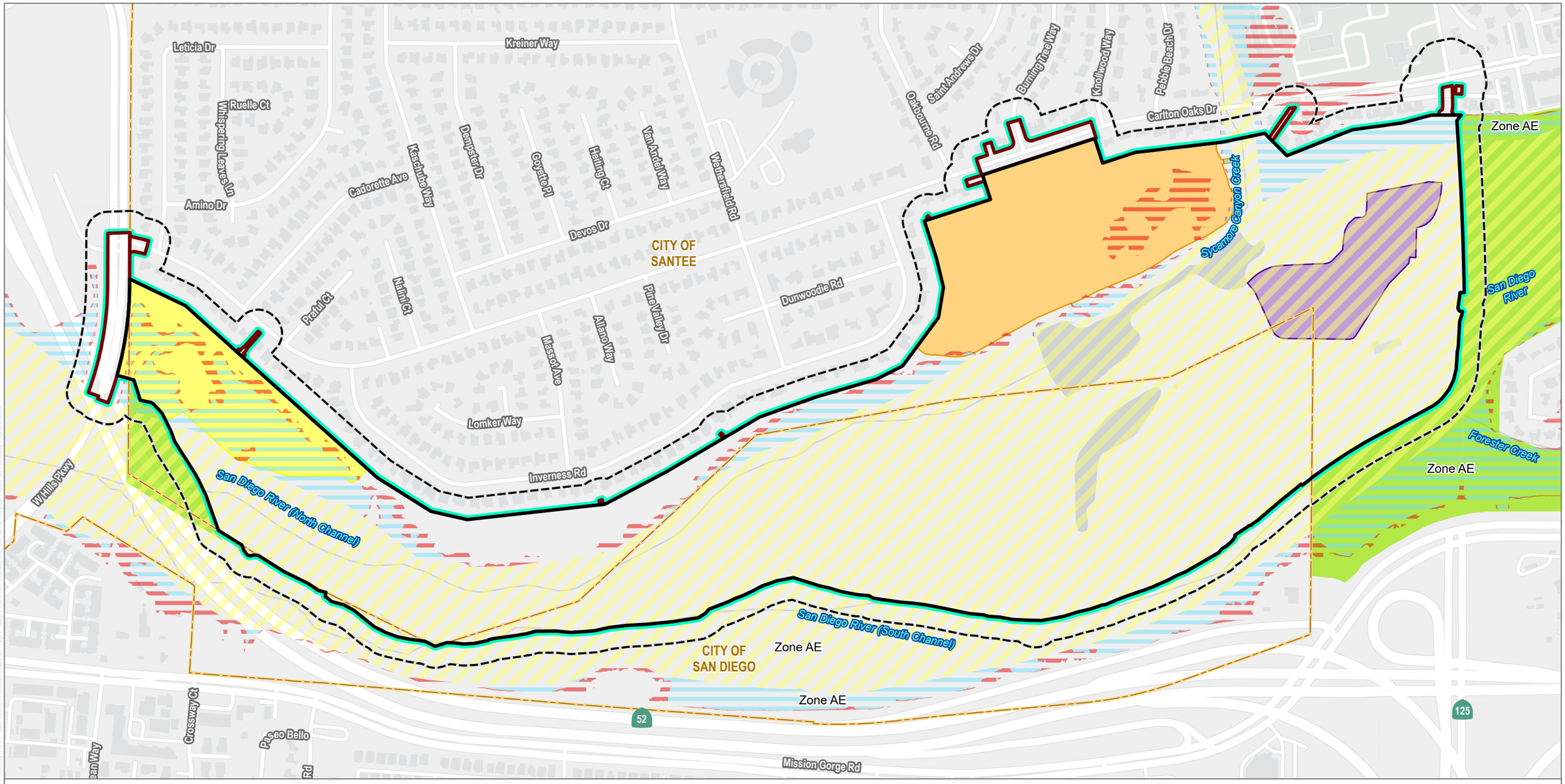

SOURCE: SANGIS 2025; Open Street Map 2023; FEMA Floodplains 2025

DUDEK

N

0 225 450 Feet

FIGURE 3B

Floodway Improvements

Carlton Oaks Golf Course Project

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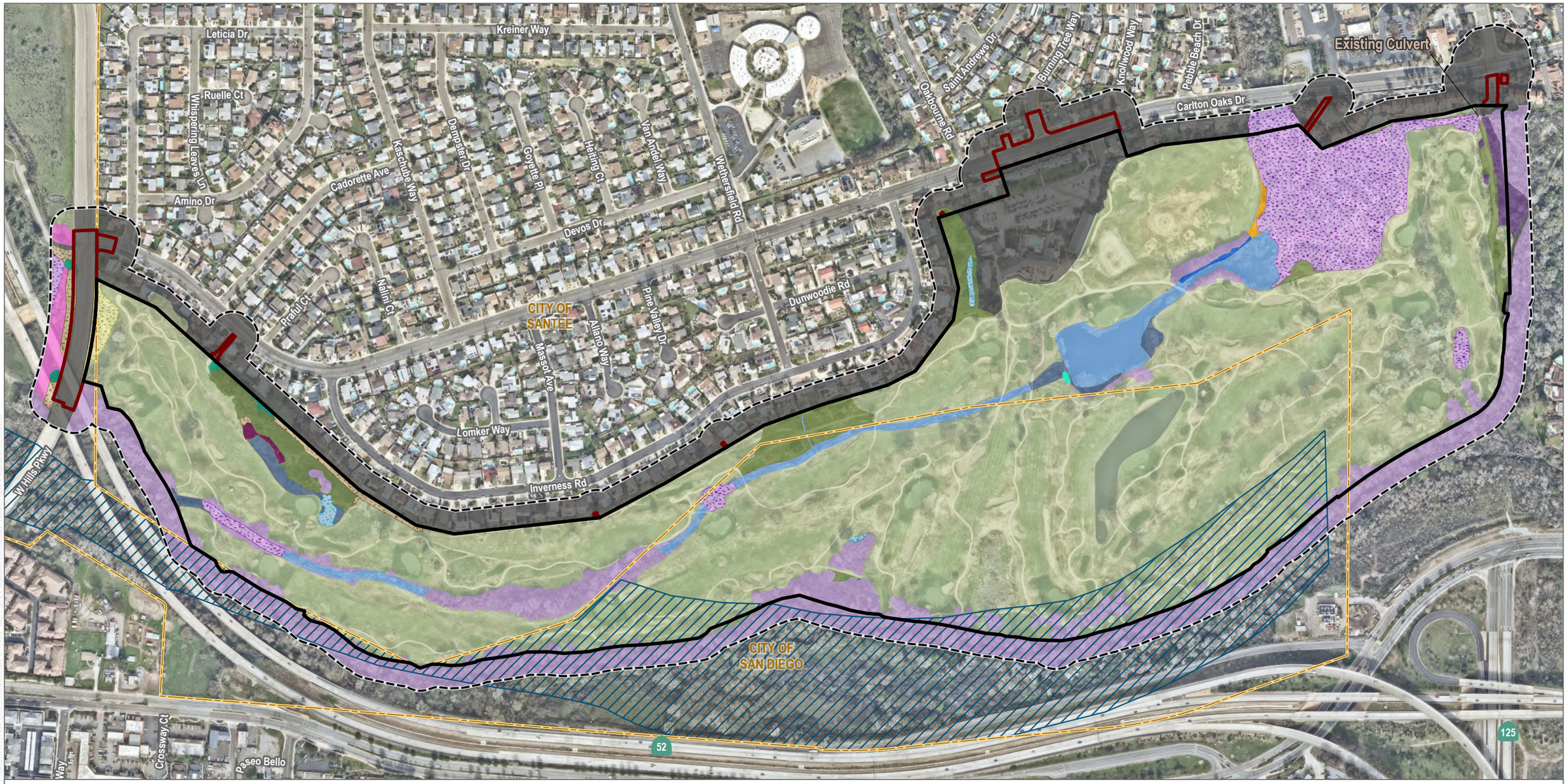

- Project Boundary
- Off-Site Work Area
- Biological Study Area
- City Boundary
- City of San Diego MHPA

Vegetation Communities and Land Cover Types

Riparian
- Mule Fat Scrub (Disturbed)
- Southern Cottonwood-Willow Riparian Forest
- Southern Cottonwood-Willow Riparian Forest (Disturbed)
- Southern Riparian Scrub
- Southern Willow Scrub
- Non-Native Riparian

Wetlands
- Coastal and Valley Freshwater Marsh
- Disturbed Wetland
- Fresh Water

Upland
- Diegan Coastal Sage Scrub (Disturbed)
- Non-Native Grassland
- Non-Native Woodland

Land Cover Types
- Developed
- Developed-Golf Course
- Developed Culvert
- Disturbed Habitat
- Eucalyptus Woodland
- Spillway

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

N

0 215 430 Feet

FIGURE 4

Vegetation Communities

Carlton Oaks Golf Course Project

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SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

N

0 220 440 Feet

FIGURE 5

Sensitive Plant Species

Carlton Oaks Golf Course Project

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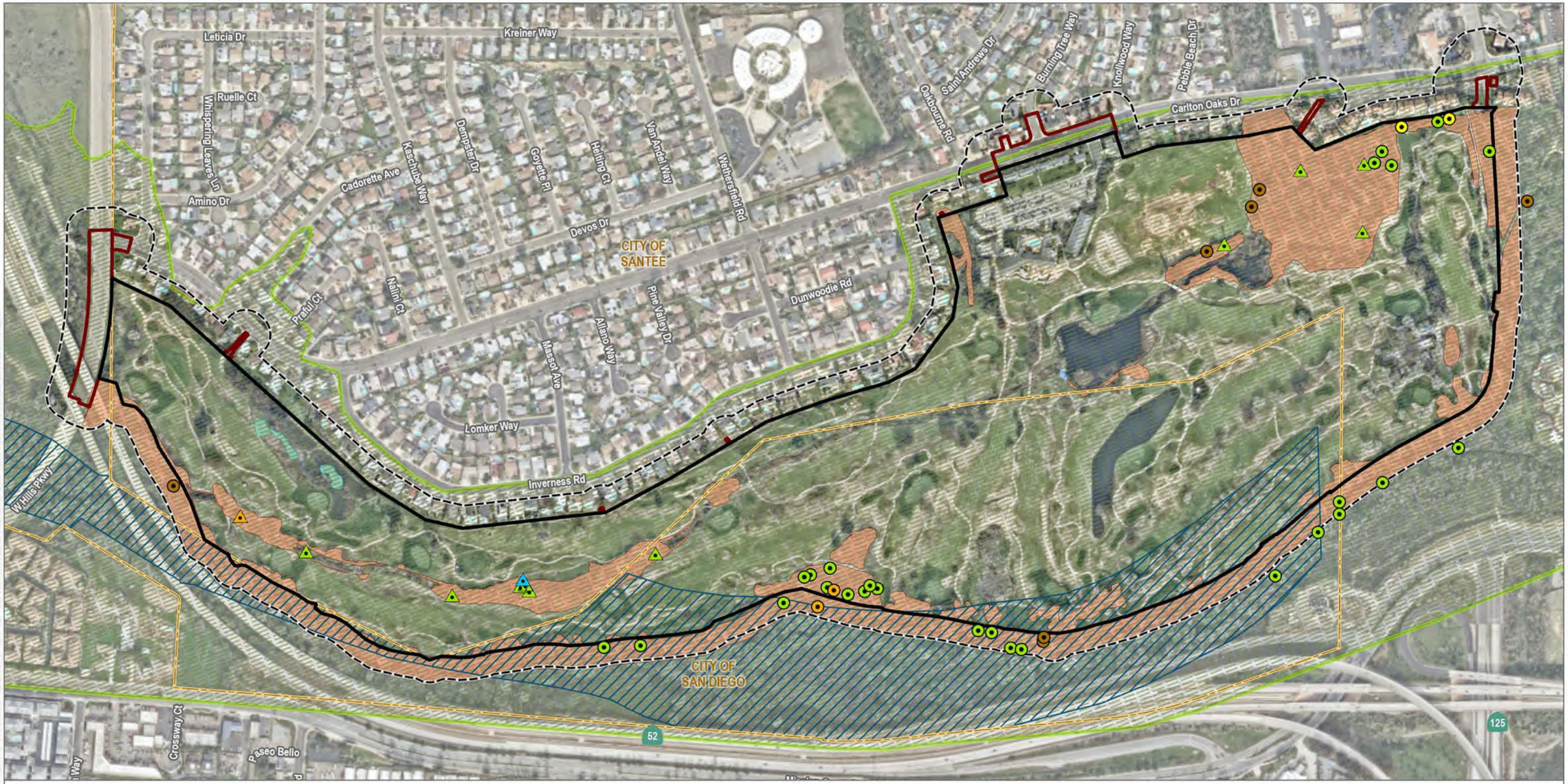

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 220 440 Feet

FIGURE 6

2019/2022 Least Bell's Vireo Survey Results

Carlton Oaks Golf Course Project

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SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 220 440 Feet

FIGURE 7

Other Sensitive Species

Carlton Oaks Golf Course Project

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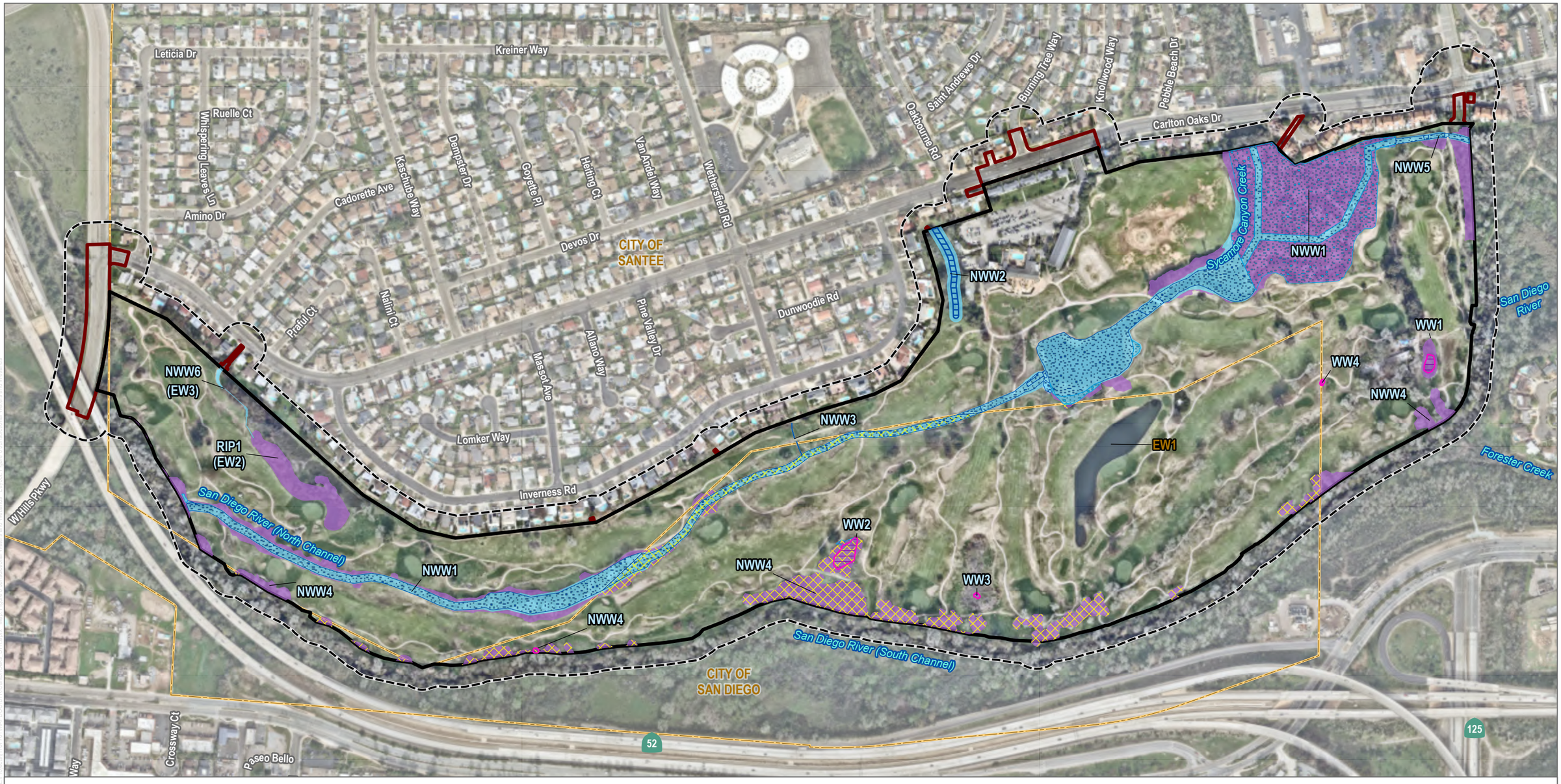

Project Boundary
Off-Site Work Area
Biological Study Area
City Boundary

Potential Jurisdictional Delineation Resources

USACE/RWQCB/CDFW
Non-Wetland Water
Wetland Water

RWQCB/CDFW
Non-Wetland Water
Wetland Water

CDFW
Riparian
Streambed

City of San Diego
Wetland

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

N

0 220 440 Feet

FIGURE 8

Jurisdictional Waters and Wetlands

Carlton Oaks Golf Course Project

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SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 237.5 475 Feet

FIGURE 9

Adjacent Lands

Carlton Oaks Golf Course Project

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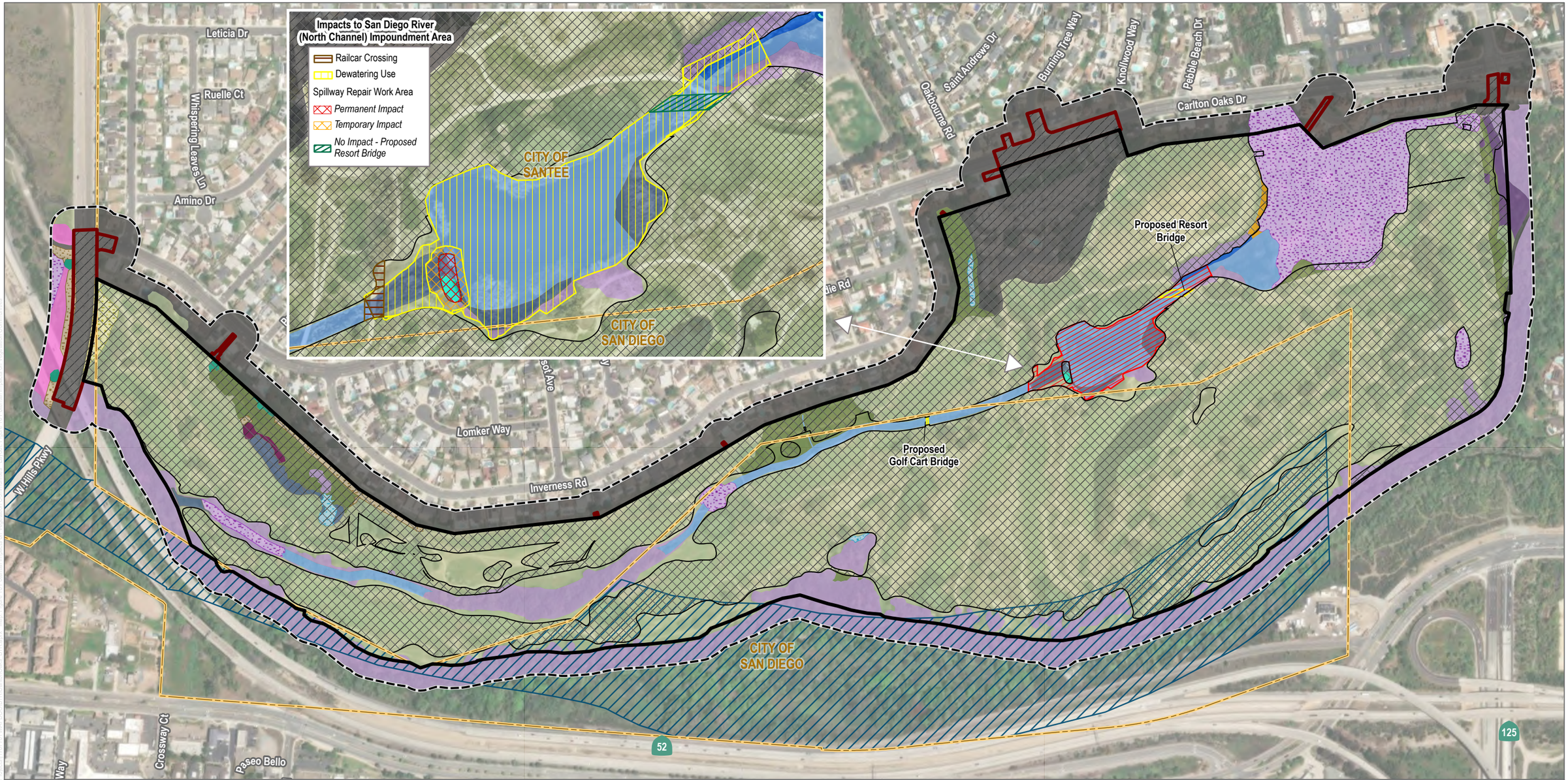

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

N

0 215 430 Feet

FIGURE 10

Potential Impacts on Vegetation Communities

Carlton Oaks Golf Course Project

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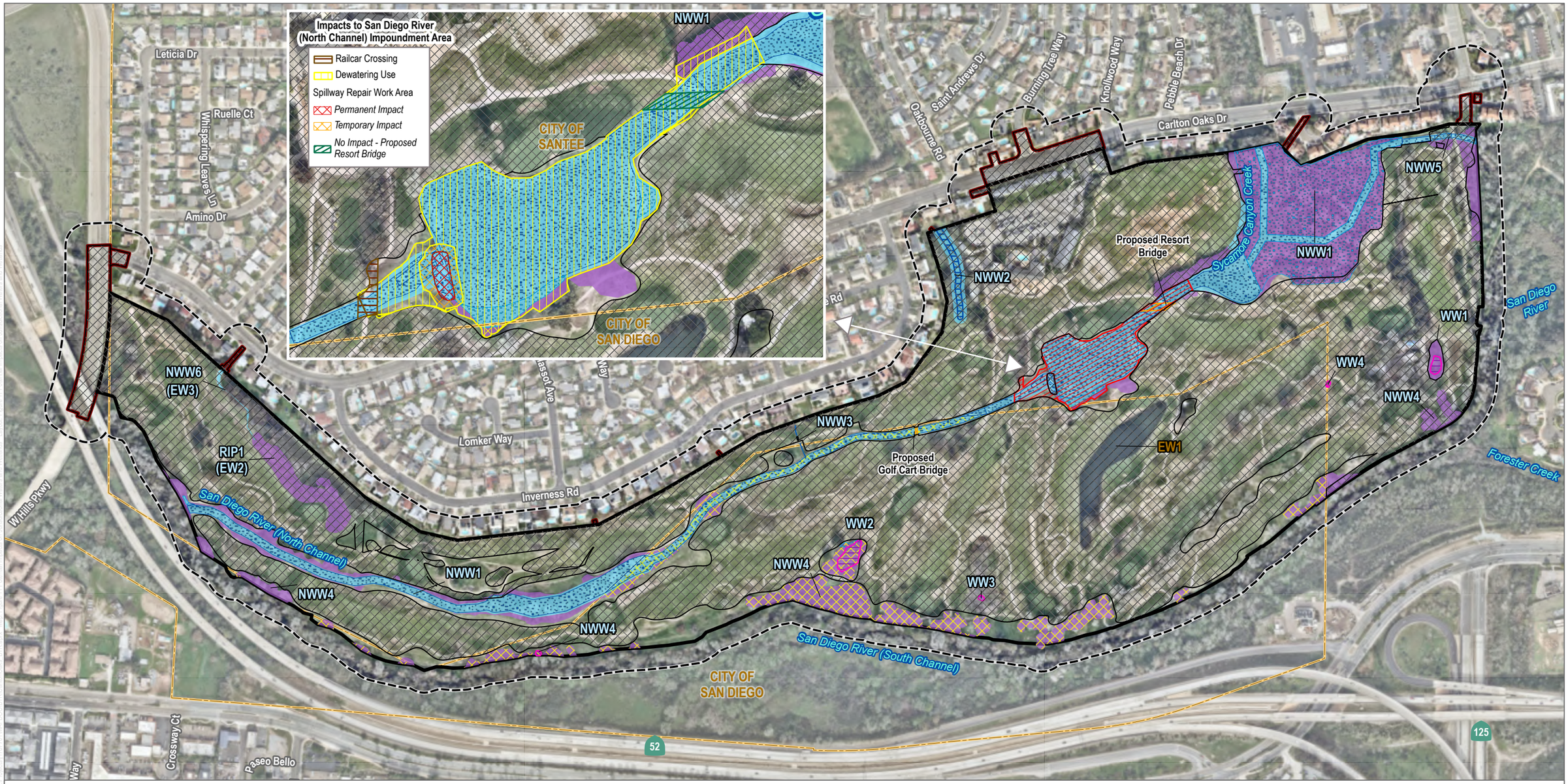

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 220 440 Feet

FIGURE 11

Potential Impacts on Jurisdictional Waters and Wetlands

Carlton Oaks Golf Course Project

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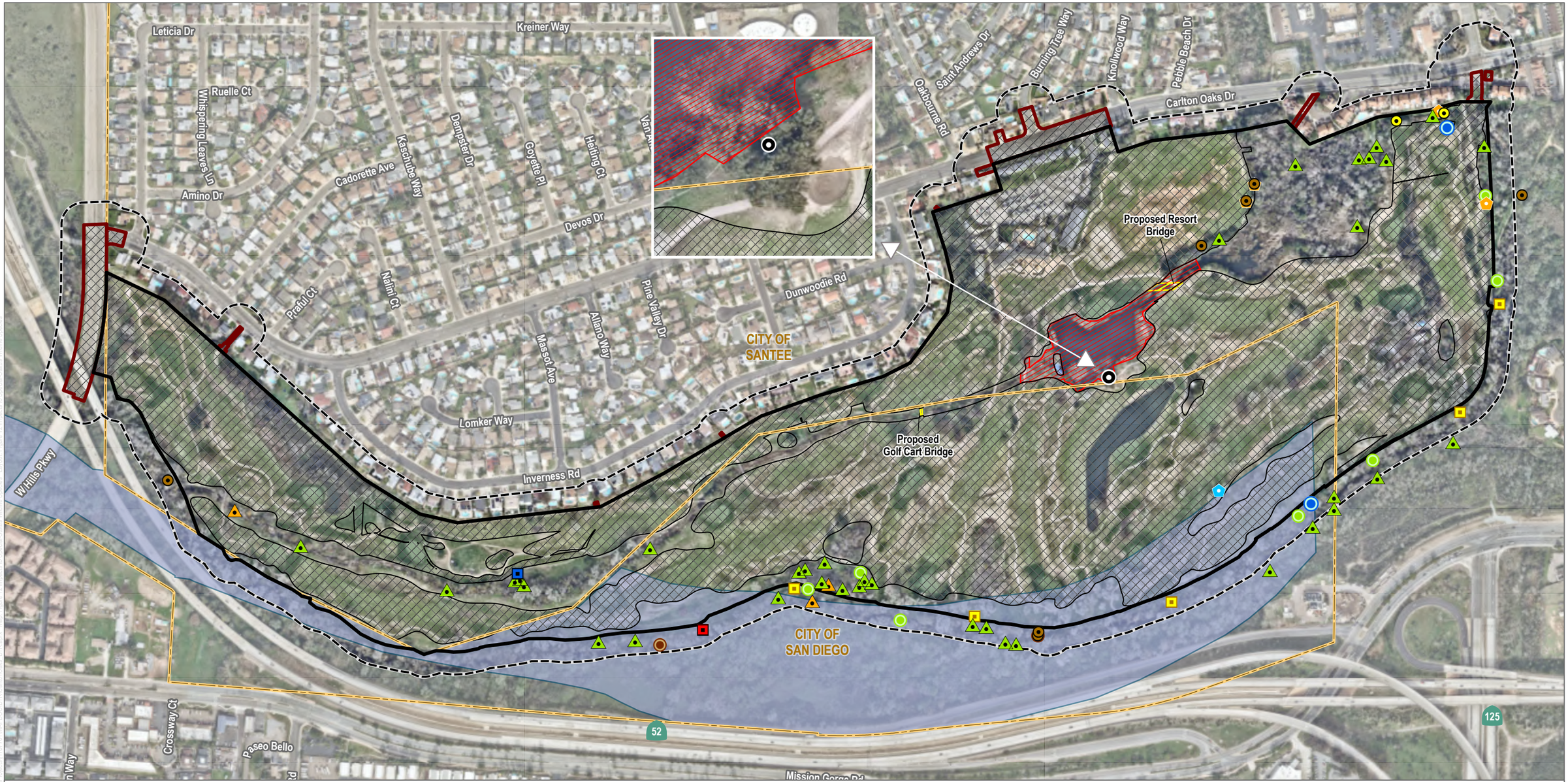

- Project Boundary
- Off-Site Work Area
- Biological Study Area
- City Boundary
- City of San Diego MHPA
- Permanent Impact
- Temporary Impact
- No Impact - Proposed Resort Bridge and Proposed Golf Cart Bridge

Least Bell's Vireo (*Vireo bellii pusillus*)

- Female
- Male
- Male with fledgling
- Pair

Other Sensitive Species

- Brown-Headed Cowbird (*Molothrus ater*)
- Cooper's hawk
- Double-crowned cormorant rookery
- Southern Mule Deer
- Western bluebird
- Yellow warbler
- Yellow-breasted chat
- Monarch Butterfly
- Vermillion Flycatcher

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 220 440 Feet

FIGURE 12

Impacts to Special-Status Wildlife Species

Carlton Oaks Golf Course Project

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Project Boundary
Off-Site Work Area
Biological Study Area
City Boundary
MSCP Biological Core

Project Trail Segment (San Diego)
Project Trail Segment (Santee)
Future San Diego River Trail Carlton Oaks Segment
Supplemental Trail Offer of Deduction (Santee)
Existing Santee Trail

Permanent Impact: Clubhouse/Hotel/Other
Permanent Impact: Residential

Wildlife Corridor
Primary Movement Corridor
Secondary Movement Corridor
Proposed Project Development in Secondary Corridor
Existing Fence at Driving Range

Vegetation Communities and Land Cover Types

Riparian
Mule Fat Scrub (Disturbed)
Southern Cottonwood-Willow Riparian Forest
Southern Cottonwood-Willow Riparian Forest (Disturbed)
Southern Riparian Scrub
Southern Willow Scrub
Non-Native Riparian

Wetlands
Coastal and Valley Freshwater Marsh
Disturbed Wetland
Fresh Water

Upland
Diegan Coastal Sage Scrub (Disturbed)
Non-Native Grassland
Non-Native Woodland

Land Cover Types
Developed
Developed-Golf Course
Developed Culvert
Disturbed Habitat
Eucalyptus Woodland
Spillway
Unmapped Riparian Corridor

SOURCE: SANGIS 2025; Open Street Map 2023

DUDEK

0 237.5 475 Feet

FIGURE 13

Wildlife Corridor Analysis

Carlton Oaks Golf Course Project

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Appendix A

Representative Site Photographs

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix B
Plant Species Observed

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix C

Animal Species Observed or Detected

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix D

Special-Status Plant Species Potential to Occur

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix E

Special-Status Animal Species Potential to Occur

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix F

2019 Western Pond Turtle Trapping Study

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix G
Coastal California Gnatcatcher Survey Reports

G-1 – 2019 Coastal California Gnatcatcher Survey Report

G-2 – 2022 Coastal California Gnatcatcher Survey Report

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix H
Least Bell's Vireo and Southwestern Willow Flycatcher Survey Reports

H-1 – 2019 Least Bell's Vireo and Southwester Willow Flycatcher Survey Report

H-2 – 2022 Least Bell's Vireo Survey Report

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix I

Updated Jurisdictional Delineation Report

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February 9, 2026 17877

Lennar Homes
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San Diego, California 92127
858.618.4942

Subject: Updated Aquatic Resources Delineation for the Carlton Oaks Country Club and Resort Project

This report has been prepared as an addendum to the previously approved Aquatic Resources Delineation Report (ARDR) for the Carlton Oaks Project prepared by ICF in September 2019 (Appendix D). In September 2025, Dudek biologists visited the Carlton Oaks site (Figures 1, 2, and 3) to evaluate a previously excluded feature as well as document any changes to existing in the ARDR prepared by ICF. While mapping remained largely the same, an additional previously un-delineated portion of the site in the northeast corner of the site was included in this delineation as well as a previously un-mapped wetland in the northwest portion of the site. Furthermore, the extents of riparian habitat have changed since 2019 and were re-delineated by Dudek.

1 Methods

The aquatic resources delineation update was conducted by Dudek biologists Megan Minter, Anna Touchstone, and Katie Dayton on within the survey area September 8, 2025 (Table 1). The survey area includes the approximate 165-acre project site and all off-site improvement areas. The project site includes the proposed hardscape development as well as the golf course redesign and avoided wetlands. The BSA is bound by residential housing to the north and by Carlton Oaks Drive on the northeast boundary. Prior to conducting the delineation, the National Wetlands Inventory (USFWS 2025) and National Hydrography Dataset (USGS 2025) were reviewed to determine if the survey area contains any previously mapped features not identified in the previous ARDR or that have changed since the previous ARDR. Site-specific topographical data was reviewed in conjunction with aerials, both current and historical, to determine the potential presence of aquatic features. Current vegetation mapping previously prepared by ICF was reviewed to assess whether the survey area supports hydrophytic vegetation and potential wetlands; several areas supporting hydrophytic vegetation were also assessed for the presence of wetland hydrology and hydric soils to determine whether they were three-parameter wetlands. Jurisdictional boundaries were mapped in the field using Esri Field Maps on a mobile device paired with a Global Navigation Satellite System (GNSS) receiver capable of sub-meter accuracy.

Table 1. Schedule of the Aquatic Resources Delineation

Date	Hours	Personnel	Conditions (temperature, skies, wind)
September 8, 2025	0830-1545	AT, KD, MM	73°F–92°F; 0% cloud cover; 0–5 mph wind; visibility: Clear; sky: Clear

Personnel: AT = Anna Touchstone; KD = Katie Dayton; MM = Megan Minter

1.1 United States Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) aquatic resources delineation was conducted in accordance with the 1987 USACE Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of

Engineers Wetland Delineation Manual: Arid West Region (USACE 2008). The delineation was conducted in accordance with the routine method using a combination of desktop analysis and fieldwork, as described in Part IV. D of the 1987 Manual. Hydrology, vegetation, and soils were assessed at representative sampling locations using the Wetland Determination Data Form to determine the presence of the three wetland parameters. Wetland sampling locations were chosen in accordance with the sampling procedures in Part IV.D of the 1987 Manual. The delineation of non-tidal wetland water bodies on the site was completed based on the presence of an ordinary high water mark (OHWM) as defined in 33 CFR Part 328.3 and 33 CFR Part 329.4 and in accordance with RGL 05-05. The National OHWM Field Delineation Manual for Rivers and Streams (USACE 2025b) was used to assist with the delineation, and the Form ENG 6250 (Rapid Ordinary High Water Mark Field Identification Data Sheet) was used to document OHWM (USACE 2025c).

1.2 Regional Water Quality Control Board

Waters of the state regulated by the Regional Water Quality Control Board (RWQCB) were mapped in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2021). As described in these procedures, wetland waters of the state are mapped based on the procedures outlined in USACE's 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008). Non-wetland waters of the state are mapped using the National OHWM Field Delineation Manual for Rivers and Streams (USACE 2025c) OHWM was documented using Form ENG 6250 (Rapid Ordinary High Water Mark Field Identification Data Sheet) was used to document OHWM (USACE 2025d).

1.3 California Department of Fish and Wildlife

Areas under the jurisdiction of the California Department of Fish and Wildlife (CDFW) were mapped to include the bank of the stream/channel and outer dripline of adjacent riparian vegetation, as set forth under California Fish and Game Code Section 1602. Streambeds under the jurisdiction of CDFW were delineated using the Cowardin method of waters classification, which defines wetlands and waters boundaries by a single parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology) (Cowardin et al. 1979).

1.4 City of San Diego

Areas under the jurisdiction of the City of San Diego were based on the definition of City wetlands described in the Environmentally Sensitive Lands Regulations (San Diego Municipal Code Section 113.0103, Definitions). According to the Environmentally Sensitive Lands Regulations, City wetlands include areas characterized by one or more of the following conditions:

1. All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodlands, riparian scrub, and vernal pools;
2. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities have removed the historic wetland vegetation or catastrophic or recurring natural events or processes have acted to preclude the establishment of wetland vegetation as in the case of salt pannes and mudflats;

3. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands; or
4. Areas mapped as wetlands on Map C-713 as shown in Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

2 Aquatic Resources Narrative

Results from 27 representative data points documented potentially USACE jurisdictional wetlands and non-wetland waters within the survey area based on observable field indicators (Table 2). The data collected at each data point and transect are provided in Appendix C. Photos of the survey area are provided in Appendix D, and the locations and direction of photos are shown on Figure 4.

Table 2. Data Point and Transect Summary

Wetland Data Point Summary				
Data Point	Wetland Determination Field Indicators	Location (Latitude/Longitude)	Determination	Associated Feature Name
SP 1.1	Hydrophytic vegetation, hydric soils, wetland hydrology	32.8430095, -117.0046898	Wetland	NWW 1
SP 1.2	None	32.84310783, -117.0046563	Upland	N/A
SP 5.1	Hydrophytic vegetation, hydric soils, wetland hydrology	32.83925433, -117.0206625	Wetland	N/A (Outside of site boundary)
SP 6.1	Hydrophytic vegetation, hydric soils, wetland hydrology	32.838481, -117.012402	Wetland	WW 2
SP 6.2	Hydrophytic vegetation	32.8392543, -117.0206625	Upland	WW 2
SP-KD-02	Hydrophytic vegetation, wetland hydrology	32.8399675, -117.02113816	Upland	N/A
SP-KD-01	Hydrophytic vegetation, wetland hydrology	32.8399675, -117.02113816	Upland	N/A
SP-KD-03	Hydrophytic vegetation, wetland hydrology	32.838062, -117.010508	Upland	N/A
SP-KD-03b	None	32.8390235, -117.0088648	Upland	N/A
SP-KD-07	None	32.8392543, -117.0206625	Upland	N/A
SP-KD-08	None	32.8383506, -117.01280383	Upland	N/A
SP-KD-01A	Hydrophytic vegetation, hydric soils, wetland hydrology	32.83925433, -117.0206625	Wetland	RIP 1
SP-KD-01B	None	32.83924416, -117.0206535	Upland	RIP 1
SP-KD-04A	Hydrophytic vegetation, hydric soils, wetland hydrology	32.8390845, -117.0088696	Wetland	EW 1
SP-KD-4B	Hydrophytic vegetation, hydric soils, wetland hydrology	32.84070783, -117.0054303	Wetland	EW 1
SP-KD-05A	Hydrophytic vegetation, hydric soils, wetland hydrology	32.8409943, -117.00381383	Wetland	WW 4

Table 2. Data Point and Transect Summary

Wetland Data Point Summary				
Data Point	Wetland Determination Field Indicators	Location (Latitude/Longitude)	Determination	Associated Feature Name
SP-KD-05B	None	32.84069316, -117.0054023	Upland	WW 4
SP-KD-06A	Hydrophytic vegetation, hydric soils, wetland hydrology	32.840956, -117.003791	Wetland	WW 1
SP-KD-06B	Hydrophytic vegetation	32.84095883, -117.003781	Upland	WW 1
WSP-MSM-01	Hydrophytic vegetation, hydric soils, wetland hydrology	32.839115, -117.0221903	Wetland	NWW 1
WSP-MSM-02	None	32.8391826, -117.0220088	Upland	NWW 1
WSP-MSM-03	None	32.83810783, -117.01719516	Upland	N/A
WSP-MSM-04	Hydrophytic vegetation, wetland hydrology	32.837884, -117.0170306	Upland	N/A
WSP-MSM-05	Hydrophytic vegetation	32.843125, -117.004628	Upland	N/A
WSP-MSM-06	Hydrophytic vegetation, hydric soils, wetland hydrology	32.843203, -117.004722	Wetland	NWW 1
WSP-MSM-07	Hydrophytic vegetation	32.842442, -117.010923	Upland	N/A
WSP-MSM-08	None	32.842382, -117.010991	Upland	N/A

2.1 Waters of the United States (USACE)

Approximately 8.53 acres of non-wetland waters and 7.20 acres of wetlands potentially regulated by USACE as waters of the United States are present in the survey area (Figure 4, Preliminary Aquatic Resources Delineation – USACE). Table 3 provides a summary of aquatic resources delineated as waters of the United States in the survey area, including Cowardin type (Cowardin et al. 1979; USACE 2025), location, and acreage/linear feet within the survey area. This table also includes a column that specifies whether or not a certain feature was originally identified in ICF's delineation report. A copy of the ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet is not submitted with this ARDR because Table 3 provides all of the information requested. GIS files are provided electronically.

Table 3. USACE Aquatic Resource Summary for the Survey Area

Feature Name[1]	Cowardin Code[2]	Location (Latitude/ Longitude; Decimal Degrees)	Non-Wetland Waters (Acres)	Wetland Waters (Acres)	Average Width (feet)
Non-Wetland Waters					
NWW-1	R3UBH	32.83964, -116.993934	8.42	7.17	35

Table 3. USACE Aquatic Resource Summary for the Survey Area

Feature Name[1]	Cowardin Code[2]	Location (Latitude/ Longitude; Decimal Degrees)	Non-Wetland Waters (Acres)	Wetland Waters (Acres)	Average Width (feet)
Non-Wetland Waters					
NWW-3	—	32.839965, -117.013193	0.01	0	6
NWW-5	PFOAx	32.843842, -117.003612	0.09	0	16
		Total[3]	8.53	7.20	—

Notes: USACE = U.S. Army Corps of Engineers; NWW = non-wetland water; R3UBH = riverine, upper perennial, unconsolidated bottom, permanently flooded; PFOAx = palustrine, forested, temporarily flooded, unknown water regime.

1 ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both non-wetland waters and wetlands.

2 Pursuant to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979) and USACE Cowardin Codes for ORM Data Entry (USACE 2026e).

3 Totals may not sum due to rounding.

Non-Wetland Waters

Historically, the San Diego River flowed from east to west across what is now the existing golf course. A confluence with Sycamore Creek was present in the northeast corner of the now golf course. During the 1960s, the San Diego River was redirected to flow south and along the southern edge of the golf course. The San Diego River (North Channel) now flows from east to west across the existing golf course beginning the northeast corner at Sycamore Creek and flowing into the new confluence with the San Diego River in the southwest corner of the golf course. A very small portion of flow from the San Diego River still enters the course in the northeast corner and flows through a culvert and into Sycamore Creek.

Drainage – Perennial (NWW 1)

NWW 1 is an intermittent segment of San Diego River (North Channel) and Sycamore Canyon Creek that is likely regulated by the USACE, RWQCB, and CDFW, and portions within the City of San Diego would be considered City of San Diego ESL Wetlands. NWW 1 is tributary to the San Diego River (South Channel) and has been manipulated due to the construction of the golf course. Prior to construction of the golf course, NWW 1 was the historic main channel of the San Diego River, but the San Diego River main channel was diverted south of the berm along the east and south side of the survey area. The lateral limits of NWW 1 are clearly defined by bed and bank, clear break in slope, and change in vegetation cover and species (Appendix C). NWW 1 flows northeast to southwest across the survey area and contains sections of unvegetated non-wetland waters and vegetated non-wetland waters; no adjacent waters or wetlands (outside of the OHWM) were observed. Within the delineation area, NWW 1 is dominated by southern cattails (*Typha domingensis*, OBL) with sections supporting patches of arroyo willow, red willow, cottonwood, and palms. A large in-line pond has also been constructed within the feature (Figure 4, Jurisdictional Waters and Wetlands) and an approximately 60-foot-long concrete and riprap-lined dam/spillway occurs directly downstream of this pond. Near the downstream segment of the delineated feature (Figure 4, Jurisdictional Waters and Wetlands), the river is not as constrained, allowing for a larger active floodplain supporting an understory of yerba mansa (*Anemopsis californica*, OBL) and curly dock (*Rumex crispus*, FAC) and an overstory of willows and cottonwood. NWW 1 within the survey area is a perennial stream that contains a continuous surface connection to the San Diego River. The San Diego River is a perennial stream that contains a continuous surface connection to the Pacific Ocean, a Traditionally Navigable Water (TNW).

Drainage – Intermittent (NWW 3)

NWW 3 is a small, intermittent channel that flows from a storm drain outlet from the housing development on the north side of the golf course. NWW-3 flows south through a culvert under a dirt access road on the golf course and directly into Sycamore Creek (NWW 1). The average width of the OHWM is three feet and it is defined by vegetation matting and scour. The average bank to bank width is 6 feet and bank height is approximately 3 feet. The channel bottom is unvegetated; however, the banks support scattered palms and are dominated by ripgut brome (*Bromus diandrus*), ragweed, and short-pod mustard.

Drainage – Intermittent (NWW 5)

NWW 5 is an intermittent stream channel located at the northeastern-most end of the survey area. It flows from east to west and eventually into NWW 1. NWW 5 is subject to USACE, RWQCB, and CDFW jurisdiction (Figure 4). It is densely vegetated with cattails and a mix of other riparian vegetation including willows and Freemont's cottonwood. There is an existing culverted road crossing that is approximately 16 feet wide under a golf course access road where NWW 5 flows.

2.2 Waters of the State (RWQCB)

All of the features described in Section 2.1, Waters of the United States, have been identified as waters of the state. In addition, four wetlands and two non-wetland waters present in the survey area are also subject to RWQCB jurisdiction. These features are subject to regulation by the RWQCB under the Porter–Cologne Water Quality Control Act. Table 4 lists all features within the survey area that are subject to RWQCB regulation. In total, 8.76 acres of non-wetland waters, and 7.44 acres of wetland waters are subject to RWQCB jurisdiction. Figure 4, Jurisdictional Waters and Wetlands visually depicts the boundaries of waters of the state under the jurisdiction of the RWQCB within the survey area.

Table 4. RWQCB Aquatic Resource Summary for the Survey Area

Feature Name[1]	Location (Latitude/Longitude; Decimal Degrees)	Non-Wetland Water (Acres)	Wetland (Acres)
Non-Wetland Waters			
NWW 1	32.839640, -116.993934	8.42	7.17
NWW 2	32.842134, -117.010966	0.23	0.00
NWW 3	32.839965, -117.013193	0.01	0.00
NWW 4	32.838093, -117.020976	0.00	0.01
NWW 5	32.843842, -117.003612	0.09	0.00
	Non-Wetlands Subtotal	*8.75*	*7.18*
Wetlands			
WW 1	32.841021, -117.003843	0.00	0.05
WW 2	32.838435, -117.012494	0.00	0.20
WW 3	32.838205, -117.010509	0.00	0.01
WW 4	32.840659, -117.005459	0.00	0.01
	Wetlands Subtotal	*0.00*	*0.27*
	Total[2]	**8.76**	**7.44**

Notes: RWQCB = Regional Water Quality Control Board; NWW = non-wetland water; WW = wetland water; CUL = culvert

[1] ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both non-wetland waters and wetlands.

[2] Totals may not sum due to rounding.

Drainage — Intermittent (NWW-2)

NWW 2 was originally mapped by ICF as an intermittent stream, likely subject to USACE, RWQCB, and CDFW jurisdiction, that flows north to south, draining into NWW 1. This feature begins at a storm drain outfall located off of Carlton Oaks Drive. This feature is also channelized by an existing housing development to the west and the existing golf course parking lot to the east (Figure 4). Lateral limits of NWW 2 were delineated based on a clear break in slope and changes in vegetation cover and species. This feature is dominated by Brazilian peppertrees (*Schinus terebinthifolia*, NL), southern cattails, and willows within the active floodplain while the banks are dominated by highway iceplant (*Carpobrotus edulis*, NL). This feature flows into a large culvert, which is assumed to outlet into NWW 1 (located 200 feet south of this feature); however, the outlet within NWW 1 could not be located at the time of the ICF delineation or Dudek delineation. This culvert does not provide a continuous surface connection to NWW 1. Therefore, NWW 2 does not connect to a TNW and would not be considered USACE jurisdictional. NWW 2 was considered USACE jurisdictional by ICF under previous federal regulations. However, in response to the Sackett v. EPA (2023) Supreme Court (Court) ruling, the revised Clean Water Rule adopted in 2023 would now exclude NWW 2 from federal jurisdiction, reflecting the Court's narrowed interpretation of federal authority over aquatic resources. Therefore, this feature is no longer considered USACE jurisdictional as waters of the United States. This feature is, however, subject to RWQCB and CDFW jurisdiction.

Drainage — Perennial (NWW-4)

Non-Wetland Water 4 (San Diego River [South Channel]) is associated riparian habitat to the San Diego River (South Channel), with a small portion under RWQCB jurisdiction. No OWHM indicators or hydrology indicators were observed at this location. A 10- to 12-foot-tall berm occurs outside of the golf course between the San Diego River (South

Channel), separating small riparian patches occurring on the golf course from the riparian areas associated with this feature. Willows and other riparian-associated vegetation exist north of the berm within the limits of the golf course in the south-central portion of the project site. These areas were mapped within the vegetation layer as southern cottonwood-willow riparian forest. These areas are separated from normal overflow of the San Diego River (South Channel) by the tall berm, but may be inundated by flooding from Sycamore Canyon Creek or from extreme flow events associated with the San Diego River (North Channel). The cottonwoods and willows are able to persist because of the elevated water table associated with the perennial San Diego River (South Channel).

Wetlands

Wetland (WW-1)

Wetland Water (WW) 1 is a depressional wetland (Figure 4) that is located approximately 400 linear feet from the San Diego River (South Channel) and approximately 800 linear feet from the OHWM of NWW 1. Additionally, WW 1 is located within the FEMA-mapped 100-year floodplain. This wetland is dominated by Gooding's willow (Salix gooddingii, FACW), tree tobacco (*Nicotiana glauca*, FAC), and bulrush (*Schoenoplectus californicus*, OBL). Ponded water occurs within this area; however, no inlet or outlet structure was observed. Due to the location of a maintenance facility directly adjacent to this area, irrigation water may be drained into this area, allowing it to persist over time and causing wetland conditions. Soils were observed to have a hydrogen sulfide odor. This feature would likely fall under RWQCB jurisdiction as a wetland waters of the state and CDFW jurisdiction as riparian habitat. WW 1 does not contain a continuous surface connection to a TNW and would likely not fall under USACE jurisdiction.

Wetland (WW-2)

WW 2 is a depressional wetland (Figure 8) that is located approximately 225 linear feet from the San Diego River and approximately 425 linear feet from the OHWM of NWW 1. WW 2 is located within the FEMA-mapped 100-year floodplain. This depressional wetland had several inlet structures diverting irrigation water into this area, which is allowing this area to persist. The center of the depression supports bulrush, while the edges support willows and mule fat. Soils exhibited redox depressions and a depleted matrix. A portion of this feature would likely fall under RWQCB jurisdiction as a wetland waters of the state and CDFW jurisdiction as riparian habitat. WW 2 does not contain a continuous surface connection to a TNW and would likely not fall under USACE jurisdiction.

Wetland (WW-3)

WW 3 is an isolated, depressional wetland (Figure 4) that is located within the developed-golf course approximately 200 linear feet north of the San Diego River (South Channel) and approximately 800 linear feet from the OHWM of NWW 1. WW 3 is located within the FEMA-mapped 100-year floodplain; however, due to a broken irrigation pipe directly adjacent to this area, irrigation water may be draining into this area, allowing it to persist over time and causing wetland conditions. Saturated soils occur within this area; however, no ponded water or inlet or outlet structure was observed during the Dudek field survey. This wetland is dominated by spikerush (*Eleocharis macrostachya*, NI) and common spikerush (*Eleocharis palustris*, OBL). Soils exhibited a depleted matrix. This feature would likely fall under RWQCB jurisdiction as a wetland water of the state and CDFW jurisdiction as riparian habitat. WW 3 does not contain a continuous surface connection to a TNW and would likely not fall under USACE jurisdiction.

Wetland (WW-4)

WW 4 is a depressional wetland (Figure 4) that is located within the developed-golf course approximately 550 linear feet north of the San Diego River (South Channel) and approximately 515 linear feet from the OHWM of NWW 1. WW 4 is located within the FEMA-mapped 100-year floodplain. Saturated soils occur within this area; however, no ponded water or inlet or outlet structure was observed. WW 4 is likely present due to an adjacent broken irrigation pipe allowing irrigation water to pool in this area and create wetland conditions. The area was dominated by Bermuda grass (*Cynodon dactylon*, FACU), fat hen (*Atriplex prostrata*, FACW), tree tobacco, and Gooding's willow Soils exhibited a depleted matrix. This feature would likely fall under RWQCB jurisdiction as a wetland waters of the state and CDFW jurisdiction as riparian habitat. WW 4 does not contain a continuous surface connection to a TNW and would likely not fall under USACE jurisdiction.

2.3 CDFW Jurisdiction

Approximately 26.97 acres of aquatic resources in the survey area are anticipated to be subject to CDFW jurisdiction: 10.65 acres of streambed and 16.32 acres of riparian area, as shown in Table 5 (Figure 4, Potential Jurisdictional Aquatic Resources). All of the features described in Section 2.1 are also CDFW jurisdictional. In addition, CDFW regulates streambed to the top of bank and adjacent riparian vegetation communities.

Table 5. CDFW Aquatic Resource Summary for the Survey Area

Feature Name[1]	Location (Latitude/Longitude; Decimal Degrees)	Streambed (Acres)	Riparian (Acres)
NWW 1	32.839640, -116.993934	9.82	9.46
NWW 2	32.842134, -117.010966	0.61	0.00
NWW 3	32.839965, -117.013193	0.01	0.00
NWW 4	32.838093, -117.020976	0.00	4.29
NWW 5	32.838093, -117.020976	0.00	4.31
NWW 6	32.840517, -117.021626	0.14	0.67
WW 1	32.841021, -117.003843	0.00	0.23
WW 2	32.838435, -117.012494	0.00	0.48
WW 3	32.838205, -117.010509	0.00	0.01
WW 4	32.840659, -117.005459	0.00	0.01
RIP 1	32.839562, -117.008978	0.00	1.18
	Total[2]	10.65	16.32

Notes: CDFW = California Department of Fish and Wildlife; NWW = non-wetland water; WW = wetland water; RIP = riparian habitat.

1 ICF's feature labels were retained as much as possible during the Dudek aquatic resource mapping to preserve continuity between documents. Therefore, a feature labeled NWW may include both streambed and riparian habitat.

2 Totals may not sum due to rounding.

Riparian Vegetation (RIP-1)

RIP-1 is a dense patch of riparian vegetation located at the terminus of NWW 6 beyond the top of bank. NWW 6 flows out of a storm drain under Carton Oaks Drive, onto the golf course and dissipates into RIP-1. This community is dominated by willows, broad-leaved cattails (*Typha latifolia*, OBL), bulrush (*Schoenoplectus* spp.,

OBL), Fremont's cottonwood (*Populus fremontii*), and eucalyptus. This riparian vegetation is contained within a constructed golf course pond that has overgrown.

2.4 City of San Diego ESL Wetlands

City of San Diego ESL regulations have protections for wetlands. City of San Diego Municipal Code Chapter 11, Article 3, Division 1 includes the following wetland definition: "Wetlands are defined as areas which are characterized by any of the following 1) All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to … riparian forest … riparian woodlands, riparian scrub…." Therefore, the majority of the jurisdictional habitats within the survey area within the City of San Diego are considered City of San Diego Environmentally Sensitive Lands (ESL) wetlands. Within the survey area, the City of San Diego wetlands total 5.76 acres, as summarized in Table 6.

Table 6. City of San Diego Wetlands Summary for the Survey Area

Feature Name	Location (Latitude/ Longitude; Decimal Degrees)	City of San Diego Wetlands (Acres)
NWW 1	32.83964, -116.993934	1.83
NWW-3	32.839965, -117.013193	0.01
NWW 4	32.843842, -117.003612	3.45
WW 2	32.838435, -117.012494	0.48
	Total[1]	**5.76**

Notes: NWW = non-wetland water; WW = wetland water.
[1] Totals may not sum due to rounding.

2.5 Excluded Water Features

Excluded Waters (EW 1, EW 2, EW 3)

In addition to the mapped jurisdictional aquatic resources described above, two managed golf course ponds and one concrete v-ditch were identified as potential aquatic resources during the ICF desktop delineation. These features were evaluated for USACE, RWQCB and/or CDFW jurisdiction and determined at that time not to be potential aquatic resources pursuant to Sections 404 and 401 of the CWA, the Porter-Cologne Act, and Section 1602 of the California Fish and Game Code. Specifically, the two managed golf course ponds and concrete v-ditch were determined to be human-made, ornamental waters created on dry land for primarily aesthetic reasons for the existing golf course. The concrete V-ditch and western golf course pond (EW 2 and EW 3 as described in the ICF delineation report Appendix I and shown on Figure 4 receive urban runoff and stormwater runoff originating from the northern residential development. As determined by ICF, the human-made v ditch and western golf course pond are not an aquatic resource as they are not a relocated tributary, excavated in a tributary, or drained wetlands as historical aerials do not show a tributary previously existing over the area. Additionally, EW 1 (Figure 4) is filled with non-potable water and is used to irrigate the golf course grounds. Representative photos were taken of these areas by ICF and historical aerial imagery evaluated to provide further support and documentation as to why they were not considered jurisdictional. The USACE issued an Approved Jurisdictional Determination on June 19, 2020, determining that waters of the U.S. are not present within the EW-1, EW-2, and EW-3 (Appendix D).

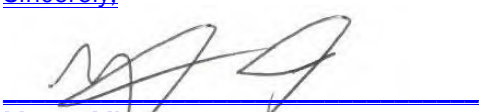
Historical aerials reviewed by ICF confirmed the three features were constructed in dry land. Prior to the construction of the golf course the San Diego River was leveed and re-routed to the south of the proposed survey area in the 1960s. This converted the majority of the survey area, including the areas inclusive of EW1, EW2, and EW3, to uplands (Appendix D: Attachment 1: Figure 1), and the surrounding area began to develop with residential homes and the golf course. The excluded waters were constructed into golf course ponds and the concrete v-ditch in the 1980s, where the site had been upland habitat since the re-routing of the San Diego River.

Per the 2015 Clean Water Rule (33 CFR 328.3(b)(4)(ii)), which was the guidance in place at the time of the ICF delineation, artificial, constructed lakes and ponds created in dry land are excluded by rule. Both the golf course ponds (EW 1 and EW 2) met this definition and were therefore, not considered "waters of the United States". Likewise, and in accordance with 33 CFR 328.3(b)(3) the concrete v-ditch (EW3) is a ditch that carries ephemeral flows and is not a relocated tributary and was not constructed in a tributary as determined by ICF. Thus, EW 3 is not considered a "waters of the United States". As previously mentioned, an Approved Jurisdictional Determination from the USACE was obtained confirming that CWA jurisdiction does not exist over the excluded waters (i.e., EW 1, EW 2, and EW 3) (Appendix E).

Dudek conducted a site visit with CDFW and RWQCB on October 21, 2025 to review on-site aquatic resources and to discuss potential jurisdiction. It was determined during CDFW's desktop review prior to the site visit that EW 3 (Feature NWW 6 in Dudek mapping shown on Figure 4) originates from a drainage visible on 1950s historic aerial imagery, prior to the construction of the housing development to the north of the golf course. This drainage was piped under the housing development when the development was constructed and now the drainage outlets onto the golf course as EW 3 (Feature NWW 6 in Dudek mapping shown on Figure 4). EW 3 (Feature NWW 6 in Dudek mapping shown on Figure 4) flows directly into EW 2 (RIP 1 in Dudek mapping shown on Figure 4), a riparian area containing freshwater marsh, southern willow scrub, and southern cottonwood-willow riparian forest. It was determined at the site visit that EW 2 and EW 3 (Features RIP 1 and NWW 6 in Dudek mapping shown on Figure 4) would be considered CDFW jurisdictional based on subsequent input from CDFW following the October 2025 site visit. EW 2 and EW 3 are built structures that are currently used and maintained for the purposes of golf course irrigation, detention of stormwater, and aesthetics and would not be the subject of RWQCB jurisdiction.

In summary, five features now fall under CDFW jurisdiction that were previously not delineated or not considered jurisdictional by ICF. These features include two previously undelineated wetlands (WW 3 and WW 4), two wetlands that were previously not included in CDFW jurisdiction (WW 1 and WW 2) and excluded waters previously not included in CDFW jurisdiction (EW 2 and EW 3). Two wetlands not previously delineated (WW 3 and WW 4) and a portion of NWW 4 are also newly included in RWQCB jurisdiction. NWW 2 was previously included in USACE jurisdiction by ICF, but is now excluded due to the lack of a relatively-permanent surface connection to a traditionally navigable water.

Sincerely,



Megan Minter
Biologist III

Att.: A. Figures
B. Photo Exhibit
C. Data Forms
D. ICF Jurisdictional Delineation Report
E. 2020 Approved Jurisdictional Determination

References

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31. Prepared for U.S. Fish and Wildlife Service. December 1979. Reprinted 1992. https://www.epa.gov/sites/default/files/2017-05/documents/cowardin_1979.pdf

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USACE. 2025a. Recommended Minimum Standards for Aquatic Resource Delineation Reports. U.S. Army Corps of Engineers. July 2025. https://www.saw.usace.army.mil/Portals/59/siteimages/Public%20Affairs/regulatory/ARDR%20Recommended%20Minimum%20Standards-21JUL25.pdf.

USACE. 2025b. National OHWM Field Delineation Manual for Rivers and Streams. U.S. Engineer Research and Development Center. January 2025. https://hdl.handle.net/11681/49526.

USACE. 2025c. Form ENG 6250 (Rapid Ordinary High Water Mark Field Identification Data Sheet)

Attachment A

Figures

SOURCE: USGS National Map 2026

La Mesa Quadrangle - Township 15S Range 1W Section 29, 30

DUDEK

0 900 1,800 Feet

FIGURE 1

Regional Location

Carlton Oaks Golf Course Project

Attachment B

Photo Exhibit

Photo 1. View of riparian habitat along NWW 4. This riparian habitat is adjacent to the golf course and is considered CDFW jurisdictional.

Photo 2. View of NWW 1 from within the channel just upstream of confluence with the San Diego River.

Photo 3. Upstream view of NWW 1 and associated riparian vegetation from the lower portion of the drainage, just upstream of the confluence with the San Deigo River,

Photo 4. View of riparian vegetation RIP-1 and EW 3. RIP-1 is CDFW jurisdictional and present at the end of NWW 6

Photo 5. Overview of dense riparian vegetation within NWW 1. Photo is located where NWW 1 contains a wide flat floodplain.

Photo 6. Riparian vegetation along the southern project boundary associated with San Diego River.

Photo 7. Upstream view of NWW 3 which flows south into NWW 1.

Photo 8. Downstream view of NWW 1 from just below the impoundment. The stream contains dense vegetation.

Photo 9. View of dense vegetation with WW 2.

Photo 10. Riparian area along the southern project boundary. A berm separates the San Deigo River from the golf course in this location.

Photo 11. View of NWW 2. This drainage is densely vegetated with Brazilian pepper trees.

Photo 12. View of concrete spillway of dam that creates the in line pond in NWW 1.

Photo 13. View of in line pond created within NWW 1.

Photo 14. View of dense riparian vegetation along NWW 1 .

Photo 15. Downstream view of NWW-5 prior to the confluence with NWW 1.

Photo 16. View of dense riparian vegetation and water within NWW 1 upstream of the in line pond.

Attachment C

Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp 1.1
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): river terrace | Local relief (concave, convex, none): concave | Slope (%): 0
Subregion (LRR): C | Lat: 32.8430095 | Long: -117.00468983 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: PFOAx
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ____
Are Vegetation No, Soil No, or Hydrology No 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: Pit taken within edge of dense riparian corridor between NWW1 and NWW5

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1. *Typha latifolia* / Broadleaf cattail, Broad-leaved cattail	50	Yes	OBL
2. *Salix lasiolepis* / Arroyo willow	30	Yes	FACW
3.			
4.			
5.			
	80	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Vitis californica* / California wild grape	75	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	75	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= 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: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	155 (A)		410 (B)

Prevalence Index = B/A = 2.65

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: sp 1.1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	10YR 2/1	95	5YR 5/6	5	C	M	Silt	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

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)
- X 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 X No ___ Depth (inches): 4

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-1.2
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): none | Slope (%): 0
Subregion (LRR): C | Lat: 32.84310783 | Long: -117.00465633 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____	No X	**Is the Sampled Area within a Wetland?**	Yes ____	No X
Hydric Soil Present?	Yes ____	No X			
Wetland Hydrology Present?	Yes ____	No X			

Remarks: Upland point to sp-1.1

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Cynodon dactylon* / Bermuda grass	75	Yes	FACU
2. *Ambrosia psilostachya* / Ragweed, Western ragweed	25	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤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 ____ No X

Remarks:

SOIL

Sampling Point: sp-1.2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	10YR 3/4	100					Loam	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks:

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)
- ___ 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 ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp 5.1
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): none | Slope (%): 0
Subregion (LRR): C | Lat: 32.83925433 | Long: -117.0206625 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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: Point taken in a low basin-like feature separated from the adjacent riverine feature by a berm.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Typha domingensis* / Cattail, Southern cattail	70	Yes	OBL
2. *Ludwigia peploides* / Marsh purslane	20	Yes	OBL
3. *Oenothera elata* / Evening primrose	5	No	FACW
4. *Xanthium strumarium* / Cocklebur	5	No	FAC
5.			
6.			
7.			
8.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 0 % 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: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	5	x 2 =	10
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		115 (B)

Prevalence Index = B/A = 1.15

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: sp 5.1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/1	100					Silt	

[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)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

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)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- X 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)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 0

Water Table Present? Yes ___ No X Depth (inches): 1

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 1

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp 6.1
Investigator(s): Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 0
Subregion (LRR): C | Lat: 32.838481 | Long: -117.012402 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: PEM1A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ____
Are Vegetation No, Soil No, or Hydrology No 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: Pit taken within ICF WW2. Feature is emergent wetland surrounded by shrub-scrub wetland/riparian

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1. *Salix lasiolepis* / Arroyo willow	10	Yes	FACW
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Schoenoplectus californicus* / California bulrush, Southern bu	75	Yes	OBL
2. *Vitis californica* / California wild grape	25	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 0 % 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: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	25	x 4 =	100
UPL species	0	x 5 =	0
Column Totals:	110 (A)		195 (B)

Prevalence Index = B/A = 1.77

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: sp 6.1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	10YR 4/2	95	2.5YR 4/6		C	M	Sndy Clay Lm	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

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)
- X 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 X No ___ Depth (inches): 0

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp 6.2
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 5
Subregion (LRR): C | Lat: 32.83925433 | Long: -117.0206625 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks: Upland point to sp 6.1 and DP-KD-08

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1. *Baccharis salicifolia* / Mule fat	20	Yes	FAC
2.			
3.			
4.			
5.			
	20	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Distichlis spicata* / Salt grass	60	Yes	FAC
2. *Hirschfeldia incana* / Mustard	30	Yes	NI
3. *Melilotus officinalis* / Yellow sweetclover	5	No	FACU
4.			
5.			
6.			
7.			
8.			
	95	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 5 % Cover of Biotic Crust 0

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: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	80	x 3 =	240
FACU species	5	x 4 =	20
UPL species	30	x 5 =	150
Column Totals:	115 (A)		410 (B)

Prevalence Index = B/A = 3.57

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
___ Prevalence Index ≤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: sp 6.2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	10YR 3/3	100					Sandy Loam	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compaction

Depth (inches): 12

Hydric Soil Present? Yes ___ No X

Remarks:

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)
- ___ 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): 0

Water Table Present? Yes ___ No X Depth (inches): 1

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 1

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No signs of hydrology.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-01a
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): | Local relief (concave, convex, none): none | Slope (%): 0
Subregion (LRR): C | Lat: 32.83925433 | Long: -117.0206625 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: PUBHx
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No 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: Point taken in concrete-lined channel artificially bermed.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1. *Schoenoplectus californicus* / California bulrush, Southern bu	60	Yes	OBL
2. *Ludwigia peploides* / Marsh purslane	40	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
	100	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 0 | % 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: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	100	x 1 =	100
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		100 (B)

Prevalence Index = B/A = 1.0

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: sp-kd-01a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-13	10YR 2/1	100					Silt	

[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)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Concrete

Depth (inches): 13

Hydric Soil Present? Yes X No ___

Remarks:

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)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- X 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)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 12

Water Table Present? Yes ___ No X Depth (inches): 1

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 1

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-1b
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): none | Slope (%): 0
Subregion (LRR): C | Lat: 32.83924417 | Long: -117.0206535 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____	No X			
Hydric Soil Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?**	Yes ____	No X
Wetland Hydrology Present?	Yes ____	No X			

Remarks: Upland point to sp-kd-01a

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1. *Turf grass*	100	Yes	NI
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	100	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)

Prevalence Index = B/A = 5.0

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤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 ____ No X

Remarks:

SOIL

Sampling Point: sp-kd-1b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks: Didn't dig pit. No hydric veg or hydrology.

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)
- ___ 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 ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-02
Investigator(s): Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 0
Subregion (LRR): C | Lat: 32.8399675 | Long: -117.02113817 | Datum: WSG-84
Soil Map Unit Name: Redding gravelly loam, 2 to 9 percent slopes | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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		No	X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Wetland Hydrology Present?	Yes	X	No		

Remarks: Pit taken in riparian vegetation along ditch, adjacent to freshwater emergent wetland

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix lasiolepis* / Arroyo willow	60	Yes	FACW
2.			
3.			
4.			
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Schoenoplectus californicus* / California bulrush, Southern bu	15	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	15	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 85 | % 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: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		135 (B)

Prevalence Index = B/A = 1.8

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: sp-kd-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16	10YR 4/2	100					Sand	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks:

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)
- ___ 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)**
- X Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X 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:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-03
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): none | Slope (%): 0
Subregion (LRR): C | Lat: 32.838062 | Long: -117.010508 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Wetland Hydrology Present?	Yes X	No ____	

Remarks: Pit dug in an isolated, very small, freshwater emergent wetland

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Eleocharis palustris* / Common spikerush	25	Yes	OBL
2. *Eleocharis macrostachya* / Spike rush	25	Yes	NI
3. *Ambrosia psilostachya* / Ragweed, Western ragweed	5	No	FACU
4. *Pluchea odorata* / Salt marsh fleabane	5	No	FACW
5. *Populus fremontii* / Fremont cottonwood	5	No	FACW
6.			
7.			
8.			
	65	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 35 | % 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: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	25	x 5 =	125
Column Totals:	65 (A)		190 (B)

Prevalence Index = B/A = 2.92

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
X Prevalence Index ≤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:
Note: Eleocharis palustris used as synonym for E. macrostachya since E. macrostachya is not listed in the NWPL

SOIL

Sampling Point: sp-kd-03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
8	10YR 2/1	98	10YR 5/8	2	C	M	Sndy Clay Lm	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- X 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)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 3

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-04a
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 0
Subregion (LRR): C | Lat: 32.8390845 | Long: -117.00886967 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: PUBHx
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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: Pit taken within constructed pond with freshwater emergent vegetation in it

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30-ft)			
1. *Salix gooddingii* / Gooding's willow, Goodding's black willow	25	Yes	FACW
2.			
3.			
4.			
	25	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1. *Baccharis salicifolia* / Mule fat	20	Yes	FAC
2.			
3.			
4.			
5.			
	20	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Typha domingensis* / Cattail, Southern cattail	95	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	95	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 5 % 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: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		95 (B)

Prevalence Index = B/A = 1.0

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: sp-kd-04a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16	10YR 2/1	100					Sand	

[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)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- X 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)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches):	0	
Water Table Present?	Yes X	No ___	Depth (inches):	5	
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	1	**Wetland Hydrology Present?** Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-04b
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 5
Subregion (LRR): C | Lat: 32.8390235 | Long: -117.00886483 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: PUBHx
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____	No X	**Is the Sampled Area within a Wetland?**	Yes ____	No X
Hydric Soil Present?	Yes ____	No X			
Wetland Hydrology Present?	Yes ____	No X			

Remarks: Upland point to DP-KD-04a, taken southwest of pond

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Washingtonia robusta* / Washington fan palm, Mexican fan p	25	Yes	FACW
2. *Eucalyptus sp.* / Gum	25	Yes	NI
3. *Phoenix canariensis* / Canary island date palm, Canary islan	5	No	NI
4. *Schinus terebinthifolia* / Brazilian peppertree	5	No	FAC
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 100 | % 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: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	30	x 5 =	150
Column Totals:	60 (A)		215 (B)

Prevalence Index = B/A = 3.58

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤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 ____ No X

Remarks:

SOIL

Sampling Point: sp-kd-04b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
10	10YR 3/4	100					Sandy Loam	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks:

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)
- ___ 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 ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-05a
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 5
Subregion (LRR): C | Lat: 32.84070783 | Long: -117.00543033 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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: Point taken within what appears to be a constructed basin

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix gooddingii* / Gooding's willow, Goodding's black willow	25	Yes	FACW
2.			
3.			
4.			
	25	= Total Cover	

Sapling/Shrub Stratum (Plot size: 30-ft)			
1. *Nicotiana glauca* / Tree tobacco	10	Yes	FAC
2. *Salix lasiolepis* / Arroyo willow	2	No	FACW
3.			
4.			
5.			
	12	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1. *Cynodon dactylon* / Bermuda grass	60	Yes	FACU
2. *Atriplex prostrata* / Fat-hen	20	Yes	FACW
3. *Melilotus officinalis* / Yellow sweetclover	10	No	FACU
4.			
5.			
6.			
7.			
8.			
	90	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 10 | % Cover of Biotic Crust 0

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: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	22	x 2 =	44
FAC species	10	x 3 =	30
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	102 (A)		354 (B)

Prevalence Index = B/A = 3.47

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
___ Prevalence Index ≤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: sp-kd-05a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5Y 2.5/1	75	5YR 4/6	25	C	M	Silty Clay	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- X Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

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 X	Depth (inches):	0	
Water Table Present?	Yes ___	No X	Depth (inches):	5	
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	10	**Wetland Hydrology Present?** Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-05b
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 0
Subregion (LRR): C | Lat: 32.84069317 | Long: -117.00540233 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____	No X			
Hydric Soil Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?**	Yes ____	No X
Wetland Hydrology Present?	Yes ____	No X			

Remarks: Pit taken on bank of basin

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1. *Nicotiana glauca* / Tree tobacco	25	Yes	FAC
2. *Ricinus communis* / Castor bean	25	Yes	FACU
3.			
4.			
5.			
	50	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Heliotropium curassavicum* / Chinese parsley	50	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	50	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 50 % 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: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	100 (A)		375 (B)

Prevalence Index = B/A = 3.75

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤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 ____ No X

Remarks:

SOIL

Sampling Point: sp-kd-05b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	2.5Y 3/3	100					Silt Loam	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks:

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)
- ___ 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 ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-06a
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 1
Subregion (LRR): C | Lat: 32.84099433 | Long: -117.00381383 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation No, Soil No, or Hydrology No 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: Point taken within freshwater emergent wetland surrounded by riparian thicket

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix gooddingii* / Gooding's willow, Goodding's black willow	25	Yes	FACW
2.			
3.			
4.			
	25	= Total Cover	

Sapling/Shrub Stratum (Plot size: 30-ft)			
1. *Nicotiana glauca* / Tree tobacco	10	Yes	FAC
2. *Salix lasiolepis* / Arroyo willow	2	No	FACW
3.			
4.			
5.			
	12	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1. *Schoenoplectus californicus* / California bulrush, Southern bu	90	Yes	OBL
2. *Vitis girdiana* / Southern california grape, Desert wild grape	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	95	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 5 | % Cover of Biotic Crust 0

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: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	2	x 2 =	4
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	107 (A)		139 (B)

Prevalence Index = B/A = 1.3

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: sp-kd-06a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	2.5Y 2.5/1	100					Silt	

[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)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- X 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)
- X 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)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches):	0	
Water Table Present?	Yes X	No ___	Depth (inches):	8	
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0	**Wetland Hydrology Present?** Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-06b
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): none | Slope (%): 0
Subregion (LRR): C | Lat: 32.84095883 | Long: -117.003781 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation No, Soil No, or Hydrology No 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 ___ No X
Wetland Hydrology Present? Yes ___ No X
Is the Sampled Area within a Wetland? Yes ___ No X

Remarks: Upland point to SP-KD-06a, taken within ornamental tree canopy

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Schinus terebinthifolia* / Brazilian peppertree	90	Yes	FAC
2.			
3.			
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30-ft)			
1. *Nicotiana glauca* / Tree tobacco	10	Yes	FAC
2. *Salix lasiolepis* / Arroyo willow	2	No	FACW
3.			
4.			
5.			
	12	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Schoenoplectus californicus* / California bulrush, Southern bu	90	Yes	OBL
2. *Vitis girdiana* / Southern california grape, Desert wild grape	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	95	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 5 | % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	90	x 3 =	270
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		270 (B)

Prevalence Index = B/A = 3.0

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: sp-kd-06b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
6	2.5Y 4/4	100					Sandy Loam	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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): 6

Hydric Soil Present? Yes ___ No X

Remarks:

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)
- ___ 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): 0

Water Table Present? Yes ___ No X Depth (inches): 8

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 0

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No signs of hydrology

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-07
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): none | Slope (%): 0
Subregion (LRR): C | Lat: 32.83925433 | Long: -117.0206625 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____	No X	**Is the Sampled Area within a Wetland?**	Yes ____	No X
Hydric Soil Present?	Yes ____	No X			
Wetland Hydrology Present?	Yes ____	No X			

Remarks: Point taken on the outside end of a basin-like feature separated from the adjacent riverine feature by a berm.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Xanthium strumarium* / Cocklebur	75	Yes	FAC
2. *Melilotus officinalis* / Yellow sweetclover	25	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 0 % 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: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	25	x 4 =	100
UPL species	0	x 5 =	0
Column Totals:	100 (A)		325 (B)

Prevalence Index = B/A = 3.25

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤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 ____ No X

Remarks:

SOIL

Sampling Point: sp-kd-07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16	10YR 4/3	70	10YR 3/2	30	D	M	Sndy Clay Lm	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Concrete

Depth (inches): 13

Hydric Soil Present? Yes ___ No X

Remarks:

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)
- ___ 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): 0

Water Table Present? Yes ___ No X Depth (inches): 1

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 1

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No signs of hydrology.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: sp-kd-08
Investigator(s): Katie Dayton, Anna Touchstone | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 0
Subregion (LRR): C | Lat: 32.83835067 | Long: -117.01280383 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____	No X	**Is the Sampled Area within a Wetland?**	Yes ____	No X
Hydric Soil Present?	Yes ____	No X			
Wetland Hydrology Present?	Yes ____	No X			

Remarks: Pit taken in riparian area adjacent to WW2

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus fremontii* / Fremont cottonwood	15	Yes	FACW
2.			
3.			
4.			
	15	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1. *Salix exigua* / Narrowleaf willow	60	Yes	FACW
2.			
3.			
4.			
5.			
	60	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Bromus diandrus* / Ripgut brome, Ripgut grass	30	Yes	NI
2. *Hirschfeldia incana* / Mustard	30	Yes	NI
3.			
4.			
5.			
6.			
7.			
8.			
	60	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 40 | % 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: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	60	x 5 =	300
Column Totals:	135 (A)		450 (B)

Prevalence Index = B/A = 3.33

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤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 ____ No X

Remarks:

SOIL

Sampling Point: sp-kd-08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
10	10YR 3/2	100					Sand	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks:

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)
- ___ 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 ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: WSP-MSM-001
Investigator(s): Megan Minter | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Channel | Local relief (concave, convex, none): concave | Slope (%): 1
Subregion (LRR): C | Lat: 32.839115 | Long: -117.02219033 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology Yes 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:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix lasiolepis* / Arroyo willow	90	Yes	FACW
2.			
3.			
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Bacopa monnieri* / Herb of grace	25	Yes	OBL
2. *Typha latifolia* / Broadleaf cattail, Broad-leaved cattail	10	Yes	OBL
3. *Xanthium strumarium* / Cocklebur	10	Yes	FAC
4. *Liquidambar styraciflua* / Sweetgum	5	No	FAC
5.			
6.			
7.			
8.			
	50	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 50 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	35	x 1 =	35
FACW species	90	x 2 =	180
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	140 (A)		260 (B)

Prevalence Index = B/A = 1.86

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: WSP-MSM-001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/1	100					Sand	
3-20	10YR 2/1	100					Sand	

[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)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- X 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)**
- X Sediment Deposits (B2) **(Riverine)**
- X Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches):		
Water Table Present?	Yes X	No ___	Depth (inches):	5	
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0	

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: WSP-MSM-02
Investigator(s): Megan Minter | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Slope | Local relief (concave, convex, none): concave | Slope (%): 2
Subregion (LRR): C | Lat: 32.83918267 | Long: -117.02200883 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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		No	X	
Hydric Soil Present?	Yes		No	X	**Is the Sampled Area**
Wetland Hydrology Present?	Yes		No	X	**within a Wetland?** Yes ____ No X

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Hirschfeldia incana* / Mustard	70	Yes	NI
2. *Ambrosia psilostachya* / Ragweed, Western ragweed	25	Yes	FACU
3. *Cynodon dactylon* / Bermuda grass	10	No	FACU
4.			
5.			
6.			
7.			
8.			
	105	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum -5 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	35	x 4 =	140
UPL species	70	x 5 =	350
Column Totals:	105 (A)		490 (B)

Prevalence Index = B/A = 4.67

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤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 ____ No X

Remarks:

SOIL

Sampling Point: WSP-MSM-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 4/3	100					Sand	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks:

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)
- ___ 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 ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: WSP-MSM-03
Investigator(s): Megan Minter | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Channel | Local relief (concave, convex, none): concave | Slope (%): 1
Subregion (LRR): C | Lat: 32.837884 | Long: -117.01703067 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix lasiolepis* / Arroyo willow	95	Yes	FACW
2. *Populus fremontii* / Fremont cottonwood	5	No	FACW
3.			
4.			
	100	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1. *Typha latifolia* / Broadleaf cattail, Broad-leaved cattail	15	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	15	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 85 | % 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: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	115 (A)		215 (B)

Prevalence Index = B/A = 1.87

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: WSP-MSM-03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1	100					Fine Sndy Lm	

[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)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- X 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)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 4

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: WSP-MSM-04
Investigator(s): Megan Minter | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 0
Subregion (LRR): C | Lat: 32.83810783 | Long: -117.01719517 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____	No X	**Is the Sampled Area within a Wetland?**	Yes ____	No X
Hydric Soil Present?	Yes ____	No X			
Wetland Hydrology Present?	Yes ____	No X			

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Elaeagnus angustifolia* / Russian olive	5	Yes	FAC
2.			
3.			
4.			
	5	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Schismus arabicus* / Arabian schismus	70	Yes	NI
2. *Ambrosia psilostachya* / Ragweed, Western ragweed	50	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	120	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum -20 | % 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: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	50	x 4 =	200
UPL species	70	x 5 =	350
Column Totals:	125 (A)		565 (B)

Prevalence Index = B/A = 4.52

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤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 ____ No X

Remarks:

SOIL

Sampling Point: WSP-MSM-04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3						Fine Sndy Lm	Shovel refusal at 5 inches

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks:

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)
- ___ 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 ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: WSP-MSM-05
Investigator(s): Megan Minter | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Valley | Local relief (concave, convex, none): concave | Slope (%): 0
Subregion (LRR): C | Lat: 32.843125 | Long: -117.004628 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ____
Are Vegetation No, Soil No, or Hydrology No 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		No	X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Wetland Hydrology Present?	Yes		No	X	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix lasiolepis* / Arroyo willow	50	Yes	FACW
2. *Schinus terebinthifolia* / Brazilian peppertree	20	Yes	FAC
3. *Washingtonia robusta* / Washington fan palm, Mexican fan p	5	No	FACW
4.			
	75	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Cynodon dactylon* / Bermuda grass	60	Yes	FACU
2. *Ambrosia psilostachya* / Ragweed, Western ragweed	10	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	70	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 30 | % 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: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	20	x 3 =	60
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	145 (A)		450 (B)

Prevalence Index = B/A = 3.1

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
___ Prevalence Index ≤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: WSP-MSM-05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 4/2	100					Fine Sndy Lm	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks:

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)
- ___ 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 ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: WSP-MSM-06
Investigator(s): Megan Minter | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Depression | Local relief (concave, convex, none): concave | Slope (%): 1
Subregion (LRR): C | Lat: 32.843203 | Long: 117.004722 | Datum: WSG-84
Soil Map Unit Name: Riverwash | NWI classification: PFOAx
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ____
Are Vegetation No, Soil No, or Hydrology No 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:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix lasiolepis* / Arroyo willow	90	Yes	FACW
2. *Schinus terebinthifolia* / Brazilian peppertree	10	No	FAC
3. *Washingtonia robusta* / Washington fan palm, Mexican fan p	5	No	FACW
4.			
	105	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 100 % 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: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		220 (B)

Prevalence Index = B/A = 2.1

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: WSP-MSM-06

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1	100					Fine Sndy Lm	

[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)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- X 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)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches):		
Water Table Present?	Yes X	No ___	Depth (inches):	12	
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0	

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: WSP-MSM-07
Investigator(s): Megan Minter | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Drainage | Local relief (concave, convex, none): concave | Slope (%): 2
Subregion (LRR): C | Lat: 32.842442 | Long: 117.010923 | Datum: WSG-84
Soil Map Unit Name: Redding cobbly loam, 9 to 30 percent slopes | NWI classification: UPL
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____	No X	**Is the Sampled Area within a Wetland?**	Yes ____ No X
Wetland Hydrology Present?	Yes ____	No X		

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Schinus terebinthifolia* / Brazilian peppertree	80	Yes	FAC
2. *Salix exigua* / Narrowleaf willow	15	No	FACW
3.			
4.			
	95	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 100 | % 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: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	80	x 3 =	240
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		270 (B)

Prevalence Index = B/A = 2.84

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index ≤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: WSP-MSM-07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1	100					Fine Sndy Lm	

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks:

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)
- ___ 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 ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Carlton Oaks | City/County: Santee/San Diego | Sampling Date: 09/08/2025
Applicant/Owner: Carlton Oaks | State: California | Sampling Point: WSP-MSM-08
Investigator(s): Megan Minter | Section, Township, Range: T 15 South, R 1 West, S 29
Landform (hillslope, terrace, etc): Slope | Local relief (concave, convex, none): convex | Slope (%): 3
Subregion (LRR): C | Lat: 32.842382 | Long: 117.010991 | Datum: WSG-84
Soil Map Unit Name: Redding cobbly loam, 9 to 30 percent slopes | NWI classification: UPL
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ____
Are Vegetation No, Soil No, or Hydrology No 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 ____	No X	**Is the Sampled Area within a Wetland?**	Yes ____	No X
Hydric Soil Present?	Yes ____	No X			
Wetland Hydrology Present?	Yes ____	No X			

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix exigua* / Narrowleaf willow	5	Yes	FACW
2.			
3.			
4.			
	5	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1. *Carpobrotus edulis* / Iceplant, Freeway iceplant	100	Yes	NI
2. *Baccharis pilularis* / Coyote brush	40	Yes	NI
3.			
4.			
5.			
	140	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 100 | % 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: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	140	x 5 =	700
Column Totals:	145 (A)		710 (B)

Prevalence Index = B/A = 4.9

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤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 ____ No X

Remarks:

SOIL

Sampling Point: WSP-MSM-08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								Unable to dig due to thick layer of ice plant

[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)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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 ___ No X

Remarks:

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)
- ___ 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 ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Attachment D

ICF Jurisdictional Delineation Report

AQUATIC RESOURCE DELINEATION REPORT FOR THE CARLTON OAKS PROJECT

PREPARED FOR:

Lennar Corporation
Ryan E. Green
16465 Via Esprillo, Suite #150
San Diego, CA 92127

PREPARED BY:

ICF
525 B Street, Suite 1700
San Diego, CA 92101

September 2019

ICF. 2019. *Aquatic Resource Delineation Report for the Carlton Oaks Project.* September. Santee, CA. Prepared for Lennar Corporation.

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Acronyms and Abbreviations

CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
FEMA	Federal Emergency Management Agency
GIS	geographic information system
GPS	global positioning systems
HUC	Hydrologic Unit Code
NHD	national hydrography dataset
NRCS	Natural Resources Conservation Service
NWI	national wetlands inventory
OHWM	Ordinary High Water Mark
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
proposed project	Carlton Oaks Project
RWQCB	Regional Water Quality Control Board
SSURGO	Soil Survey Geographic
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

Chapter 1
Introduction

ICF conducted a routine-level delineation of potentially jurisdictional aquatic resources for the Carlton Oaks Project (proposed project). The purpose of this delineation was to identify the extent of potential federal and state jurisdiction within the proposed project boundary pursuant to Sections 404 and 401 of the Clean Water Act (CWA), Section 13260 of the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and Section 1602 of the California Fish and Game Code.

Section 404 of the CWA covers waters of the U.S., including wetlands and are regulated by the U.S. Army Corps of Engineers (USACE). Pursuant to Section 401 of the CWA, the Regional Water Quality Control Board (RWQCB) or State Water Resources Control Board (SWRCB) regulates at the state level all activities that are regulated at the federal level by the USACE. Additionally, the RWQCB and/or SWRCB may also regulate activities affecting non-federal waters and wetlands (e.g., isolated features) under the Porter-Cologne Act. Section 1602 of the California Fish and Game Code is implemented by the California Department of Fish and Wildlife (CDFW) and covers aquatic features, which include lakes or streambeds with a defined bed and bank plus any adjacent riparian vegetation.

The information and results presented herein document the investigation, best professional judgment, and conclusions of ICF. It is correct and complete to the best of our knowledge. However, all jurisdictional delineations should be considered preliminary until reviewed and approved/verified by the applicable regulatory agencies.

1.1 Project Description

The proposed project consists of four components: the West Hills Residential, Carlton Oaks Residential, Hotel and Assisted Living, and Golf Course. Below is a brief description of each project component.

- West Hills Residential will consist of 71 Detached Residential Units with access from West Hills Parkway.
- Carlton Oaks Residential will consist of 53 lots measuring 5,000 square feet each, 119 small detached condos, all located at the current club house site and access from Carlton Oaks Drive.
- Mixed-Use Hotel Site will consist of a 2-3 story hotel with 51 rooms, pool, assisted living (between 80-100 rooms), golf club house, driving range, restaurant, banquet hall, event lawn, and public trail head. This site will access from the proposed extension of Fanita Parkway. (The current clubhouse, hotel, and driving range will be relocated to this site.).
- Golf Course will be redesigned to accommodate the West Hills Residential, Carlton Oaks Residential, Hotel and Assisted Living development and create a more resort friendly playing style while maintaining 18 holes.

1.2 Project Location

The proposed project is located in the City of Santee and City of San Diego, San Diego County, California (Figure 1; all figures provided in Appendix A). Specifically, the proposed project is located at 9200 Inwood Drive, adjacent to State Route 52 and Carlton Oaks Drive. The project site is mapped in Township 15S, Range 1W of the U.S. Geological Survey (USGS) 7.5-minute La Mesa quadrangle map (USGS 2018) (Figure 2). The proposed project is located approximately at 32.839713°N, -117.010112 °W. The delineation area is consistent with the proposed project boundary.

Chapter 2
Methodology

2.1 Project Research

Prior to the field visit, aquatic resources were identified using high-resolution aerial imagery overlaid with geographic information system (GIS) data from the national wetlands inventory (NWI) (USFWS 2012) and national hydrography dataset (NHD) (USGS 2018). These were used to identify the locations of potential areas of USACE, RWQCB, and CDFW jurisdiction within the delineation area boundary. In addition to the regionally available data (e.g., NWI and NHD) the approximate location and extent of aquatic resources were identified based on observed vegetation types, topographic changes, and visible drainage patterns. Figure 3 presents the watershed and NHD drainages and Figure 4 depicts the NWI resources within the delineation area. The delineation area is located within the 100-year floodway and floodplain of the San Diego River.

2.2 Field Investigation

On April 17, 2019, ICF delineators, Lanika Cervantes and Nicole Salas, conducted the jurisdictional field delineation within the proposed project boundary. The survey was conducted on foot, and jurisdictional limits were recorded using high-resolution aerial photographs (1 inch = 100 feet) and an Apple iPad using Collector Map with a sub-meter accuracy global positioning systems (GPS) unit. Existing conditions were documented as field notes and site photographs (see Appendix B, *Carlton Oaks Photolog, April 2019*).

2.2.1 U.S. Army Corps of Engineers Jurisdiction

Potential waters of the U.S., including wetlands, were evaluated for the presence of Ordinary High Water Mark (OHWM) indicators and/or wetland vegetation, soils, and hydrology. Lateral limits of non-wetland waters of the U.S. were delineated based on the presence of OHWM indicators using field indicators pursuant to *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States: A Determination Manual* (USACE 2008a). Arid West Ephemeral and Intermittent Stream OHWM Datasheets were completed for all applicable non-wetland waters (USACE 2010) and are provided in Appendix C. The project was also analyzed for potential wetlands using the methodology set forth in the 1987 *Corps of Engineers Wetland Delineation Manual* (1987 Manual; Environmental Laboratory 1987) and the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Regional Supplement; USACE 2008b). Vascular plants were identified using *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012) and *The National Wetland Plant List* (Lichvar et al. 2016).

Within the delineation area, in areas located outside of the OHWM that exhibited evidence of wetland hydrology and/or hydrophytic vegetation, wetland sample soil pits were dug to examine soil color and texture and determine the wetland boundary. A paired-pit technique (i.e., one sample

point with wetland results paired with one sample point with non-wetland results) was used to identify the wetland boundary. Wetland Determination Forms are provided in Appendix D.

2.2.2 State Water Resources Control Board/Regional Water Quality Control Board Jurisdiction

Evaluation of state jurisdiction followed guidance from Section 401 of the CWA and typically follows the same jurisdictional areas as USACE. In addition, the delineation area was reviewed for resources potentially regulated under the Porter-Cologne Act (i.e., isolated features). Isolated vernal pools, isolated wetlands, or other aquatic features not normally subject to federal regulation did not occur within the delineation area; therefore, no further evaluation pursuant to the Porter-Cologne Act was necessary.

2.2.3 California Department of Fish and Wildlife Jurisdiction

CDFW jurisdiction typically includes surface water features with a defined bed and bank. Evaluation of potentially jurisdictional areas followed the guidance of standard practices by CDFW personnel. Briefly, CDFW jurisdiction was delineated by measuring outer width and length boundaries of potentially jurisdictional areas (e.g., lakes or streambeds), consisting of the greater of either the top of bank measurement or the extent of adjacent associated riparian or wetland vegetation.

Chapter 3
Environmental Setting

This chapter describes existing topography, land use, hydrology, and soils associated with the delineation area.

3.1 Topography and Land Use

The delineation area occurs north of State Route 52 and south of Carlton Oaks Drive. The topography in the delineation area is relatively flat as it was located within an existing golf course.

The surrounding land uses consist of a mix of open space, which consists of undeveloped areas within the upstream and downstream segments of the San Diego River, residential and commercial development, and transportation corridors.

3.2 Hydrology

3.2.1 Existing Hydrology

The delineation area lies within the Lower San Diego River watershed (Hydrologic Unit Code [HUC] 10: 1807030407) and contains the lower San Diego River and Forester Creek. These drainages are all characterized by vegetated streambeds and riparian that run through urban areas.

The drainages are surrounded by open space with single-family residences scattered throughout the area and concentrated low density residential surrounding the delineation area. Developed areas along the San Diego River are likely causing drainages to receive additional inputs via urban runoff before they enter the Pacific Ocean. The lower San Diego River and Forester Creek are listed as impaired waterbodies under Section 303(d) of the Clean Water Act. These waterbodies are impaired by pollutants such as fecal coliform, enterococcus, selenium, nitrogen, manganese, phosphorus, total dissolved solids, and low dissolved oxygen.

3.2.2 Precipitation

Based on the San Miguel weather station located approximately 12.5 miles southeast of the delineation area, the total estimated precipitation within the last year was approximately 8.78 inches. The precipitation data for the San Miguel station for the preceding year is presented in Table 1.

Table 1. Rainfall Data Summary for the Delineation Area (in inches)[1]

May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Total
0.18	0	0	0.01	0.02	0.29	1.43	2.88	1.71	0.97	1.2	0.09	8.78

Data source: Western Regional Climate Control Center. Available: http://www.raws.dri.edu. Accessed: April 2019. San Miguel station is located approximately 12.5 miles southeast of the delineation area.

[1] Although the Miramar East weather station is located less than 8 miles northwest of the delineation area, the rain data for the Miguel station appears to be more applicable for this area. The Miramar East station only logged a total of 1.85 inches for the past year.

3.2.3 Watershed

The delineation area is located within the USGS Lower San Diego River HUC 10 and is located within the RWQCB Calwatershed San Diego Hydrologic Unit (HU), Lower San Diego Hydrologic Area (HA), and Santee Hydrologic Subarea (907.12) (Figure 3). General information on this watershed is provided below.

3.2.3.1 Lower San Diego River

The Lower San Diego River HA is a triangular shaped area that encompasses approximately 440 square miles. This watershed drains San Diego River, Forester Creek, San Vicente Creek, and numerous unnamed creeks. The dominant land uses in the Lower San Diego River HA are open space, several large reservoirs, and low density development. Most development in this watershed is residential housing.

3.3 Soils

3.3.1 Soil Series

The Natural Resources Conservation Service (NRCS) has mapped the soil series: Redding, Riverwash, Visalia, and Vista as occurring within the delineation area based on the Soil Survey Geographic (SSURGO) database (USDA/NRCS 2006) (Figure 5).

Descriptions of the soil series included within the SSURGO mapping unit (San Diego County Area; CA638) are provided below based on the official soil descriptions provided by USDA (USDA/NRCS 2012).

3.3.1.1 Redding

The Redding soil series (RdC, ReE, RhC, and RhE) consists of well or moderately well drained soils that are found on terraces. The soils are formed from alluvium derived from mixed sources. The extent of the soils occur along the northern and eastern edge of Central Velley in California. They occur in elevations from 130 to 1,000 feet and have slopes from 0 to 30 percent. They have very low to high run off and very slow to slow permeability.

This soil series is not identified as hydric soils for San Diego County (USDA/NRCS 2011).

3.3.1.2 Riverwash

The Riverwash soil series (Rm) consist of excessively drained soils and are found on drainage ways. The soils formed from sandy, gravelly, or cobbly alluvium procured from mixed sources. Occur in elevations from 700 to 2,900 feet and at 0 to 4 percent slopes. They have negligible runoff.

This soil series is identified as hydric soils for San Diego County (USDA/NRCS 2011).

3.3.1.3 Visalia

The Visalia soils series (VbB and VbC) consist of well drained soils that are typically associated with alluvial fans and floodplains. The soils are formed from alluvium derived from granite. Occur in elevations ranging from 0 to 4,000 feet and at 5 to 15 percent slopes. This soils series is identified as hydric for San Diego County (USDA/NRCS 2011).

3.3.1.4 Vista

The Vista soil series (VbB, VbC, and VvD) consists of moderately deep, well drained soils that formed in material weathered from decomposed granitic rocks. Vista soils are on hill and mountainous uplands and have slopes of 2 to 85 percent. This soil series is not identified as hydric soils for San Diego County (USDA/NRCS 2011).

Chapter 4
Aquatic Resource Delineation Results

The following describes the delineated aquatic resources and expected jurisdictional status within the delineation area. Detailed information, including maps of the delineated aquatic resources within the delineation area, photographs, OHWM and Wetland Determination Forms, and request for an approved jurisdictional determination are provided in the following attachments:

- Appendix A, Figures (Delineated Aquatic Resources –Figures 6 and 7)
- Appendix B, Site Photographs, April 2019
- Appendix C, Arid West OHWM Data Forms
- Appendix D, Arid West Wetland Determination Forms
- Appendix E, RGL 16-01, Approved JD Request

4.1 Delineation Results

Ten aquatic resources, including two excluded golf course ponds and one concrete v-ditch within the delineation area were identified, evaluated, and mapped for potential federal, state, and CDFW jurisdiction pursuant to the regulations described above. Each feature evaluated within the delineation area is depicted on Figure 6 (USACE/RWQCB Aquatic Resources) and Figure 7 (CDFW Aquatic Resources) are described below, and summarized in Tables 2 and 3.

NWW 1 is an intermittent segment of Sycamore Canyon Creek that is likely regulated by the USACE, RWQCB, and CDFW. NWW 1 is tributary to the San Diego River and has been manipulated due to the construction of the golf course. Prior to construction of the golf course, NWW 1 was the historic main channel of San Diego River. The lateral limits of NWW1 are clearly defined by bed and bank, clear break in slope, and change in vegetation species (Appendix C, Transects 1 and 3). NWW1 flows northeast to southwest across the delineation area and contains sections of unvegetated non-wetland waters and vegetated non-wetland waters; no adjacent waters or wetlands (outside of the OHWM) were observed. Within the delineation area, NWW1 is dominated by southern cattails (*Typha domingensis*) with sections supporting patches of arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*), cottonwood (*Populus fremontii*), and palms. A large in-line pond has also been constructed within the feature (Figures 6 and 7-Sheet 5) and an approximate 20-foot long concrete and riprap-lined dam occurs directly downstream of this pond. Near the downstream segment of the delineated feature (Figures 6 and 7 – Sheet 2), the river is not as constrained allowing for a larger active floodplain supporting an understory of yerba mansa (*Anemopsis californica*) and curly dock (*Rumex crispus*) and an overstory of willows and cottonwood.

NWW 2 is an intermittent stream, subject to USACE, RWQCB, and CDFW jurisdiction, that flows north to south, draining into NWW 1. This feature begins at a storm drain outfall located off of Carlton Oaks Drive. This feature is also manipulated as it is confined between the housing development to the west and the golf course parking lot to the east (Figures 6 and 7-Sheet 5). Lateral limits of NWW 2 were delineated based on a clear break in slope and changes in vegetation cover and species (Appendix C, Transect 2). This feature is dominated by Brazilian peppertrees

(*Schinus terebinthifolia*), southern cattails, and willows within the active floodplain while the banks are dominated by highway ice plant (*Carpobrotus edulis)*. This feature flows into a large culvert, which is assumed to outlet into NWW 1 (located 200 feet south of this feature), however the outlet within NWW 1 could not be located at the time of the survey.

NWW 3 is an ephemeral stream that flows north to south and is likely subject to USACE, RWQCB, and CDFW jurisdiction. It is a tributary to NWW 1 (Figures 6 and 7 – Sheet 4). This feature starts at a small storm drain outfall near the edge of the housing developments. The channel bottom is unvegetated, however the banks support scattered palms and are dominated by ripgut brome (*Bromus diandrus*), ragweed (*Ambrosia psilostachya*), and shortpod mustard (*Hirschfeldia incana*). The lateral limits of NWW 3 are delineated based on bed and bank and break in slope.

NWW 4 (San Diego River) is associated riparian habitat to San Diego River, subject to CDFW jurisdiction only (Figure 7 – Sheet 1). No OWHM indicators or hydrology indicators were observed at this location. A 10-12 foot tall berm occurs between the golf course and San Diego River, separating small riparian patches occurring on the golf course from the riparian areas associated with the feature. However, in this area the berm has been eroded and is only 5 feet tall. Therefore, this area is considered contiguous riparian habitat subject to CDFW jurisdiction. The riparian habitat within this area is dominated by arroyo willows and mule fat.

NWW 5 is an intermittent stream channel located at the north eastern most end of the delineation area. It is densely vegetated with cattails and a mix of other riparian vegetation including willows and cottonwoods. There is an existing culverted road crossing that is approximately 16 feet wide. NWW 5 is subject to USACE, RWQCB, and CDFW jurisdiction (Figures 6 and 7-Sheet 7).

WW 1 is a depressional wetland (Figure 6 – Sheet 8) that is located approximately 400 linear feet from the San Diego River and approximately 800 linear feet from the OHWM of NWW1. Additionally WW 1 is located within the FEMA mapped 100-year floodplain. This feature is not considered CDFW jurisdictional as it is a wetland that is not directly associated with a lake, river, or stream feature. Ponded water occurs within this area, however no inlet or outlet structure was observed. Due to the location of a maintenance facility directly adjacent to this area, irrigation water may be drained into this area, allowing it to persist over time and causing wetland conditions. The area was dominated by bulrush (*Schoenoplectus sp*.) and yerba mansa near the center and Brazilian peppertrees and willows along the edge.

WW 2 is a depressional wetland (Figure 6 – Sheet 4) that is located approximately 225 linear feet from the San Diego River and approximately 425 linear feet from the OHWM of NWW1. Additionally WW 2 is located within the FEMA mapped 100-year floodplain. This feature is not considered CDFW jurisdictional as it is separated by San Diego River by a 10-12 foot high berm, and therefore is not associated with a lake, river, or stream feature. This depressional wetland had several inlet structures diverting irrigation water into this area, which is allowing this area to persist. The center of the depression supports bulrush, while the edges support willow species and mule fat (*Baccharis salicifolia*).

EW 1, EW 2, and EW 3: In addition to the mapped jurisdictional aquatic resources described above, two managed golf course ponds and one concrete v-ditch, were identified as potential aquatic resources during the desktop delineation. These features were evaluated for USACE, RWQCB and/or CDFW jurisdiction and determined not to be potential aquatic resources pursuant to sections 404 and 401 of the CWA, Porter-Cologne Act, and Section 1602 of the California Fish and Game Code.

Specifically, the two managed golf course ponds and concrete v-ditch are man-made, ornamental waters created on dry land for primarily aesthetic reasons for the existing golf course. The concrete v-ditch and western golf course pond (EW 2 and EW 3) receive urban runoff and stormwater runoff originating from the northern residential development. The man-made v-ditch and western golf course pond are not an aquatic resource as the v-ditch and western pond are not a relocated tributary, excavated in a tributary, or drain wetlands as historical aerials do not show a tributary previously existing over the area (Figure 6 – Sheet 1). Additionally, the eastern pond (EW 1, Figure 6 – Sheet 6) is filled with non-potable water and is used to irrigate the golf course grounds (Alex Corona, personal communication, March 12, 2019). Representative photos were taken of these areas and historical aerial imagery evaluated to provide further support and documentation as to why they were not considered jurisdictional.

Table 2. Summary of USACE and RWQCB Aquatic Resources within the Delineation Area

			USACE/RWQCB		
Aquatic Resource	**Linear Feet**	**OHWM Width[1]**	**Non-wetland Acres[2]**	**Wetland[4] Acres**	**Excluded Waters[5] Acres**
NWW 1	4,912	54	6.48[3]	-	--
NWW 2	422	24	0.23	-	--
NWW 3	139	3	0.01	-	--
WW 1	--	--	-	0.05	--
WW 2	--	--	-	0.20	--
NWW 5	108	20	0.05	--	--
EW 1	--	--	--	--	1.77
EW 2	--	--	--	--	1.06
EW 3	253	--	--	--	0.01
Sub-Total	6,072	-	**6.78**	**0.25**	**2.84**
Total	**6,072**	-	**7.03**		**2.84**

[1] Based on average OHWM width in the delineation area.

[2] Total acreage may not add up to the total shown; total is reflective of rounding geographic information systems raw data in each category

[3] Of this, 0.02 acre is concrete/riprap lined.

[4] Acreage does not include wetlands within the stream channel (i.e., wetlands below the OHWM).

[5] 33 CFR 328.3(b)(4)(i) Artificially, constructed lakes and ponds created in dry land are not considered waters of the U.S.

Table 3. Summary of CDFW Jurisdictional Aquatic Resources within the Delineation Area

			CDFW		
Aquatic Resource	Linear Feet	Top of Bank Width[1]	Unvegetated Streambed Acres[2]	Vegetated Streambed Acres	Riparian Acres
NWW 1	4,912	65	3.00	4.48	1.06
NWW 2	422	60	-	0.61	-
NWW 3	139	6	-	0.02	-
NWW 4	115	N/A	-	-	0.06
NWW 5	108	30		0.07	0.16
Sub-Total	5,695	-	**3.00**	**5.18**	**1.28**
Total	**5,695**	**-**		**9.47**	

[1] Based on average width in the proposed project boundary.

[2] Total acreage may not add up to the total shown; total is reflective of rounding geographic information systems raw data in each category.

4.2 Conclusion

Ten aquatic resources within the delineation area were identified and mapped for potential federal, state, and CDFW jurisdiction. A total of 7.03 acres of non-wetland and wetland aquatic resources likely subject to USACE and RWQCB regulatory jurisdiction (i.e., are waters of the U.S.) occur within the delineation area. Additionally, 9.47 acres (5,695 linear feet) of streambed and riparian resources occur within the proposed project and would be subject to CDFW jurisdiction pursuant to Sections 1600–1616 of the California Fish and Game Code. Finally, three of the mapped aquatic resources, EW 1, EW 2, and EW 3 are ornamental and/or artificial aquatic resources, constructed in dry land. In accordance with the June 29, 2015 Clean Water Rule (Federal Register Vol. 80, No. 124) these types of features are excluded aquatic resources (33 CFR 328.2(b)) and are not considered waters of the U.S. As such, an approved jurisdictional determination from the USACE is requested to confirm that jurisdiction does not exist over the excluded waters (i.e., EW 1, EW 2, and EW 3)(Appendix E).

Chapter 5
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Appendix A
Figures

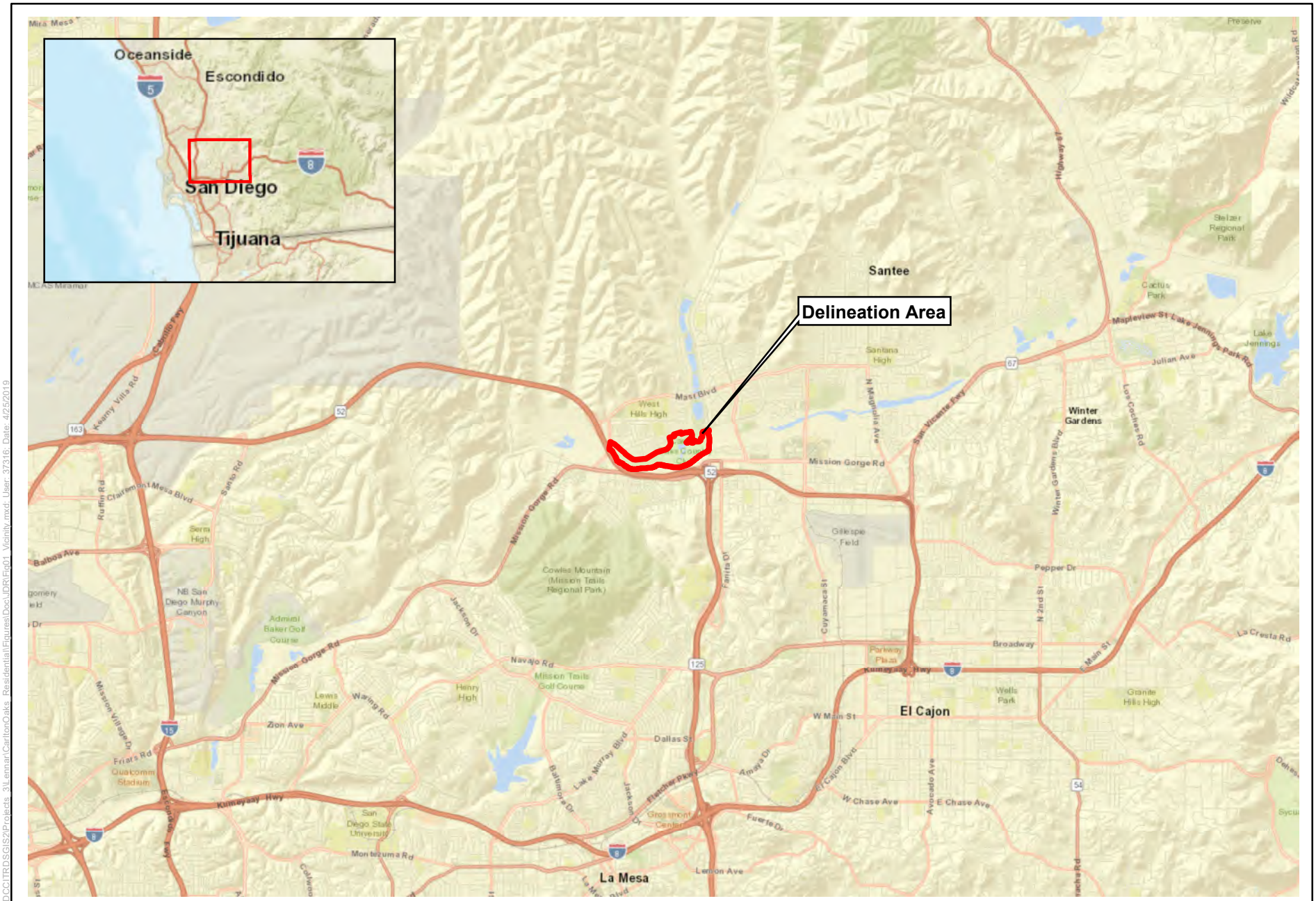
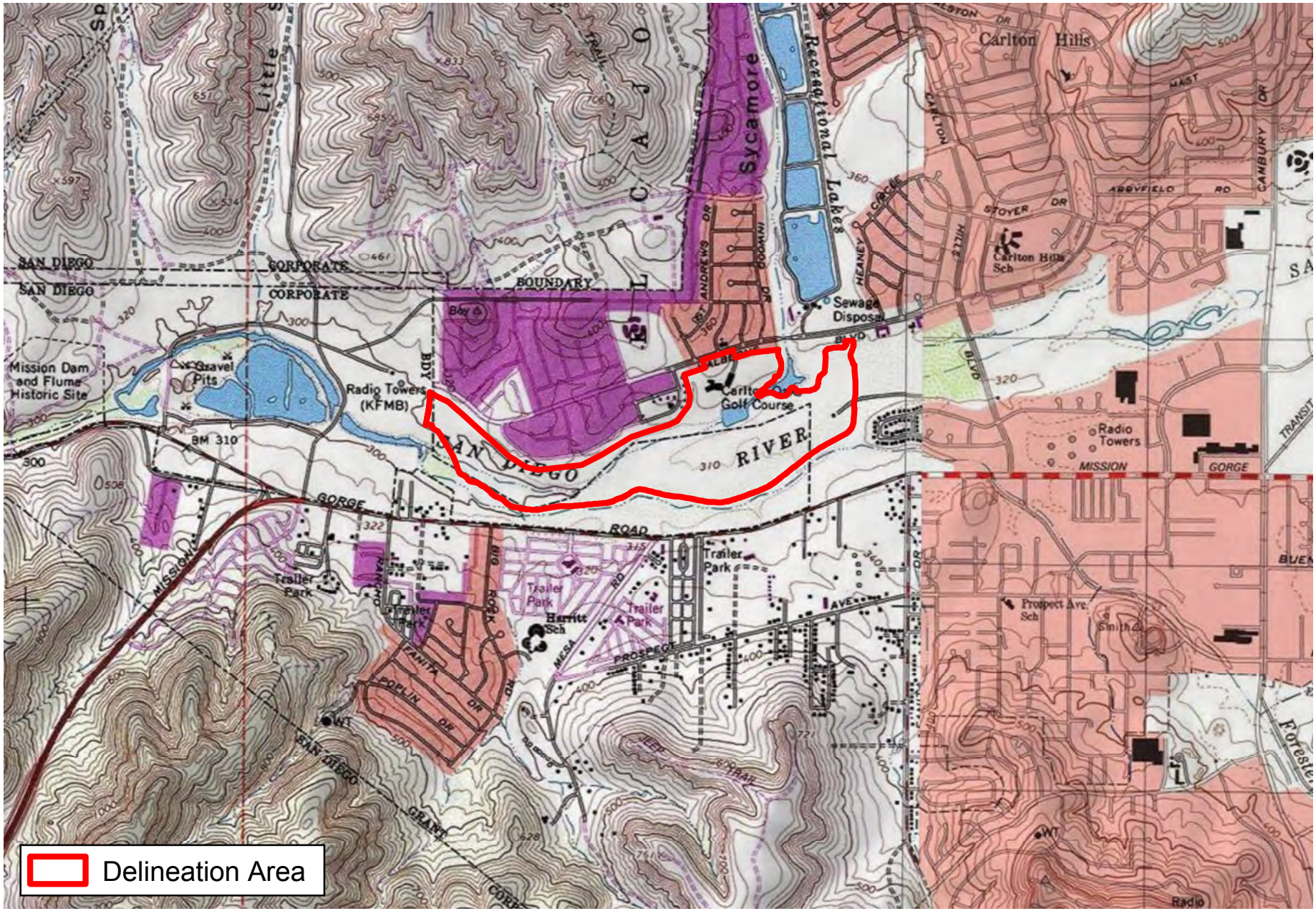


Figure 1
Regional Location
Carlton Oaks Project



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1:24,000

Source: Imagery-USGS La Mesa Quad (2019)

Figure 2
Project Vicinity
Carlton Oaks Project

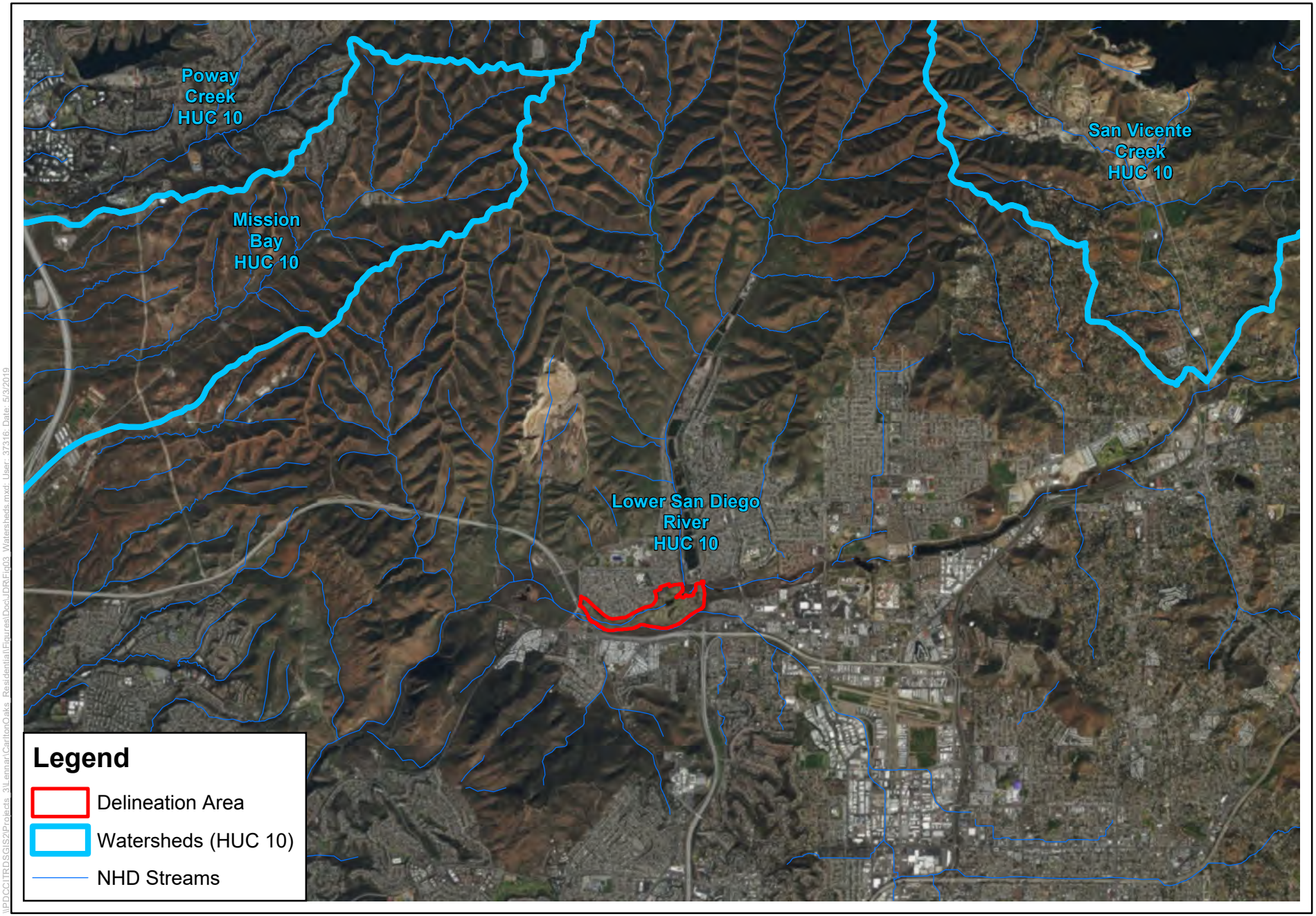


Figure 3
Watersheds
Carlton Oaks Project

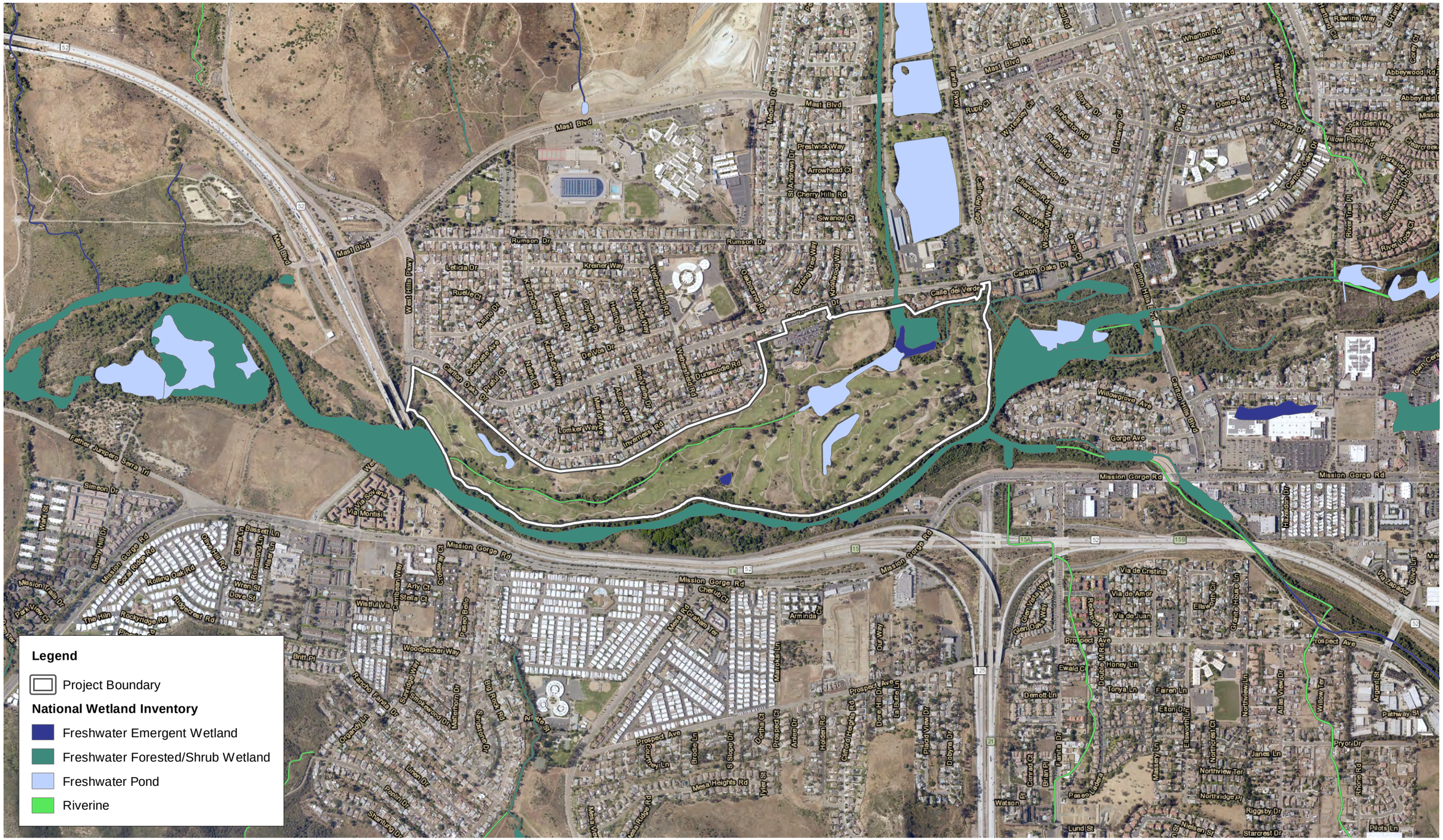
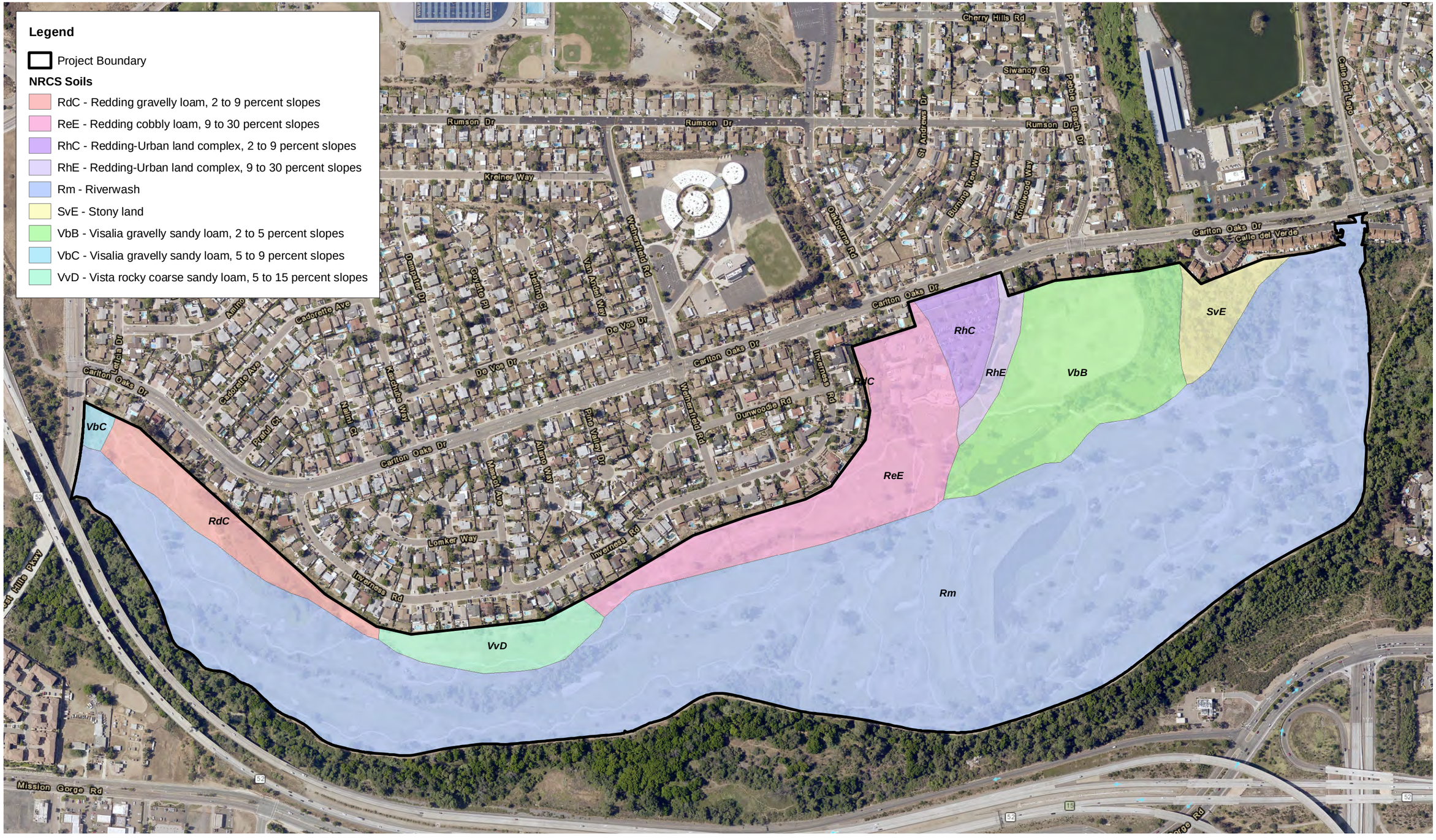


Figure 4
National Wetland Inventory (NWI)
Carlton Oaks Project



0 500 1,000 Feet
1:5,370

Figure 5
NRCS Soils map
Carlton Oaks Project

0 500 1,000 Feet
1:6,000

Figure 6 - Index
USACE/RWQCB Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect
- Excluded Waters

Waters of the U.S. and State

- Non-wetland Waters (Riprap-lined)
- Non-wetland Waters
- Wetland Waters

ICF

N

0 100 200 Feet

1:1,360

Figure 6 Sheet 1
USACE/RWQCB Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect
- Excluded Waters

Waters of the U.S. and State

- Non-wetland Waters (Riprap-lined)
- Non-wetland Waters
- Wetland Waters

ICF

N

0 100 200 Feet

1:1,360

Figure 6 Sheet 2
USACE/RWQCB Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect
- Excluded Waters

Waters of the U.S. and State

- Non-wetland Waters (Riprap-lined)
- Non-wetland Waters
- Wetland Waters

0 100 200 Feet

1:1,360

Figure 6 Sheet 3
USACE/RWQCB Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect
- Excluded Waters

Waters of the U.S. and State

- Non-wetland Waters (Riprap-lined)
- Non-wetland Waters
- Wetland Waters

0 100 200 Feet

1:1,360

N

Figure 6 Sheet 4
USACE/RWQCB Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect
- Excluded Waters

Waters of the U.S. and State

- Non-wetland Waters (Riprap-lined)
- Non-wetland Waters
- Wetland Waters

0 100 200 Feet

1:1,360

Figure 6 Sheet 5
USACE/RWQCB Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect
- Excluded Waters

Waters of the U.S. and State

- Non-wetland Waters (Riprap-lined)
- Non-wetland Waters
- Wetland Waters

ICF

N

0 100 200 Feet

1:1,360

Figure 6 Sheet 6
USACE/RWQCB Aquatic Resources
Carlton Oks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect
- Excluded Waters

Waters of the U.S. and State

- Non-wetland Waters (Riprap-lined)
- Non-wetland Waters
- Wetland Waters

0 100 200 Feet
1:1,360

N

Figure 6 Sheet 7
USACE/RWQCB Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect
- Excluded Waters

Waters of the U.S. and State

- Non-wetland Waters (Riprap-lined)
- Non-wetland Waters
- Wetland Waters

0 100 200 Feet

1:1,360

N

Figure 6 Sheet 8
USACE/RWQCB Aquatic Resources
Carlton Oaks Project

0 500 1,000 Feet
1:6,000

N

Figure 7 - Index
CDFW Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect

CDFW Waters

- Unvegetated Streambed
- Vegetated Streambed
- Riparian

0 100 200 Feet

1:1,360

N

Figure 7 Sheet 1
CDFW Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect

CDFW Waters

- Unvegetated Streambed
- Vegetated Streambed
- Riparian

ICF

N

0 100 200 Feet

1:1,360

Figure 7 Sheet 2
CDFW Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect

CDFW Waters

- Unvegetated Streambed
- Vegetated Streambed
- Riparian

ICF

N

0 100 200 Feet

1:1,360

Figure 7 Sheet 3
CDFW Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect

CDFW Waters

- Unvegetated Streambed
- Vegetated Streambed
- Riparian

0 100 200 Feet

1:1,360

N

ICF

Figure 7 Sheet 4
CDFW Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect

CDFW Waters

- Unvegetated Streambed
- Vegetated Streambed
- Riparian

0 100 200 Feet

1:1,360

Figure 7 Sheet 5
CDFW Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect

CDFW Waters

- Unvegetated Streambed
- Vegetated Streambed
- Riparian

0 100 200 Feet

1:1,360

N

Figure 7 Sheet 6
CDFW Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect

CDFW Waters

- Unvegetated Streambed
- Vegetated Streambed
- Riparian

ICF

N

0 100 200 Feet

1:1,360

Figure 7 Sheet 7
CDFW Aquatic Resources
Carlton Oaks Project

Legend

- Delineation Area
- Culvert
- Outfall
- Photo Point
- Sample Point
- OHWM Transect

CDFW Waters

- Unvegetated Streambed
- Vegetated Streambed
- Riparian

0 100 200 Feet

1:1,360

N

ICF

Figure 7 Sheet 8
CDFW Aquatic Resources
Carlton Oaks Project

Appendix B

Site Photographs, April 2019

Carlton Oaks Photolog
Photos taken on 4/17/2019

	Photo 1, Figure 6 and 7 – Sheet 1 Name: NWW 4 – San Diego River/Forester Creek – Riparian Habitat Comments: Facing south, view of associated riparian habitat. This is the only area along the project boundary where the berm between the golf course and the river is less than 5 feet higher and therefore this area was considered CDFW jurisdiction.
	Photo 2, Figure 6 and 7 – Sheet 1 Name: NWW 1 – Sycamore Canyon Creek Comments: Facing west, view of where SP 4.2 was taken, within the OHWM however outside of wetland waters. This is before the downstream confluence of Sycamore Canyon Creek and San Diego River/Forester Creek causing a ponded area indicated by the red arrow.
	Photo 3, Figure 6 and 7 – Sheet 1 Name: NWW 1 – Sycamore Canyon Creek Comments: Facing east, view of the lower portion of the San Diego River within the project boundary.

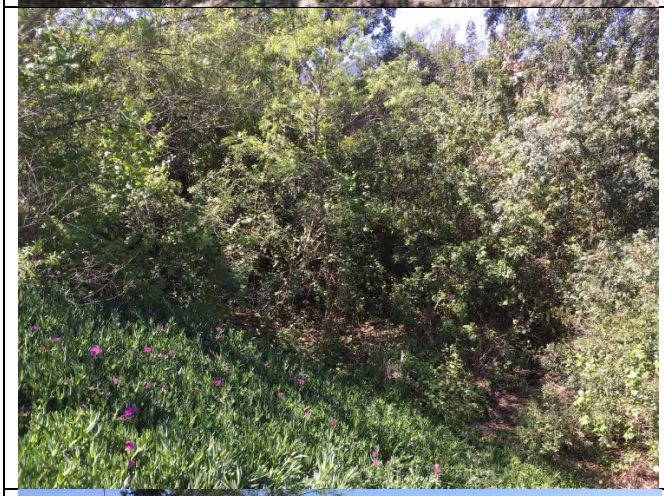
Carlton Oaks Photolog
Photos taken on 4/17/2019

	Photo 4, Figure 6 and 7 – Sheet 1 Name: EW 2 - Constructed Pond Comments: Facing northwest, view of a constructed pond located within the northwest project area boundary. Not a jurisdictional feature as this is a constructed water feature.
	Photo 5, Figure 6 and 7 – Sheet 3 Name: NWW 1 – Sycamore Canyon Creek Comments: Facing west, view of where SP 3.1 was taken and OHWM transect T3. In this area the river is wider and has a large active floodplain.
	Photo 6, Figure 6 and 7 – Sheet 3 Name: Riparian Area Comments: Facing east, view of where SP 5.1 was taken to verify this area is not a wetland. A 12-foot tall berm separates San Diego River from the project area where this riparian area occurs therefore this areas was also not considered CDFW associated riparian.

Carlton Oaks Photolog
Photos taken on 4/17/2019

	Photo 7, Figure 6 and 7 – Sheet 4 Name: NWW 3 Comments: Facing north, view of NWW 3 that flows into NWW 1, Sycamore Canyon Creek. It begins at an outfall at the top of the hillslope.
	Photo 8, Figure 6 and 7 – Sheet 4 Name: NWW 1- Sycamore Canyon Creek Comments: Facing west, view of nonwetland/un-vegetated segment of NWW 1, Sycamore Canyon Creek.
	Photo 9, Figure 6 and 7 – Sheet 4 Name: WW 2 Comments: Facing west, view of wetland depressional area dominated with cattails and willows. SP 6.1 taken within this area to confirm wetland habitat.

Carlton Oaks Photolog
Photos taken on 4/17/2019

	Photo 10, Figure 6 and 7 – Sheet 4 Name: Riparian Area Comments: Facing north, within riparian area dominated by willows and oak trees. Only mature willows within this area and no hydrology indicators observed. This area was determined to not be a wetland. Additionally, there is a 10-foot tall berm that separates this riparian area from San Diego River, therefore this area was also not considered CDFW associated riparian habitat.
	Photo 11, Figure 6 and 7 – Sheet 5 Name: NWW 2 Comments: Facing south, view of NWW 2 that flows into NWW 1, Sycamore Canyon Creek. Banks are dominated by iceplant and drainage dominated by willows.
	Photo 12, Figure 6 and 7 – Sheet 5 Name: NWW 1 – Sycamore Canyon Creek Comments: Facing northeast, view of concrete dam. An in-line pond was constructed within NWW 1 upstream of this area.

Carlton Oaks Photolog
Photos taken on 4/17/2019

	Photo 13, Figure 6 and 7 – Sheet 5 Name: NWW 1- Sycamore Canyon Creek Comments: Facing east, view of the constructed in-line pond within NWW 1.
	Photo 14, Figure 6 and 7 – Sheet 7 Name: NWW 1 – Sycamore Canyon Creek Comments: Facing west, view of NWW 1 where SP 1.1 and 1.2 was taken. Wetland and riparian habitat occur just outside of the survey area.
	Photo 15, Figure 6 and 7 – Sheet 7 Name: NWW 5 Comments: Facing east, view of NWW 5

Carlton Oaks Photolog
Photos taken on 4/17/2019

	Photo 16, Figure 6 and 7 – Sheet 8 Name: WW 1 Comments: Facing southwest, view of the WW 1, a depressional area. No inlet or outlet observed within this area. Ponded water and emergent vegetation observed.

Appendix C

Arid West Ordinary High Water Mark Data Forms

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Carlton Oaks
Project Number:
Stream: Sycamore Creek
Investigator(s): L. Cervantes + N. Salas

Date: 4/17
Town: Santee
Photo begin file#:

Time: 9:30
State: CA
Photo end file#:

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☒ / N ☐ Is the site significantly disturbed?

Location Details: T1 - NWW 1

Projection: **Datum:** 0

Coordinates: See Figure 6 Sheet 5

Potential anthropogenic influences on the channel system:
- lots of irrigation; portion of the channel is within an ornamental water feature within golf course.

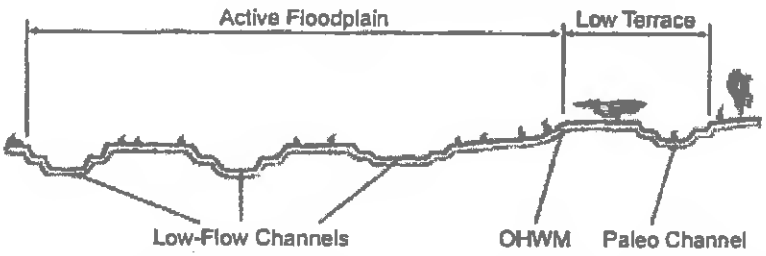
Brief site description:
Surrounded by maintained golf course. Channel is mostly open water with wetland fringe.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☐ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☐ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

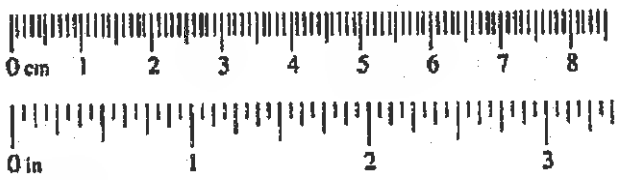


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☑ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

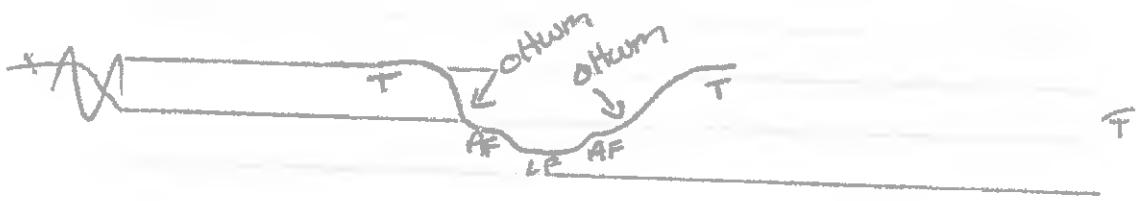
Wentworth Size Classes

Inches (in)	Millimeters (mm)	Wentworth size class	
10.08	256	Boulder	Gravel
2.56	64	Cobble	Gravel
0.157	4	Pebble	Gravel
		Granule	Gravel
0.079	2.00		
0.039	1.00	Very coarse sand	Sand
0.020	0.50	Coarse sand	Sand
1/2 0.0098	0.25	Medium sand	Sand
1/4 0.005	0.125	Fine sand	Sand
		Very fine sand	Sand
1/8 0.0025	0.0625		
1/16 0.0012	0.031	Coarse silt	Silt
1/32 0.00061	0.0156	Medium silt	Silt
1/64 0.00031	0.0078	Fine silt	Silt
		Very fine silt	Silt
1/128 0.00015	0.0039		
		Clay	Mud



Project ID: Cross section ID: T1-NWW1 Date: Time:

Cross section (



OHWM

GPS point: See figure Sheet 5

Indicators:

- [X] Change in average sediment texture
- [X] Change in vegetation species
- [ ] Change in vegetation cover
- [X] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

Clear break in slope, close to trapazoidal channel, riprapon either side of channel.

Floodplain unit: [X] Low-Flow Channel [ ] Active Floodplain [ ] Low Terrace

GPS point: Sheet 4

Characteristics of the floodplain unit:

Average sediment texture: medium silt

Total veg cover: 40 % Tree: 0 % Shrub: 0 % Herb: 40 %

Community successional stage:

- [ ] NA
- [X] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [X] Ripples
- [ ] Drift and/or debris
- [ ] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [ ] Surface relief
- [X] Other: drainage patterns
- [ ] Other: _____
- [ ] Other: _____

Comments:

Low flow is mostly open water

Project ID: Cross section ID: T1 - NWW1 Date: Time:

Floodplain unit: ☐ Low-Flow Channel ☒ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: Cobble/coarse Silt

Total veg cover: 90 % Tree: 0 % Shrub: 10 % Herb: 50 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☒ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☒ Ripples
- ☐ Drift and/or debris
- ☒ Presence of bed and bank
- ☒ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Both soil types observed within Channel, Cobbles near rip rap & coarse silt with in AF.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☒ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: Boulder

Total veg cover: 20 % Tree: 0 % Shrub: 0 % Herb: 20 %

Community successional stage:

- ☐ NA
- ☒ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☒ Presence of bed and bank
- ☐ Benches
- ☒ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

terrace is constructed from placed rip rap

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Carlton Oaks **Date:** 4/17/19 **Time:** 10:00
Project Number: **Town:** Santee **State:** CA
Stream: Tributary to Sycamore Ck **Photo begin file#:** **Photo end file#:**
Investigator(s): L. Cervantes, N Salas

Y ☐ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☐ Is the site significantly disturbed?

Location Details: T2 - NWW2

Projection: **Datum:**
Coordinates: See Figure 6 sheet 5

Potential anthropogenic influences on the channel system:
Feature is surranded by development and golf course. Small amounts of trash and stormwater runoff into area

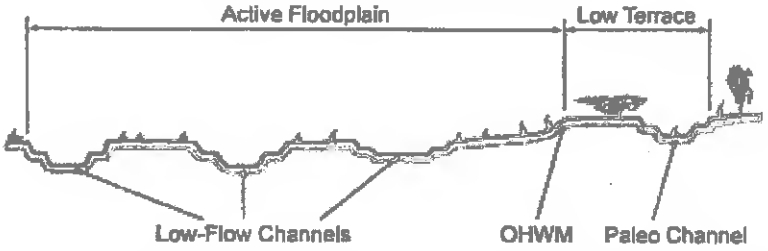
Brief site description:
Steep banks dominated by iceplant. Riparian/wetland vegetation in channel bottom. Mix of native and nonnative veg.

Checklist of resources (if available):

- ☒ Aerial photography
  Dates:
- ☒ Topographic maps
- ☐ Geologic maps
- ☒ Vegetation maps
- ☐ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☒ Global positioning system (GPS)
- ☐ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
  - ☐ History of recent effective discharges
  - ☐ Results of flood frequency analysis
  - ☐ Most recent shift-adjusted rating
  - ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

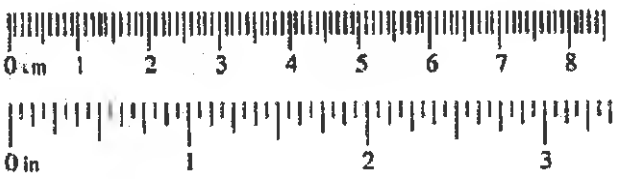


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☒ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☒ GPS
   - ☐ Other:

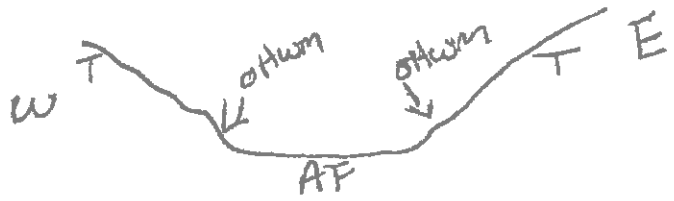
Wentworth Size Classes

Inches (in)	Millimeters (mm)	Wentworth size class	
10.08	256	Boulder	Gravel
2.58	64	Cobble	Gravel
0.157	4	Pebble	Gravel
		Granule	Gravel
0.079	2.00		
0.039	1.00	Very coarse sand	Sand
0.020	0.50	Coarse sand	Sand
1/2 0.0098	0.25	Medium sand	Sand
1/4 0.005	0.125	Fine sand	Sand
		Very fine sand	Sand
1/8 0.0025	0.0625		
1/16 0.0012	0.031	Coarse silt	Silt
1/32 0.00061	0.0156	Medium silt	Silt
1/64 0.00031	0.0078	Fine silt	Silt
		Very fine silt	Silt
1/128 0.00015	0.0039		
		Clay	Mud



Project ID: **Cross section ID:** T2-1 n WW2 **Date:** **Time:**

Cross section drawing:



OHWM

GPS point: See Figure Sheet 5

Indicators:

- [x] Change in average sediment texture
- [x] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments: Clear break in slope as banks on both sides are very steep. Vegetation changes from Brazilian pepper tree, cottonwood, typha, and wild grape to iceplant.

Floodplain unit: [x] Low-Flow Channel [x] Active Floodplain [ ] Low Terrace

GPS point: Sheet 5

Characteristics of the floodplain unit:

Average sediment texture: medium silt

Total veg cover: 65 % Tree: 40 % Shrub: 0 % Herb: 25 %

Community successional stage:

- [ ] NA
- [ ] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [x] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [x] Drift and/or debris
- [x] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [ ] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments: no true low flow channel, full area appears to be engaged. Lots of drift + debris, as well as drainage patterns. Clear break in slope.

Project ID: Cross section ID: T2-, NWW2 Date: Time:

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☒ Low Terrace

GPS point: see Figure Sheet 5

Characteristics of the floodplain unit:

Average sediment texture: medium silt

Total veg cover: 90 % Tree: 10 % Shrub: 0 % Herb: 80 %

Community successional stage:

- ☐ NA
- ☒ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☒ Presence of bed and bank
- ☐ Benches
- ☒ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments: Area dominated by iceplant and steep 45% slopes.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Carlton oaks
Project Number:
Stream: Sycamore Creek
Investigator(s): L. Cervantes, N. Salas

Date: 4/17/19 **Time:** 12:30
Town: Santee **State:** CA
Photo begin file#: **Photo end file#:**

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: T3- NWW 1.

Projection: **Datum:**
Coordinates: See Figure sheet 3

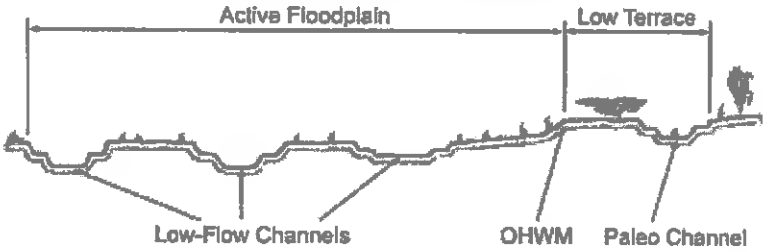
Potential anthropogenic influences on the channel system:
site w/in golf course and recieves significant runoff from irrigation

Brief site description:
Feature in this area is a larger floodplain area w/active floodplain, not as confined as upstream and downstream areas

Checklist of resources (if available):

- [X] Aerial photography
  Dates:
- [X] Topographic maps
- [ ] Geologic maps
- [X] Vegetation maps
- [ ] Soils maps
- [ ] Rainfall/precipitation maps
- [ ] Existing delineation(s) for site
- [ ] Global positioning system (GPS)
- [ ] Other studies
- [ ] Stream gage data
  Gage number:
  Period of record:
  - [ ] History of recent effective discharges
  - [ ] Results of flood frequency analysis
  - [ ] Most recent shift-adjusted rating
  - [ ] Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

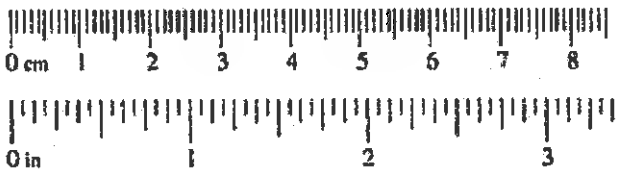


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - [X] Mapping on aerial photograph
   - [ ] Digitized on computer
   - [X] GPS
   - [ ] Other:

Wentworth Size Classes

Inches (in)	Millimeters (mm)	Wentworth size class	
10.08	256	Boulder	Gravel
2.56	64	Cobble	Gravel
0.157	4	Pebble	Gravel
		Granule	Gravel
0.079	2.00		
0.039	1.00	Very coarse sand	Sand
0.020	0.50	Coarse sand	Sand
1/2 0.0098	0.25	Medium sand	Sand
1/4 0.005	0.125	Fine sand	Sand
1/8 0.0025	0.0625	Very fine sand	Sand
1/16 0.0012	0.031	Coarse silt	Silt
1/32 0.00061	0.0156	Medium silt	Silt
1/64 0.00031	0.0078	Fine silt	Silt
1/128 0.00015	0.0039	Very fine silt	Silt
		Clay	Mud



Project ID: Cross section ID: T3-NWW1 Date: Time:

Cross section drawing:

OHWM

GPS point: See Figure Sheet 3

Indicators:

- [x] Change in average sediment texture
- [x] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

Clear break in slope, about a 5ft elevation increase from AF to Terrace. Vegetation shift from wetland/riparian to annual grassland.

Floodplain unit: [x] Low-Flow Channel [ ] Active Floodplain [ ] Low Terrace

GPS point: Sheet 3

Characteristics of the floodplain unit:

Average sediment texture: Medium silt

Total veg cover: 40 % Tree: 0 % Shrub: 0 % Herb: 40 %

Community successional stage:

- [ ] NA
- [x] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [x] Drift and/or debris
- [ ] Presence of bed and bank
- [x] Benches
- [ ] Soil development
- [ ] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments:

Low flow supports flowing water and is 1.5ft lower in elevation from AF. Cattails and bulrush limited to Low flow.

Project ID: **Cross section ID:** T3-NWW1 **Date:** **Time:**

Floodplain unit: ☐ Low-Flow Channel ☒ Active Floodplain ☐ Low Terrace

GPS point: Sheet 3

Characteristics of the floodplain unit:
Average sediment texture: medium silt
Total veg cover: 100 % Tree: 40 % Shrub: 0 % Herb: 60 %
Community successional stage:
☐ NA ☐ Mid (herbaceous, shrubs, saplings)
☐ Early (herbaceous & seedlings) ☒ Late (herbaceous, shrubs, mature trees)

Indicators:
☐ Mudcracks ☐ Soil development
☐ Ripples ☐ Surface relief
☒ Drift and/or debris ☐ Other: _____
☒ Presence of bed and bank ☐ Other: _____
☒ Benches ☐ Other: _____

Comments:
AF is characterized with dominance of wetland herbs consisting of yerba mansa and Curly dock w/mature tree canopy. Lots of debris and sediment and clear bench from LF to AF then to terrace.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☒ Low Terrace

GPS point: Sheet 3

Characteristics of the floodplain unit:
Average sediment texture: medium sand
Total veg cover: 70 % Tree: 10 % Shrub: 0 % Herb: 60 %
Community successional stage:
☐ NA ☐ Mid (herbaceous, shrubs, saplings)
☒ Early (herbaceous & seedlings) ☐ Late (herbaceous, shrubs, mature trees)

Indicators:
☐ Mudcracks ☒ Soil development
☐ Ripples ☐ Surface relief
☐ Drift and/or debris ☐ Other: _____
☒ Presence of bed and bank ☐ Other: _____
☐ Benches ☐ Other: _____

Comments:
Low terrace dominated by annual grasses and a caple of fan palms.

Appendix D

Arid West Wetland Determination Forms

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project | City/County: Santee/San Diego | Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. | State: CA | Sampling Point: 1.1

Investigator(s): Lanika Cervantes and Nicole Salas | Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Depression/drainage | Local relief (concave, convex, none): concave | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 32.843129 | Long: -117.004691 | Datum: NAD 1963

Soil Map Unit Name: Riverwash | NWI classification: Freshwater Forested/Shrub

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 (●)	No ( )	
Hydric Soil Present?	Yes (●)	No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Wetland Hydrology Present?	Yes (●)	No ( )	

Remarks: Sample point taken at edge of wetlands for San Diego River.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix laevigata*	20	Yes	FACW
2.			
3.			
4.			
Total Cover:	20 %		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Typha domingensis*	25	Yes	OBL
2. *Vitis californica*	5	No	FACU
3. *Ambrosia psilostachya*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
Total Cover:	35 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 65 % | % 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: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	20	x 2 =	40
FAC species		x 3 =	0
FACU species	10	x 4 =	40
UPL species		x 5 =	0
Column Totals:	55 (A)		105 (B)

Prevalence Index = B/A = 1.91

Hydrophytic Vegetation Indicators:

- [X] Dominance Test is >50%
- [X] 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.

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks: The sample area was dominated with obligate and FACW vegetation.

SOIL

Sampling Point: 1.1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	Gley 1 2.5 10Y	100	-	-			Loam/Clay	

[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)
- ☐ 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 ◉ No ○

Remarks: Soils were saturated at 4 inches and had a strong hydrogen sulfide smell, which indicates hydric soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☒ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☒ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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):	3
Water Table Present?	Yes ◉ No ○	Depth (inches):	At surface
Saturation Present? (includes capillary fringe)	Yes ◉ No ○	Depth (inches):	At surface

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: The sample area had four primary hydrology indicators observed within the area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project | City/County: Santee/San Diego | Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. | State: CA | Sampling Point: 1.2

Investigator(s): Lanika Cervantes and Nicole Salas | Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 32.843129 | Long: -117.004646 | Datum: NAD 1963

Soil Map Unit Name: Riverwash | NWI classification: Undefined

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 ( )	No (●)	
Hydric Soil Present?	Yes (●)	No ( )	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Wetland Hydrology Present?	Yes ( )	No (●)	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Ambrosia psilostachya*	40	Yes	FACU
2. *Vitis californica*	10	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	50 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 50 % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species	50	x 4 =	200
UPL species		x 5 =	0
Column Totals:	50 (A)		200 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

- (●) 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.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

SOIL

Sampling Point: 1.2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Loamy Clay	
3-8	10YR 5/2	92	10YR 5/6	8	C	M	Sand	Moist soil at edge of slope near golf course

[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)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compaction

Depth (inches): 8

Hydric Soil Present? Yes ◉ No ○

Remarks: Soils were compacted and very difficult to dig, however this are did support hydric soils. May be due to irrigation from the golfcourse as this area is still lower in elevation from the course.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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: No primary or secondary wetland hydrology indicators were observed within the project area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project | City/County: Santee/San Diego | Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. | State: CA | Sampling Point: 2.1

Investigator(s): Lanika Cervantes and Nicole Salas | Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Drainage | Local relief (concave, convex, none): concave | Slope (%): 1

Subregion (LRR): C - Mediterranean California | Lat: 32.842318 | Long: -117.010926 | Datum: NAD 1963

Soil Map Unit Name: Redding cobbly loam | NWI classification: Undefined

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 (●)	No ( )	
Hydric Soil Present?	Yes (●)	No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Wetland Hydrology Present?	Yes (●)	No ( )	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Schinus terebinthifolia*	15	Yes	FAC
2.			
3.			
4.			
Total Cover:	15 %		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Vitis californica*	15	Yes	FACU
2. *Carpobrotus edulis*	5	No	Not Listed
3. *Typha domingensis*	15	Yes	OBL
4.			
5.			
6.			
7.			
8.			
Total Cover:	35 %		
Woody Vine Stratum			
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: 66.7 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species		x 2 =	0
FAC species	15	x 3 =	45
FACU species	15	x 4 =	60
UPL species	5	x 5 =	25
Column Totals:	50 (A)		145 (B)

Prevalence Index = B/A = 2.90

Hydrophytic Vegetation Indicators:

- [X] Dominance Test is >50%
- [X] 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.

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks: Sample area is supported by wetland vegetation.

SOIL

Sampling Point: 2.1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Loamy Clay	
3-8	10YR 5/2	92	10YR 5/6	8	C	M	Sand	Moist soil at edge of slope near golf course

[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)
- ☐ 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 ◉ No ○

Remarks: Soils were compacted and very difficult to dig and no hydric soil indicators were observed with the sample area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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): 3
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 1

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: The sample area had both primary and secondary indicators observed within the area. High levels of sediment and drift deposits and a high water table was observed within the sample area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project | City/County: Santee/San Diego | Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. | State: CA | Sampling Point: 2.2

Investigator(s): Lanika Cervantes and Nicole Salas | Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 32.842318 | Long: -117.010868 | Datum: NAD 1963

Soil Map Unit Name: Redding cobbly loam | NWI classification: Undefined

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 ( )	No (●)	
Hydric Soil Present?	Yes ( )	No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Wetland Hydrology Present?	Yes ( )	No (●)	

Remarks: Sample point 2.2 is approximately 20 feet higher in elevation than sample point 2.1

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Carpobrotus edulis*	90	Yes	Not Listed
2. *Ambrosia psilostachya*	3	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	93 %		
Woody Vine Stratum			
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: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species	3	x 4 =	12
UPL species	90	x 5 =	450
Column Totals:	93 (A)		462 (B)

Prevalence Index = B/A = 4.97

Hydrophytic Vegetation Indicators:

- (●) 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.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks: The sample area is dominated with upland vegetaion and ornamental vegetation.

SOIL

Sampling Point: 2.2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 3/3	100	-				Loamy Clay	Dry soils

[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)
- ☐ 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 ○ No ◉

Remarks: No hydric soil indicators were observed with the sample area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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: The sample area had no primary nor secondary indicators observed within the area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project | City/County: Santee/San Diego | Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. | State: CA | Sampling Point: 3.1

Investigator(s): Lanika Cervantes and Nicole Salas | Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Floodplain | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 32.837908 | Long: -117.017178 | Datum: NAD 1963

Soil Map Unit Name: Riverwash | NWI classification: Riverine

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 (●)	No ( )	
Hydric Soil Present?	Yes (●)	No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Wetland Hydrology Present?	Yes (●)	No ( )	

Remarks: Sample point 3.1 is approximately 3 feet lower in elevation than sample point 3.2.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix lasiolepis*	25	Yes	FACW
2. *Populus fremontii*	20	Yes	FAC
3. *Schinus terebinthifolius*	10	No	Not Listed
4.			
Total Cover:	55 %		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Rumex crispus*	30	Yes	FAC
2. *Anemopsis californica*	20	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	50 %		
Woody Vine Stratum			
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: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	25	x 2 =	50
FAC species	50	x 3 =	150
FACU species		x 4 =	0
UPL species	10	x 5 =	50
Column Totals:	105 (A)		270 (B)

Prevalence Index = B/A = 2.57

Hydrophytic Vegetation Indicators:

- [X] Dominance Test is >50%
- [X] 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.

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks: The sample area is dominated with obligate, FACW and FAC vegetation.

SOIL

Sampling Point: 3.1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Loamy Clay	
4-8	10YR 4/1	98	Gley 1 2.5/N	2			Sand	
8-18	10 YR 4/1	100					Loamy Clay	

[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)
- ☐ 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 ◉ No ○

Remarks: The soil had a faint Hydrogen Sulfide smell, and distinct redox concentrations

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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: The sample area had three secondary indicators observed within the area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project | City/County: Santee/San Diego | Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. | State: CA | Sampling Point: 3.2

Investigator(s): Lanika Cervantes and Nicole Salas | Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 32.838026 | Long: -117.017112 | Datum: NAD 1963

Soil Map Unit Name: Riverwash | NWI classification: Undefined

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 ( )	No (●)	
Hydric Soil Present?	Yes ( )	No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Wetland Hydrology Present?	Yes ( )	No (●)	

Remarks: Sample point taken on floodplain terrace, but located 5 feet higher in elevation from drainage.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Erigeron canadensis*	40	Yes	FACU
2. *Hirschfeldia incana*	10	No	Not Listed
3. *Juncus acutus*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
Total Cover:	55 %		
Woody Vine Stratum			
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: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species	5	x 2 =	10
FAC species		x 3 =	0
FACU species	40	x 4 =	160
UPL species	10	x 5 =	50
Column Totals:	55 (A)		220 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

- [●] 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.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks: The sample area is dominated with upland vegetation.

SOIL

Sampling Point: 3.2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-13	10YR 3/3	100					Loamy Clay	

[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)
- ☐ 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 ○ No ◉

Remarks: No hydric soil indicators were observed with the sample area. The sample pit was approximately 5 feet higher than the drainage/lower floodplain.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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: The sample area had signs of sediment deposits, which could be from the drainage overflowing in high rain events.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project City/County: Santee/San Diego Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. State: CA Sampling Point: 4.1

Investigator(s): Lanika Cervantes and Nicole Salas Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): C - Mediterranean California Lat: 32.83911 Long: -117.022093 Datum: NAD 1963

Soil Map Unit Name: Riverwash NWI classification: Riverine

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 (•)	No ( )	
Hydric Soil Present?	Yes (•)	No ( )	**Is the Sampled Area within a Wetland?** Yes (•) No ( )
Wetland Hydrology Present?	Yes (•)	No ( )	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Typha domingensis*	20	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	20 %		
Woody Vine Stratum			
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: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	20 (A)		20 (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

- [x] Dominance Test is >50%
- [x] 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.

Hydrophytic Vegetation Present? Yes (•) No ( )

Remarks: The sample area is dominated with obligate vegetation.

SOIL

Sampling Point: 4.1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
								No pit dug

[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)
- ☒ 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 ◉ No ○

Remarks: No sample pit was dug because standing water was within the sample area and roots were inhibiting obtaining a soil sample. Soil assumed hydric based on primary hydrology indicators and dominance of obligate vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☒ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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):	5
Water Table Present?	Yes ◉	No ○	Depth (inches):	At Surface
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches):	At Surface

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: The sample area had surface water present, which is a primary wetland hydrology indicator.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project | City/County: Santee/San Diego | Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. | State: CA | Sampling Point: 4.2

Investigator(s): Lanika Cervantes and Nicole Salas | Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 32.839132 | Long: -117.022086 | Datum: NAD 1963

Soil Map Unit Name: Riverwash | NWI classification: Undefined

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 ( )	No (●)	
Hydric Soil Present?	Yes ( )	No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Wetland Hydrology Present?	Yes (●)	No ( )	

Remarks: Sample point taken within OHWM however outside of wetland area

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Hirschfeldia incana*	15	Yes	Not Listed
2. *Bromus diandrus*	5	Yes	Not Listed
3. *Centaurea solstitialis*	1	No	Not Listed
4.			
5.			
6.			
7.			
8.			
Total Cover:	21 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 79 % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species	21	x 5 =	105
Column Totals:	21 (A)		105 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

- (●) 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.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks: The sample area is dominated with upland vegetation.

SOIL

Sampling Point: 4.2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/3	100					sand	
8-14	10YR 3/2	95	7.5 YR 4/6	5	C	M	Loamy Clay	Prominent redox

[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)
- ☐ 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 ○ No ◉

Remarks: The soils do not meet any of the hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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: The sample area had some sediment and drift deposits as this area was determined to be within the OHWM, however did not support wetland habitat.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project | City/County: Santee/San Diego | Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. | State: CA | Sampling Point: 5.1

Investigator(s): Lanika Cervantes and Nicole Salas | Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 32.837337 | Long: -117.016892 | Datum: NAD 1963

Soil Map Unit Name: Riverwash | NWI classification: Undefined

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 (●)	No ( )	
Hydric Soil Present?	Yes ( )	No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Wetland Hydrology Present?	Yes ( )	No (●)	

Remarks: Sample pit 5.1 was to confirm that the riparian habitat observed near the golf course berm was not a wetland.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	25	Yes	OBL
2. *Populus fremontii*	15	Yes	FAC
3.			
4.			
Total Cover:	40 %		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Lactuca serriola*	20	Yes	FACU
2. *Hirschfeldia incana*	10	Yes	Not Listed
3. *Anagallis arvensis*	10	Yes	FAC
4. *Centaurea solstitialis*	5	No	Not Listed
5. *Foeniculum vulgare*	2	No	Not Listed
6.			
7.			
8.			
Total Cover:	47 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 53 % | % 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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species		x 2 =	0
FAC species	25	x 3 =	75
FACU species	20	x 4 =	80
UPL species	17	x 5 =	85
Column Totals:	87 (A)		265 (B)

Prevalence Index = B/A = 3.05

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.

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks: The sample area is dominated with herbaceous upland vegetation and has a canopy of willows that overhangs into the sample area.

SOIL

Sampling Point: 5.1

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
0-7	10YR 4/3	100	-				sand	
8-15	10YR 4/2	100	-				Loamy Clay	

[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)
- ☐ 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 ○ No ◉

Remarks: No hydric soil indicators were observed within the sample area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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: The sample area had some drift deposits but no other primary nor secondary wetland hydrology indicators. There is also a large 12 foot tall berm that separates this riparian habitat to Forester Creek. Drift deposits may have occurred due to large rain events or irrigation flows in this area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project | City/County: Santee/San Diego | Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. | State: CA | Sampling Point: 6.1

Investigator(s): Lanika Cervantes and Nicole Salas | Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 1

Subregion (LRR): C - Mediterranean California | Lat: 32.838488 | Long: -117.012336 | Datum: NAD 1963

Soil Map Unit Name: Riverwash | NWI classification: Freshwater Emergent Wetl

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 (●)	No ( )	
Hydric Soil Present?	Yes (●)	No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Wetland Hydrology Present?	Yes (●)	No ( )	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix laevigata*	15	Yes	FACW
2.			
3.			
4.			
Total Cover:	15 %		
Sapling/Shrub Stratum			
1. *Baccharis salicifolia*	5	Yes	FAC
2.			
3.			
4.			
5.			
Total Cover:	5 %		
Herb Stratum			
1. *Typha domingensis*	30	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	30 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 70 % | % 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: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	15	x 2 =	30
FAC species	5	x 3 =	15
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	50 (A)		75 (B)

Prevalence Index = B/A = 1.50

Hydrophytic Vegetation Indicators:

- [X] Dominance Test is >50%
- [X] 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.

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks: The sample area is dominated with herbaceous obligate vegetation and has a canopy of willows that overhangs into the sample area.

SOIL

Sampling Point: 6.1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	Gley 1 310Y	100					sand	

[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)
- ☐ 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 ◉ No ○

Remarks: The soil sample had a strong hydrogen sulfide smell; that was the only indicator that was observed within the sample area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☒ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☒ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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):	2
Water Table Present?	Yes ◉ No ○	Depth (inches):	At Surface
Saturation Present? (includes capillary fringe)	Yes ◉ No ○	Depth (inches):	At Surface

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: The sample area had three primary wetland hydrology indicators within the sample area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carlton Oaks Project | City/County: Santee/San Diego | Sampling Date: 4/17/2019

Applicant/Owner: Lennar Corp. | State: CA | Sampling Point: 6.2

Investigator(s): Lanika Cervantes and Nicole Salas | Section, Township, Range: Undefined

Landform (hillslope, terrace, etc.): Terrace | Local relief (concave, convex, none): concave | Slope (%): 2

Subregion (LRR): C - Mediterranean California | Lat: 32.838422 | Long: -117.012295 | Datum: NAD 1963

Soil Map Unit Name: Riverwash | NWI classification: Undefined

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 ( )	No (●)	
Hydric Soil Present?	Yes ( )	No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Wetland Hydrology Present?	Yes ( )	No (●)	

Remarks: Sample Area 6.2 is approximately 3 feet higher in elevation than Sample Point 6.1.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Hirschfeldia incana*	20	Yes	Not Listed
2. *Ambrosia psilostachya*	20	Yes	FACU
3. *Lepidium virginicum*	15	Yes	FACU
4.			
5.			
6.			
7.			
8.			
Total Cover:	55 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 45 % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species	35	x 4 =	140
UPL species	20	x 5 =	100
Column Totals:	55 (A)		240 (B)

Prevalence Index = B/A = 4.36

Hydrophytic Vegetation Indicators:

- (●) 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.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks: The sample area is dominated with herbaceous upland vegetation.

SOIL

Sampling Point: 6.2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100	-				Sandy	

[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)
- ☐ 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 ○ No ◉

Remarks: No hydric soil indicators were observed within the sample area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ 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)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ 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: No primary nor secondary wetland hydrology indicators were observed within the sample area.

Appendix E

RGL 16-01 Approved JD Request

Appendix 1 - REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD)

To: District Name Here

- I am requesting a JD on property located at: Carlton Oaks Country Club, 9200 Inwood Drive
  (Street Address)
  City/Township/Parish: Santee County: San Diego State: CA
  Acreage of Parcel/Review Area for JD: _____
  Section: _____ Township: 15S Range: 1W
  Latitude (decimal degrees): 32.839713 Longitude (decimal degrees): -117.010112
  (For linear projects, please include the center point of the proposed alignment.)
- Please attach a survey/plat map and vicinity map identifying location and review area for the JD.
- ☐ I currently own this property. ☐ I plan to purchase this property.
  ☑ I am an agent/consultant acting on behalf of the requestor.
  ☐ Other (please explain): _____.
- Reason for request: (check as many as applicable)
  ☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
  ☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
  ☑ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
  ☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
  ☐ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
  ☐ A Corps JD is required in order to obtain my local/state authorization.
  ☑ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
  ☐ I believe that the site may be comprised entirely of dry land.
  ☐ Other: _____
- Type of determination being requested:
  ☑ I am requesting an approved JD.
  ☐ I am requesting a preliminary JD.
  ☐ I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.
  ☐ I am unclear as to which JD I would like to request and require additional information to inform my decision.

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

*Signature: _____ Date: 09/16/2019

- Typed or printed name: Meris Guerrero
  Company name: ICF
  Address: 525 B Street, Suite 1700, San Diego, CA 92101
  _____
  Daytime phone no.: 858-444-3953
  Email address: meris.guerrero@icf.com

***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.
Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.
Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.
Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

Attachment E

2020 Approved Jurisdictional Determination

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
5900 LA PLACE COURT, SUITE 100
CARLSBAD, CALIFORNIA 92008

June 19, 2020

SUBJECT: Approved Jurisdictional Determination

Ryan E. Green
Lennar Corporation
16465 Via Esprillo, Suite 150
San Diego, California 92127

Dear Mr.Green:

I am responding to your request (File No. SPL-2019-00517) dated September 16, 2019 for an Approved Jurisdictional Determination (JD) for the Carlton Oaks Project Area (Review Area) located at 9200 Inwood Drive, within the city of Santee and San Diego, San Diego County, California (32.8397, -117.0101).

The Corps' evaluation process for determining whether a Department of the Army permit is needed involves two tests. If both tests are met, a permit would likely be required. The first test determines whether an aquatic resource located within the Review Area is within the Corps' geographic jurisdiction (i.e., it is within a water of the United States). The second test determines whether a project, as proposed, involves a regulated activity under Corps' authority (i.e., Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, or Section 103 of the Marine Protection Research and Sanctuaries Act). The determination in this letter pertains only to the question of geographic jurisdiction.

Based on available information, I have determined that waters of the U.S. are not present within the Review Area in the locations graphically depicted on the enclosed map entitled, "*Review Area: Excluded Resources Carlton Oaks Project"*, and dated June 4, 2020 (Enclosure 1). The basis for this finding may be found on the enclosed Approved Jurisdictional Determination form (Enclosure 2).

This determination was conducted to identify the potential extent of the Corps' Clean Water Act jurisdiction within the Carlton Oaks Review Area identified in your request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

Thank you for participating in the regulatory program. If you have any questions, please contact me at (760) 602-4838 or via e-mail at Daniel.S.Grijalva@usace.army.mil.

Sincerely,

Kyle Dahl
Chief
San Diego and Imperial Counties Section

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL		
Applicant: Ryan E. Green	File No.: SPL-2019-00517	Date: February 3, 2020

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at *http://www.usace.army.mil/cecw/pages/reg_materials.aspx* or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Daniel S. Grijalva
Regulatory Project Manager
U.S. Army Corps of Engineers
Los Angeles District
5099 La Place Court, Suite 100
Carlsbad, California 92008
Phone: 760-602-4836 , FAX 916-557-7803
Email: Daniel.S.Grijalva@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Thomas J. Cavanaugh
Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division
1455 Market Street, 2052B
San Francisco, California 94103-1399
Phone: 415-503-6574, FAX 415-503-6646)
Email: Thomas.J.Cavanaugh@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

Appendix J

Approved Jurisdictional Determination

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix K

~~Conceptual Habitat~~Proposed On-Site Mitigation ~~and Monitoring Plan~~Overview

Note: The originally circulated Appendix K, Conceptual Habitat Mitigation and Monitoring Plan (of Appendix E, Biological Survey Report), which was circulated for public review in June 2025, has been replaced with the following Appendix K, Proposed On-Site Mitigation Overview, of Appendix E, Revised Biological Survey Report. The original Appendix K, Conceptual Habitat Mitigation and Monitoring Plan (of Appendix E, Biological Survey Report) may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

MEMORANDUM

To:	Marisa Lundstedt, Principal; Summit Planning Group
From:	Michael Sweesy, Restoration Ecologist; Dudek
Subject:	Carlton Oaks Country Club and Resort Proposed Onsite Mitigation Overview
Date:	February 10, 2026
cc:	Lennar Homes
	Carey Fernandes, Daria Sarraf, Tricia Wotipka; Dudek
Attachments:	Figures 1-2

This memorandum provides a brief overview of the proposed mitigation program that will compensate for impacts to waters of the United States (U.S.) and state, including wetlands, as well as streambeds and riparian habitat subject to review and regulation by U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and the San Diego Regional Water Quality Control Board (RWQCB) within the Carlton Oaks Country Club and Resort Project (project). The mitigation program will replace wetlands functions and values through a mitigation program involving onsite mitigation that provides aquatic resource replacement within the same watershed as the impacts and minimizes risk and uncertainty of the mitigation outcome through appropriate design and implementation standards. The mitigation program demonstrates the ability of the project to provide successful onsite aquatic resource mitigation that reduces project impacts to a level below significant under the California Environmental Quality Act (CEQA).

Impacts to coastal sage scrub (CSS) habitat, a sensitive vegetation community that is regulated by the City of San Diego and the City of Santee, is also addressed through onsite mitigation.

Detailed Habitat Mitigation and Monitoring Plans (HMMP) will be completed for aquatic features and CSS habitat prior to the issuance of any grading permit from the City of Santee HMMPs will be provided in each resource agency's permit application, to satisfy regulatory requirements of the USACE, CDFW, RWQCB, and cities of San Diego and Santee.

1 Introduction

The proposed project would include a redesign of the existing Carlton Oaks golf course, construction of residential accessory uses consisting of two residential neighborhoods; redevelopment of the hotel and clubhouse features, including a pro shop; and learning center; and related roadway and utility infrastructure improvements. The proposed project is located at 9200 Inwood Drive, which is on the south side of Carlton Oaks Drive and the east side of West Hills Parkway and is within the City of Santee and City of San Diego, in San Diego County, California. The City of Santee is the Lead Agency under the CEQA for the proposed project.

The proposed project has been identified as Not a Part (NAP) of the Santee Multiple Species Conservation Plan Subarea Plan (Subarea Plan) Area. Therefore, Take authorization under the Subarea Plan is not available for projects occurring in the NAP areas. The applicant will seek Take authorization through Endangered Species Act (ESA) Section 7 or an individual Section 10 permit. The San Diego River (South Channel) is located adjacent to the southern side of the project site and within the City of San Diego's Multi-Habitat Planning Area (MHPA). The MHPA

is also designated over a portion of the existing golf course in the southern section of lands within the City of San Diego. No sensitive vegetation communities within the MHPA would be impacted because of the proposed project, and the overall use of the site will remain a golf course. An existing manufactured berm is located along most of the southern and eastern boundary, generally outside the project site and within the 100-foot buffer area. No alterations to the berm are proposed.

The project's permanent impacts include the following: proposed residential and clubhouse/hotel development, grading from the golf course redesign, fuel modification zones, spillway/dam repair within the ponded area along the San Diego River (North Channel), new footings associated with the proposed resort bridge and golf cart bridge, and off-site improvements for access and utilities.

The project's temporary impacts include the following: dewatering activities, spillway repair work area, and the Temporary Railcar Crossing. The project's temporary dewatering footprint is associated with the impounded portion of the San Diego River (North Channel). Dewatering activities are proposed only during the project's construction phase, and the ponded area would be rehydrated after removal of the dewatering weirs. No vegetation or tree removal, fill, or grading would occur as part of the temporary dewatering activities. The pond is an intermittent feature, drying up when water is not coming from Sycamore Canyon or high-water flows from the San Diego River, so the effects of dewatering are anticipated to be similar to existing variation in hydrology. The work area needed to repair the spillway within the ponded area of the San Diego River (North Channel) which would be restored to pre-project conditions after the spillway repair is complete. The Temporary Railcar Crossing would be placed at an existing golf cart bridge located west of the Proposed Resort Bridge to provide vehicular access to the golf course. Temporary steel beams and plates would be placed on top of the existing golf cart bridge to allow for a road wide enough to provide access for construction equipment. Once construction is complete the natural habitat areas would be restored in-place. To be conservative the entire area for the Temporary Railcar Crossing was analyzed as a temporary impact; however, impacts to sensitive habitat communities may not occur within the entire area based on the actual placement of the steel beams and plates on top of the existing golf cart bridge.

Avoidance areas within the project site are natural habitat areas associated with the major drainage feature bisecting the project site (i.e. Sycamore Canyon Creek and the San Diego River (North Channel)) and riparian habitat areas along the southern boundary of the project site associated with the San Diego River (South Channel). The golf course was designed to avoid these areas to the maximum extent feasible because these avoidance areas are highly valuable biological resources that are occupied by special-status species. Additionally, the project's grading and golf course layout were specifically designed to maintain river capacity and avoid adverse changes to the portion of Sycamore Canyon Creek and the San Diego River within the project site as well as the upstream or downstream reaches of Sycamore Canyon Creek and the San Diego River and their associated riparian vegetation communities. Therefore, the overall function and value of these areas will be maintained after project implementation.

2 Existing Conditions

Existing site conditions are important factors in determining site suitability and self-sustainability of habitat establishment, and to determine appropriate native vegetation communities and species composition of those communities within proposed mitigation areas. Analysis of existing conditions as described below suggests that

onsite soils and hydrology associated with the Sycamore Canyon Creek drainage channel are suitable for the proposed target native riparian and wetland communities.

2.1 Soils

There are no steep slopes or rock outcrops within the project site. The Natural Resources Conservation Service (NRCS) has mapped the following soil series as occurring within the delineated jurisdictional waters based on the Soil Survey Geographic (SSURGO) database (USDA/NRCS 2006): Redding, Riverwash, Visalia, and Vista. Soil series included within the SSURGO mapping unit (San Diego County Area; CA638) are described below based on the official soil descriptions provided by the U.S. Department of Agriculture (USDA/NRCS 2012). Soil maps for the project site are included in the Jurisdictional Delineation Report (Dudek ~~2025b~~2026).

Redding - The Redding soil series (RdC, ReE, RhC, and RhE) consists of well- or moderately well-drained soils that are found on terraces. The soils are formed from alluvium derived from mixed sources. The extent of the soils occurs along the northern and eastern edge of Central Valley in California. They occur in elevations from 130 to 1,000 feet and have slopes from 0% to 30%. They have very low to high run off and very slow to slow permeability. This soil series is not identified as hydric soils for San Diego County (USDA/NRCS 2011).

Riverwash - The Riverwash soil series (Rm) consists of excessively drained soils found on drainage ways. The soils formed from sandy, gravelly, or cobbly alluvium procured from mixed sources, and occur in elevations from 700 to 2,900 feet and at 0% to 4% slopes. They have negligible runoff. This soil series is identified as hydric for San Diego County (USDA/NRCS 2011). Riverwash soil has potential to support wetland communities, including riparian forest. Vegetation mapping and jurisdictional delineations determined the extent of wetland communities within the project area.

Visalia - The Visalia soils series (VbB and VbC) consists of well-drained soils that are typically associated with alluvial fans and floodplains. The soils are formed from alluvium derived from granite and occur in elevations ranging from 0 to 4,000 feet and at 5% to 15% slopes. This soils series is identified as hydric for San Diego County (USDA/NRCS 2011).

Vista - The Vista soil series (VbB, VbC, and VvD) consists of moderately deep, well-drained soils that formed in material weathered from decomposed granitic rocks. Vista soils are on hills and mountainous uplands and have slopes of 2% to 85%. This soil series is not identified as hydric for San Diego County (USDA/NRCS 2011).

2.2 Hydrology

The proposed project site lies within the Lower San Diego River watershed (Hydrologic Unit Code [HUC] 10: 1807030407) that contains the lower San Diego River and Forester Creek. These drainages are all characterized by vegetated streambeds and riparian habitats that run through urban areas. The southern boundary of the project site parallels the San Diego River (South Channel). Under existing conditions, the project site includes a vegetated earth berm along the southern and eastern boundaries, which directs low flows from the San Diego River and Forester Creek along the southern limits of the golf course. This berm will remain in place and unaltered under the proposed conditions, effectively isolating the project site from the upstream offsite drainage areas during small storm events and ensuring that existing low-flow conditions remain unaffected by the proposed project.

Sycamore Canyon Creek enters the site in the northeast, merges with the San Diego River (North Channel), then traverses westerly through the existing golf course, joining the San Diego River (mainstem South Channel) in the southwest side of the project site. The creek drains an approximate 11,000-acre catchment area that primarily includes open space including portions of the County of San Diego Goodan Ranch, City of San Diego Mission Trails Regional Park, and Miramar Naval Air Station. The creek channel bypasses the Ray Stayer Water Reclamation and treatment facility and the Santee Lakes recreational facility before entering the project area. Creek flow is unregulated throughout the watershed area.

2.3 Jurisdictional Aquatic Resources

Within the project site, aquatic resources were identified, evaluated, and mapped for potential USACE, RWQCB, and CDFW jurisdiction pursuant to each agency's regulations. A total of 11 features. likely subject to USACE, RWQCB, and CDFW regulatory jurisdiction (i.e., waters of the state/U.S. and streambeds/riparian habitat) occur within the project site. Because CDFW represents the greatest extent of jurisdictional aquatic features within the project site, this memorandum focuses on the mitigation required for impacts to CDFW jurisdictional areas.

2.3 Vegetation Communities

Eighteen vegetation communities or land cover types were observed within the project site and a buffer surrounding the project site. Most of the project site (78%) is made up of developed and disturbed habitats, with the remainder (22%) consisting of natural habitats. The following vegetation communities and land cover types were observed within the project site: coastal and valley freshwater marsh, developed (including golf course, culvert, spillway), Diegan coastal sage scrub – disturbed, disturbed habitat, disturbed wetland, eucalyptus woodland, freshwater (jurisdictional ponds), mule fat scrub – disturbed, non-native grassland, non-native riparian, southern cottonwood-willow riparian forest (including disturbed), and southern willow scrub. Brief descriptions of vegetation communities that occupy CDFW jurisdictional features within the development footprint are provided below.

2.3.1 Coastal and Valley Freshwater Marsh

Freshwater marsh communities are found in areas permanently inundated or flooded by fresh water, lacking significant current from water movement. Prolonged saturation in these communities allows for the accumulation of deep, peaty soils. Freshwater marshes are usually located in the coastal valleys near river mouths and around the margins of lakes and springs. Freshwater marsh is dominated by perennial, emergent monocots, typically ranging from 4 to 5 feet tall. Typically, species of cattails (Typha spp.) and bulrush (*Schoenoplectus* spp.) dominate this community.

A total of 0.54 acres of freshwater marsh was identified within the impact areas of the project site. Broad-leaved cattails (*Typha latifolia*) and bulrushes dominated this community. Other species included the invasive floating water-primrose (*Ludwigia peploides*) and bulrushes.

2.3.2 Disturbed Wetland

Disturbed wetlands are areas permanently or periodically inundated by water that have been significantly modified by human activity. A total of 0.29 acres of disturbed wetland was observed in the impact areas of the project site,

associated with a storm drain outfall to the west of the existing golf course clubhouse and the existing western golf course pond. The disturbed wetland in the storm drain outfall was dominated by cocklebur (*Xanthium strumarium*) and black mustard, with some Mexican rush (*Juncus mexicanus*) and western ragweed (*Ambrosia psilostachya*). The disturbed wetland associated with was dominated by the invasive floating water-primrose (*Ludwigia peploides*).

2.3.3 Eucalyptus Woodland

Eucalyptus woodland is dominated by gum trees (Eucalyptus spp.), an introduced genus that has been planted for ornamental purposes and for hardwood production and wind blocking. Gum trees typically occur in the form of clustered trees. The understory of mature groves is usually sparse because of the allelopathic chemicals exuded by the decomposing leaves. With a constant moisture source, the species becomes naturalized and will reproduce and expand its range. The sparse understory offers only limited wildlife habitat; however, individual trees and eucalyptus woodlands can provide nesting sites for a variety of raptors. During winter migrations, a large variety of migrating songbirds may be found feeding on the insects that are attracted to eucalyptus flowers.

A total of 0.01 acres of eucalyptus woodland was identified within the project site. Gum tree species include red iron bark (*Eucalyptus sideroxylon*), Tasmanian blue gum (*Eucalyptus globulus*), and sugar gum (*Eucalyptus cladocalyx*). This is not typically a wetland community, however, this community partially overlaps a CDFW streambed feature.

2.3.4 Fresh Water

This community represents areas of year-round bodies of fresh water in the form of lakes, streams, ponds or rivers. These are areas of open water, and vegetation cover is usually less than 10%. A total of 0.02 acres of fresh water was identified within the impact areas of project site. Open water is primarily associated with sections of San Diego River (North Channel) that are too deep to support emergent wetland vegetation (freshwater marsh) and an ephemeral stream associated with feature. Most of the area mapped as fresh water is in the two large ponds in San Diego River (North Channel) to the southeast of the existing golf course clubhouse.

2.3.5 Mule Fat Scrub – disturbed

Mule fat scrub is a shrubby riparian scrub community dominated by mule fat (*Baccharis salicifolia*) and occasionally interspersed with small willows (*Salix* spp.). This vegetation community occurs along intermittent stream channels with a coarse substrate and moderate water depth, along areas with shallow groundwater, or along areas that receive runoff from roads and other structures (Holland 1986). In some environments, limited hydrology may favor the persistence of mule fat. A total of 0.25 acres of mule fat scrub was identified within the impact areas of the project site. Mule fat scrub community species included mule fat with an understory of black mustard and field mustard.

2.3.6 Non-Native Grassland

Non-native grassland contains a dense to sparse cover of annual grasses. It may include showy-flowered native annual forbs, but grasses make up over 50% of the cover. In San Diego County the presence of wild oats (*Avena* spp.), bromes (*Bromus* spp.), storksbill (Erodium spp.), and wild barley (*Hordeum murinum*) are common indicators. A total of 0.13 acres of non-native grasslands was identified with the project site in small openings associated with

a feature under CDFW jurisdiction and adjacent to native riparian habitats. Although not typical a wetland community, this community occurs below the top of bank and is therefore considered CDFW jurisdictional.

2.3.7 Non-Native Woodland

The non-native woodland community applies to woodlands of exotic trees that are not maintained or artificially irrigated (i.e., not ornamental plantings). This is a catch-all for non-native woodland communities not dominated by eucalyptus or tamarisk. A total of 0.73 acres of non-native woodland was identified within the impact areas of the project site associated with CDFW jurisdictional features. This community was nearly exclusively Brazilian pepper tree (*Schinus terebinthifolia*) that is associated with fringe riparian areas within the top of bank.

2.3.8 Southern Cottonwood-Willow Riparian Forest

Southern cottonwood willow riparian forest is a tall, open, broadleaved, winter deciduous riparian forest dominated by Fremont's cottonwood (*Populus fremontii*), Goodding's black willow (*Salix gooddingii*), and red willow (*Salix laevigata*). Areas labeled 'disturbed' represent areas with a more open, sparse understory of arroyo willow and non-native grasses, lacking the diverse and dense canopy of southern cottonwood-willow riparian forest.

A total of 1.49 acres of southern cottonwood-willow riparian forest was identified within the impact areas of the project site associated with CDFW jurisdictional features. Within these areas, the community was dominated by large riparian trees such as Fremont's cottonwood, Goodding's black willow, and western sycamore (*Platanus racemosa*), with an understory of arroyo willow (*Salix lasiolepis*), mule fat, poison hemlock (Conium maculatum), poison oak (*Toxicodendron diversilobum*), rushes (*Juncus* spp.), flatsedge (*Cyperus eragrostis*), black mustard, field mustard, bromes, wild oats, perennial ryegrass (*Festuca perennis*), and wild barley.

2.3.9 Developed – Culvert, Spillway, Golf Course

Developed – culvert is mapped within the northeastern corner of the project site for an existing culvert approximately 16 feet wide that runs underneath an existing dirt road (Golf Course Emergency Access Road). This culvert connects the San Diego River (North Channel) east of the project site into Sycamore Canyon Creek within the project site.

Within the San Diego River (North Channel), a large in-line pond has been constructed and an approximately 60-foot-long concrete and riprap-lined dam occurs directly downstream of this pond. This area was identified during vegetation mapping efforts as the spillway, which due to the presence of concrete and riprap would be considered developed lands. During the dewatering activities the existing concrete spillway and earthen dam for the large, ponded area along the San Diego River (North Channel) would be repaired. The permanent impacts for the concrete spillway/earthen dam repair are based on the site's topographic contours and high-resolution aerial imagery and therefore represent an approximate impact footprint (i.e. not based on a field survey or spillway design). These impacts may vary slightly during final design and discussions with the aquatic resource agencies; however, the impact footprint provided in this analysis represents the greatest extent (i.e. impacts may be refined to reduce the impact footprint once design is finalized).

There are two depressional features located within areas mapped as developed – golf course that likely formed due to a broken irrigation pipe directly adjacent to these areas. Irrigation water may be draining into these areas,

allowing them to persist over time and causing wetland conditions. These areas were dominated by Bermuda grass (*Cynodon dactylon*, FACU), fat hen (*Atriplex prostrata*, FACW), tree tobacco (*Nicotiana glauca*, FAC), and Gooding's willow (*Salix gooddingii*, FACW). This feature would likely fall under RWQCB jurisdiction as a wetland waters of the state and CDFW jurisdiction as riparian habitat.

2.3.10 Southern Willow Scrub

Southern willow scrub is a dense, broad-leafed, winter-deciduous riparian thicket dominated by several willow species, with scattered emergent Fremont cottonwood and California sycamore. This community was formerly extensive along the major rivers of coastal Southern California but is now much reduced (Oberbauer et al. 2008). Southern willow scrub totals 0.17 acres and was mapped in association with the western golf course pond. This community was dominated by willows (*Salix* sp.).

Other non-vegetated land covers within jurisdictional areas include Developed – Culvert, spillway and Developed areas associated with existing golf course facilities.

3 Jurisdictional Features to be Impacted

This memorandum addresses permanent impacts that would result from project implementation. Temporary impact restoration is assumed to be feasible and with limited risk and uncertainty because of the nature of the temporary dewatering impact the location of the spillway repair work area (i.e. occurs within the ponded area of the San Diego River (North Channel), and the actual placement of the steel beams and plates on top of the existing golf cart bridge for Temporary Railcar Crossing across the San Diego River (North Channel). Based on the limited duration of dewatering at the golf course pond and available adaptive management actions to protect existing resources associated with the pond, passive recovery of the dewatered area is expected to occur with minimal intervention.

3.1 Project Impacts

The proposed project would result in direct permanent and temporary impacts to aquatic features and resources that are regulated by USACE, RWQCB, and CDFW. Impacts within each agency jurisdiction are presented below. The impact totals presented for each aquatic resource agency should not be summed up due to overlap between areas of resource agency regulatory jurisdiction. The ultimate decisions on the jurisdictional aquatic resource mitigation shall be made in accordance with the permit and certification requirements of the applicable resource agencies (i.e., USACE, RWQCB, CDFW).

- Permanent impacts to 0.35 acres and temporary impacts to 2.84 acres of USACE jurisdictional aquatic resources.
- Permanent impacts to 0.60 acres and temporary impacts to 2.84 acres of RWQCB jurisdictional aquatic resources.
- Permanent impacts to 3.75 acres and temporary impacts to 3.13 acres of CDFW jurisdictional aquatic resources.

Temporary impacts would occur to jurisdictional aquatic resources (i.e. coastal and valley freshwater marsh, fresh water, non-native riparian, and southern cottonwood-willow riparian) associated with the impounded portion of the

San Diego River (North Channel) from dewatering activities during construction, the existing spillway repair work area, and from the temporary railcar crossing. Table 1 summarizes the in-place restoration for the temporary impacts occurring within San Diego River (North Channel).

Table 1. Restoration for Temporary Impacts Along San Diego River (North Channel) Impoundment

Aquatic Feature	Vegetation Community/ Land Cover Type	Total Temporary Impact (acres)	Ratio‡	Total Restoration Required (acres)
NWW1	Coastal and Valley Freshwater Marsh	0.54	1:1	0.54 in situ
	Fresh Water (Open Water)	2.41	1:1	2.41 in situ
	Non-Native Riparian	0.05	1:1	0.05 in situ
	Southern Cottonwood-Willow Riparian Forest	0.13	1:1	0.13 in situ
	Project Totals	**3.13**	**N/A**	**3.13 in situ**

Notes: ‡ = all temporary impacts shall be restored in-place to pre-project conditions.

Permanent impacts to native vegetation communities within vegetated jurisdictional wetland features include Freshwater, Coastal and Valley Freshwater Marsh, Southern Cottonwood-Willow Riparian Forest (undisturbed and disturbed), Southern Willow Scrub, and Mule Fat Scrub (disturbed). Other non-native vegetation communities and non-vegetated land covers to be impacted within CDFW jurisdictional areas include Developed - Culvert, Developed - Golf Course, Disturbed Habitat, Disturbed Wetland, Eucalyptus Woodland, Fresh Water, Non-native Grassland, Non-native Woodland, and spillway. Project impacts are summarized in Table 2 for CDFW jurisdiction which is inclusive of other agency jurisdictional areas.

Table 2. Summary of Impacts to Jurisdictional Aquatic Resources

Vegetation Community/Land Cover	Permanent Impact (acres)
CDFW Riparian Habitats	
Coastal and Valley Freshwater Marsh	0.55
Fresh Water	0.02
Disturbed Wetland	0.29
Mule Fat Scrub (Disturbed)[1]	0.29
Southern Cottonwood-Willow Riparian Forest	1.19
Southern Cottonwood-Willow Riparian Forest (disturbed)	0.34
Southern Willow Scrub	0.17
Subtotal	2.86

Table 2. Summary of Impacts to Jurisdictional Aquatic Resources

Vegetation Community/Land Cover	Permanent Impact (acres)
Vegetation Communities and Land Cover Types Occurring with Jurisdictional Aquatic Resources	
Developed-Golf Course	0.03
Developed – Culvert	<0.01
Disturbed Habitat	<0.01
Eucalyptus Woodland	0.01
Non-Native Grassland	0.13
Non-Native Woodland	0.73
Spillway	0.03
Subtotal	*0.94*
Total	**3.75**

Notes: Totals may not sum due to rounding.
[1] A small portion of this community (0.04 acres) is not under CDFW jurisdiction but is included as it is required mitigation for sensitive vegetation community.

3.2 Functional Assessment

The HMMP will provide a functional assessment of existing and future conditions to describe the replacement of lost functions associated with project impacts. The re-establishment areas presently provide very low aquatic function or functions are entirely absent from the proposed mitigation sites that are located within the existing golf course facility.

4 Wetland Mitigation and Approach

A mitigation program is proposed to compensate for unavoidable project impacts to aquatic resources regulated by the USACE, RWQCB, and CDFW. This mitigation program is intended to satisfy CDFW mitigation requirements because resources impacted by the project affect the broadest area under CDFW Fish & Game Code Section 1600 regulations. Agencies with fewer impacts (USACE and RWQCB) fit within this overall mitigation program that consists of re-establishment, rehabilitation, and enhancement of aquatic resources within the project site. In addition, this program considers the overall increase of jurisdictional area, aquatic functional gain, in-kind mitigation, in-watershed mitigation, and risk and uncertainty factors.

4.1 Proposed Mitigation

This mitigation program provides 7.01 acres of compensation for 3.75 acres of permanent impacts to aquatic resources (refer to totals in Tables 3 and 4). Mitigation is provided based on the ecological function and quality of the resource to be permanently impacted and the difficulty to Re-establish, Rehabilitate, and Enhance lost aquatic functions and services. Table 3 summarizes the target wetland vegetation communities and Table 4 summarizes the non-wetland vegetation communities and the proposed mitigation acreage based on proposed mitigation ratios to fully mitigate project impacts to all resource agency jurisdictional areas.

Table 3. Summary of Proposed Mitigation for Impacts to Riparian/Wetland Vegetation Communities

Vegetation Community/ Land Cover Impact	Target Vegetation Community[1]	Permanent Impact (acres)	Mitigation Ratio[1]	Proposed Mitigation (acres)
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	0.55	1:1	0.55
Fresh water		0.02	1:1	0.02
Disturbed Wetland	Mule Fat Scrub	0.29	1:1	0.29
Mule Fat Scrub (disturbed)[2]		0.29	2:1	0.59
Southern Cottonwood – Willow Riparian Forest	Southern Cottonwood – Willow Riparian Forest	1.19	3:1	3.58
Southern Cottonwood – Willow Riparian Forest (disturbed)	Southern Cottonwood – Willow Riparian Forest	0.34	3:1	1.03
Southern Willow Scrub	Southern Willow Scrub	0.17	3:1	0.50
	Total	**2.86**	**—**	**6.56**

Notes: Totals may not sum due to rounding.

1 Target vegetation community includes both re-establishment and enhancement mitigation types.

2 The mitigation ratios provided are based on the standard aquatic resource regulatory agency (i.e. USACE, RWQCB, and CDFW) ratios; however, the manner in which the mitigation ratio will be met will be determined during the permitting process pursuant to the aquatic resource regulatory agencies' requirements and with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e. USFWS and CDFW) through the consultation process.

3 A small portion of this community (0.04 acres) is not under CDFW jurisdiction but is included as it is required mitigation for sensitive vegetation community.

Table 4. Summary of Proposed Mitigation for Impacts to Other Vegetation Communities/Land Cover Types Occurring with CDFW Aquatic Resources

Vegetation Community/Land Cover Impact	Target Vegetation Community	Permanent Impact (acres)	Mitigation Ratio[1]	Proposed Mitigation (acres)
Developed – Culvert	Culvert replacement	<0.01	1:1	N/A
Developed – Spillway	Spillway replacement	0.03	1:1	N/A
Non-Native Grassland	Mulefat Scrub Enhancement	0.13	0.5:1	0.07
Developed Golf Course[2]		0.03	0.5:1	0.02
Disturbed Habitat		<0.01	0.5:1	<0.01
Eucalyptus Woodland		0.01	0.5:1	<0.01
Non-Native Woodland		0.73	0.5:1	0.37
	Total	**0.94**	**N/A**	**0.45**

Notes: Totals may not sum due to rounding.

1 The mitigation ratios provided are based on the standard aquatic resource regulatory agency (i.e. USACE, RWQCB, and CDFW) ratios; however, the manner in which the mitigation ratio will be met will be determined during the permitting process pursuant to the aquatic resource regulatory agencies' requirements and with any permit/agreement conditions and mitigation measures imposed by the wildlife agencies (i.e. USFWS and CDFW) through the consultation process. Ratios for the developed – culvert and developed – spillway are not provided as these two features would be replaced at their current location by the proposed project

2 There are two depressional features located within areas mapped as developed – golf course that likely formed due to a broken irrigation pipe directly adjacent to these areas.

The proposed mitigation provides for re-establishment of wetlands and riparian habitat in areas presently occupied by golf course facilities including tees, greens, and fairways. Designation of these areas for compensatory mitigation will remove all development rights to assure in perpetuity site protection with long term management. In addition to re-establishment mitigation, the project proposes enhancement of existing degraded wetlands and riparian areas associated with Sycamore Canyon Creek and the northern San Diego River channel. Extensive removal of invasive, non-native vegetation is planned within these existing drainage areas to be replaced with appropriate target native vegetation communities.

4.2 Site Selection

Mitigation site selection considered existing site conditions and focused on opportunities where existing hydrology could be captured and incorporated into mitigation sites to support self-sustaining native riparian and wetland vegetation communities. This site selection factor focused site selection on areas adjacent to Sycamore Canyon Creek and the northern San Diego River channel, ~~as well as~~ storm drain outfalls that provide stormwater runoff from developed areas in the golf course vicinity, and areas of shallow groundwater associated with the San Diego River floodplain. Only onsite mitigation was considered because sufficient area is present within the project to accommodate the required mitigation. Onsite mitigation satisfies regulatory requirements for mitigation within the same watershed as the project impact. All mitigation is located on private property and does not rely on land leased from the City of San Diego. Other factors such as soil type, land use, golf course play, and existing vegetation were considered in mitigation site selection.

4.3 Re-Establishment

Re-establishment is a mitigation type that increases multiple aquatic functions of wetlands to create an overall functional gain when compared to the functional loss from permanent impacts. Re-establishment typically creates flood-prone conditions where hydrology is absent or muted, and/or where aquatic functions are reduced due to existing land uses that preclude aquatic function.

~~Nine~~ Ten potential re-establishment areas are identified within the overall project area. These cumulative acreage of these areas exceeds the re-establishment needs for the proposed project (Figure 2). Except for mitigation sites R3 and R10, all potential re-establishment areas are adjacent to the Sycamore Canyon Creek/San Diego River North Channel. ~~These~~ All proposed mitigation areas presently serve as golf course areas of play or ~~areas associated with~~ out-of-bound areas that are maintained as part of the golf course facility. All sites may not be required to satisfy regulatory agency requirements. Re-establishment of each area would remove the golf course activity and maintenance, and all other development rights will be removed to preserve the mitigation site in perpetuity. Site modification would create flood-prone areas that are tied to the surface and subsurface hydrology of the existing Sycamore Canyon Creek channel and the character of flow that is supplied by the 11,000-acre+ watershed catchment area. The resulting hydrology will support self-sustaining native riparian and wetland communities that are in-kind with project impacts.~~-~~ Each selected mitigation site would be planted with cuttings, nursery container plant, and a seed mix to promote vegetation community development.

Site R3 is dissimilar to the other identified potential mitigation sites. The site would be connected to discharge from an existing stormwater drain system. The mitigation site is located within an upland area and would be shaped as a depression to pond water leaving the storm drain. A small creek feature would be built to hydraulically connect

the mitigation site to the Sycamore Canyon Creek channel to re-establish the tributary connection that was historically present.

R10 is a topographic low point within the golf course that is adjacent to the berm that protects the golf course from San Diego River flows. The area is situated over persistent shallow groundwater associated with the San Diego River floodplain. In addition, runoff with the eastern portion of the golf course concentrates at this location. As a mitigation site, the persistent shallow groundwater will support self-sustaining riparian vegetation that would be connected to the adjacent San Diego River riparian habitat through canopy proximity. Permanent removal of golf course land uses and establishment of riparian habitat with herbaceous, shrub, and canopy vegetation layers will create vertical complexity and ecological functions where none currently exist.

4.4 Enhancement/Rehabilitation

Enhancement and rehabilitation are mitigation types that modify single aquatic functions to create habitat functions and values. In most cases, Enhancement involves the removal and control of invasive, non-native species populations and replacement of the removed vegetation with self-sustaining, high functioning native vegetation communities.

Two enhancement mitigation areas are identified onsite where dense invasive species growth is present within existing drainages and jurisdictional areas. Mitigation activities would remove the above ground biomass and treatment of the remaining non-native vegetation to kill the root system without major soil disturbance. Invasive trees are prevalent within Enhancement Areas 1 and 2 (Figure 2). Trees would be cut at grade and the fresh cut stumps treated with an appropriate herbicide that translocate to kill the root system. In situ treatment of root systems to kill invasive trees is essential to maintaining channel bank stability while removing invasive species. Native vegetation communities would be established where invasive vegetation removal has occurred. Cottonwood trees and willows will be planted within each enhancement area to create vertical native habitat structure and complexity where it is currently absent. This approach is particularly appropriate to compensate for impacts to Southern Cottonwood-Willow Riparian Forest.

4.5 Plant Palettes

Plant palettes will be included in the final HMMP that are intended to establish target native vegetation communities. Plant selection will include native species that are present onsite and within the adjacent San Diego River floodplain. Species will be selected by vegetation community for appropriateness to the site conditions that will be present within the identified mitigation sites according to soils, hydrology, and terrain. The HMMP will indicate the species to be installed and type and size of plant materials (e.g., 1-gallon, rose pots, etc.) and seed mix composition, planting densities, and seed quality requirements.

4.6 Irrigation

New plantings and seed mix applications may require supplemental irrigation water that promotes plant survival in the immediate post-construction period when plant root systems are developing but have not reached a self-sustaining functionality. A temporary irrigation system will be installed to support plant survival and vegetation community development in the first year or two after installation. Temporary irrigation will stop a minimum of two

years prior to resource agency sign-off to demonstrate self-sustaining and habitat resiliency characteristics during the final two years of monitoring.

4.7 Maintenance

Each mitigation site will be maintained during a five-year maintenance and monitoring period. Maintenance activities will promote native vegetation establishment. The final HMMP will include a maintenance schedule and description of maintenance activities that are recommended to promote mitigation success.

5 Diegan Coastal Sage Scrub Mitigation

Diegan coastal sage scrub is a low, soft-woody community of shrubs that are most active in the winter and early spring with many species identified as facultatively drought-deciduous. The dominant species may vary by soil type, slope, and aspect. It is most commonly dominated by California sagebrush (Artemisia californica), California buckwheat (Eriogonum fasciculatum), laurel sumac (Malosma laurina), black sage (Salvia mellifera), white sage (Salvia apiana), and lemonade berry (Rhus integrifolia). This vegetation community is primarily constrained to drier coastal slopes. Many species associated with this community have become rarer because of development pressures from urban and agricultural development.

A total of 0.5 acres of relatively low-functioning Diegan coastal sage scrub will be impacted by project construction. Areas mapped within the project impact area as disturbed Diegan coastal sage scrub consist of dry open plantings on the shoulder and embankment of West Hills Parkway. Broom baccharis (Baccharis sarothroides) was the dominant plant species, with associated species such as California buckwheat and California sagebrush, and with invasive non-native weeds between the shrubs. Diegan coastal sage scrub is classified by the City of San Diego as a Tier II sensitive upland (City of San Diego 19972018). The City of Santee does not have a similar designation but does consider it a sensitive community and is addressed within the Draft Subarea Plan (City of Santee 2025).

Mitigation for disturbed Diegan coastal sage scrub impacts is proposed at a 1:1 mitigation ratio. The mitigation plan will target the establishment of high functioning habitat within a site context that is conducive to wildlife use, including California gnatcatcher. Suitable mitigation sites within the golf course have been identified as upland areas where self-sustaining Diegan coastal sage scrub habitat may be restored. A few sites are located adjacent to Sycamore Canyon Creek riparian corridor. The presence of the riparian corridor provides a continuity of habitat and creates an ecotone with greater resources than one single vegetation community provides for wildlife forage and movement.

An HMMP will be prepared that provides a conceptual description of the mitigation program including mitigation site location(s), plant palette, planting densities, monitoring and maintenance programs, and long-term site protection.

6 Rationale for Success

Risk and uncertainty are an important factor to determine the level of success that can reasonably be expected at a mitigation site. Sites that are supported by ecological systems at locations where adjacent invasive species

populations are controlled are more likely to achieve ecological performance standards and overall mitigation success. Each of the sites evaluated for compensatory mitigation are well supported by hydrology from a relatively intact watershed with few constraints to flow. The presence of reliable hydrology, whether from the San Diego River watershed or the smaller Sycamore Canyon Creek watershed, provides for a sustainable riparian environment that will support the targeted native vegetation communities to be enhanced, rehabilitated, and re-established. Onsite perched groundwater provides an additional water source for native riparian vegetation, especially cottonwood trees due to the position of the mitigation sites immediately downstream of San Diego River/Forrester Creek confluence, and the onsite confluence with Sycamore Canyon Creek. Due to the historically wide floodplain at this location, soil formation occurred where flow velocities dropped and deposited fine soil particles creating a rich, fine-grained soil that is highly supportive of riparian vegetation. Non-native vegetation, while prevalent onsite, is lacking in upstream reaches of the San Diego River, Forrester Creek, and Sycamore Creek, in part due to upstream restoration activities. Sycamore Canyon Creek is a largely unmodified watershed, and large masses of woody invasive species are absent from upstream reaches. The lack of invasive species increases the ability to control unwanted non-native vegetation growth within the mitigation sites in the long term. The combination of supportive ecological systems and lack of offsite invasive vegetation indicated a strong rationale for the success of the proposed compensatory mitigation program.

7 Monitoring and Performance Standards

The final HMMPs will detail the requirements for a 5-year post-construction monitoring program that is designed to regularly collect quantitative vegetation data, qualitative observations, and photo-documentation over the monitoring period to determine conformance with interim and final performance standards. Mitigation site underperformance to the required interim performance standard, in part or as a whole, would trigger adaptive management actions to address the cause of underperformance and to promote successful attainment of final performance standards. The HMMPs will define the monitoring schedule, maintenance schedule, data analysis and reporting requirements consistent with regulatory requirements.

Performance standards will be developed that are reflective of functioning habitat within the project vicinity for vegetation communities that are targeted for re-establishment and enhancement, and rehabilitation. Performance standards will provide a graduated schedule of quantitative interim annual standards that are designed to reflect the normally expected development of target vegetation communities. Final performance standards that are required at the end of the five-year monitoring period would reflect a level of vegetation community development that demonstrates resilience and self-sustainability and is generally representative of the target vegetation community. In meeting performance standards, project impacts will be fully mitigated.

8 Long Term Management

A long-term management plan (LTMP) will be included in the HMMPs that defines the scope of work to be performed by a long-term land manager with the goal of managing the mitigation sites to maintain re-established, enhanced, and rehabilitated native vegetation communities and aquatic functions, in perpetuity. The LTMP will include routine management activities including periodic site review, site protection status, and site conditions that support or detract from habitat functionality, self-sustainability, and habitat resilience. Identified site conditions that reduce habitat function will be addressed through appropriate and timely management actions. Adaptive management will

be described in the LTMP that directs the Land Manager to address substantial changes in site status that may deteriorate site functionality. The LTMP will be reviewed and approved by appropriate resource agencies as dictated during the wetlands regulatory permit process. The approved LTMP scope of work will serve as the basis for the endowment calculation.

9 Mitigation Program Schedule

Preparation of draft and final HMMPs will occur a minimum of 60 days prior to permit issuance by resource agencies. Implementation of the approved HMMPs will occur concurrently with project implementation impacts to regulated non-vegetated waters and vegetated wetlands to minimize temporal loss of aquatic resources, functions, and values. A five-year maintenance and monitoring program, as specified in the HMMPs, would begin upon completion of mitigation construction installation.

Upon achievement of the performance standards, no less than five years post-installation and after formal acceptance by the resource agencies of completed mitigation, a conservation easement will be recorded over the mitigation areas to formally designate the sites as permanent open space with land use constraints that legally restrict land use to native habitat only. A calculation of in-perpetuity management actions and costs will be performed to establish the value of a non-wasting endowment using a capitalization rate of no greater than 3%. Funding of the endowment will occur a minimum of 2 years prior to the end of the monitoring period to allow for the invested capital to earn a return that will fund management activities on the first day of the in-perpetuity management. An easement and endowment holder, and land manager, acceptable to the resource agencies, will be identified in the HMMPs with separate defined roles within the long-term management structure.

10 References

Dudek 2026~~b~~. Updated Aquatic Resources Delineation for the Carlton Oaks Country Club and Resort Project.

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Appendix L

2021 Fuel Management Clearing Letter Report

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix M

2024 Crotch's Bumblebee Survey Report

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix N

2024 Driving Range Grading Memo

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix O
Hydrology Memorandum

MEMORANDUM

TO: City of Santee

FROM: Janet Khabbaz, PE, QSD, QSP
Hunsaker & Associates

SUBJECT: Carlton Oaks – Response to California Department of Fish and Wildlife (CDFW) Comment Letter

DATE: 01/13/2026

Purpose

This memorandum is divided into two sections and will serve as an appendix to the Environmental Impact Report (EIR). It documents the hydrologic and hydraulic analyses and evaluation steps undertaken to respond to comments provided by the California Department of Fish and Wildlife (CDFW).

The first section of this memorandum documents the hydraulic analysis conducted to evaluate potential changes in water surface elevation (WSE) and flow velocity associated with the proposed project, with particular focus on small storm events and wetland areas located both upstream and downstream of the project boundary. This analysis was prepared in response to CDFW comments requesting confirmation that potential effects to adjacent parcels and sensitive habitat areas were fully evaluated, and to demonstrate that no further extension of the hydraulic study upstream or downstream is warranted.

The second section of this memorandum explains why the proposed refinements to the riparian re-establishment mitigation areas adjacent to Sycamore Creek and the San Diego River, proposed to support appropriate native riparian vegetation communities, do not require revisions to the approved flood study or floodplain modeling.

1. Response to CDFW Comments: Evaluation of Project Effects on Adjacent Parcels and Sensitive Habitat Areas

Summary of Hydraulic Analysis Findings

The HEC-RAS hydraulic analysis was conducted to evaluate potential changes in water surface elevation (WSE) and flow velocity associated with the proposed project, with particular focus on small storm events and the wetland areas located both downstream and upstream of the project boundary. The study also assessed whether it was necessary

to extend the analysis farther upstream and downstream to ensure that any potential effects on adjacent parcels and sensitive habitat areas were fully captured. The modeling was extended approximately 0.28 miles upstream and 0.22 miles downstream of the project limits, confirming that no hydraulically significant changes occur that could alter existing inundation patterns, sediment transport, or erosion processes within or near the wetland areas. Therefore, further model extension beyond this reach, such as the one-mile review initially suggested, was determined to be unnecessary.

Parcel 383-060-28:
The eastern upstream end of this parcel is located approximately 1,753 ft downstream of West Hills Parkway, which represents the western limit of the project area. The hydraulic analysis at West Hills Parkway (cross section [242]) indicates no measurable change in water surface elevation or flow velocity under post-project conditions. The model was extended an additional (1,156 ft) downstream of the project limit, and the results continued to show no discernible impact to either WSE or velocity.

Parcel 383-060-25:
This parcel is located immediately south of the eastern edge of the project area. Post-project modeling results show a very minor reduction in water surface elevation, on the order of (0.04 ft) at the upstream edge and (0.01 ft) at the downstream edge, along with a negligible increase in velocity (approximately 0.08 fps maximum) during the 2-year event at the upstream portion of the parcel. No change in velocity was observed at the downstream extent. These minimal variations are within typical model precision and do not represent a hydraulically significant change.

Parcel 383-071-08:
This parcel contains a vegetated wetland area located east of the project boundary. The project site is hydraulically separated from this wetland during small events by an existing vegetated earth berm constructed under Grading Plan G-378 (1995). The berm's crest elevation is approximately (6 ft) higher than the 5-year water surface elevation within the adjacent wetland, effectively isolating the area from project-related flows during smaller storm events. Because the berm will remain undisturbed and intact under the proposed conditions, no impact to the wetland area is anticipated.
The berm guides low flows from the San Diego River and Forester Creek along the southern limits of the existing golf course and terminates near the western portion of the course, just upstream of the West Hills Parkway Bridge.
To evaluate whether it was necessary to extend the analysis further upstream to include

Parcel 381-040-24, the modeling incorporated a worst-case scenario by assuming

complete removal of the existing berm. Even under this conservative condition, results at the Carlton Hills Boulevard Bridge (downstream face) indicate only minor decreases in water surface elevation, on the order of (0.3 ft), and a very slight increase in velocity (approximately 0.3 fps), both of which remain well within non-erosive limits (<5 fps). The study was extended approximately (1,500 ft) upstream of the project boundary within Parcel 383-071-08, confirming that at the upstream extent, prior to entering Parcel 381-040-24, any potential project influence is effectively negligible.

Summary Conclusion:
The results demonstrate that the proposed project does not cause any hydraulically significant change in water surface elevation or flow velocity within or adjacent to sensitive habitat areas that could negatively affect inundation patterns, sediment transport, or erosion processes. The existing vegetated berm along the eastern and southern boundaries of the golf course will continue to function as a hydraulic separation feature, ensuring that the upstream wetlands remain both hydraulically and physically isolated from the project area during low flows and small storm events. Consequently, no adverse hydrologic, geomorphic, or habitat impacts are anticipated as a result of the project. Please refer to Attachment 1 & 2 for the Exhibits and analysis.

2. Evaluation of Proposed Riparian Re-Establishment Mitigation Effects on the Floodway and Floodplain Study

Description of Proposed Mitigation
Areas of re-establishment mitigation are adjacent to the Sycamore Creek & San Diego River North Channel. The mitigation sites will be modified to be within the flood-prone area adjacent to the creek and river's north channel to create hydrology that will support appropriate native riparian vegetation communities. Mitigation sites will be planted with native riparian plant species that are typical of the area, using nursery container plants and native seed mix to establish a self-sustaining native habitat. Temporary irrigation may be used to promote vegetation establishment. By designating these sites as compensatory mitigation, all development rights will be removed from the mitigation area to allow for perpetuity preservation.

Floodplain and Hydraulic Considerations

- The proposed re-establishment mitigation does not include any fill, structures, or obstructions within the floodplain or floodway.
- The proposed mitigation areas are designed to be depressed relative to surrounding grades, providing localized floodplain storage. These mitigation areas

represent a very small width compared to the overall floodplain width, such that they do not measurably influence flood conveyance or water surface elevations.

- Flood conveyance and flow paths remain unchanged from the modeled condition.
- The proposed changes associated with the proposed re-establishment mitigation will not increase base flood elevations or water surface elevations for any modeled event.
- Any hydraulic effect associated with proposed re-establishment mitigation would be neutral to beneficial due to added storage within the flood-prone area.

Conclusion

The proposed riparian re-establishment mitigation modifications are minor in scale relative to the overall floodplain, do not affect flood elevations or conveyance, and provide potential localized storage benefits. Any hydraulic effect associated with proposed re-establishment mitigation would be neutral to beneficial due to added storage within the flood-prone area. Therefore, no revision to the approved flood study is required, and the existing flood study remains valid.

Should you have any questions regarding the information contained within this memo, please contact me at (858) 410-7627

Sincerely,

Janet Khabbaz, PE., QSD., QSP.
Water Resources Manager
CC: Alisa S. Vialpando, R.C.E. 47945
President
(858) 558 4500

9707 Waples Street, San Diego, CA 92121
(858) 558-4500

Attachment 1

Carlton Oaks
CDFW Response Exhibit
Legend
Existing Berm
Carlton Oaks Boundary
38306025
38307108
Santee Lakes Recreation Preserve
Carlton Oaks School
Carlton Oaks Country Club
Sycamore Canyon
Hollis Lake
Mast Blvd
Mission Gorge Rd
Carlton Oaks Dr
Inverness Rd
Forester Creek
San Diego River
Prospect Ave
Santee Boulders
Grossmont Health Occupations Center
West Hills Pk
Mast Blvd Hiking Trail Head
East Fortuna Staging Area
Kumeyaay Lake Campground
Highlands Mobile Home Park
Valley View Estates
MISSION VIEW ESTATES
Meadowbrook
Greenbrier Gardens Mobile
Santee Pioneer Little League Fields
Big Rock Pk
Phil Thearle's Autowerks
Van Hanh Temple
CARLTON HILLS
Mast Pk
GTM Stores
In-N-Out Burger
220
242
244
320
330
340
345
355
52
3000 ft
N
Google Earth
Image © 2025 Vexcel Imaging US, Inc.

Attachment 2

2-year and 5-year Peak Flow Estimating

This summary presents interpolated 2-year and 5-year peak flow estimates for three datasets of known peak discharges (10-, 50-, 100-, and 500-year). The power-law relationship $Q = k \cdot T^b$ was applied for each dataset to estimate lower-frequency events and assess consistency across return periods.

Dataset 1 – Base Case (10=5,500; 50=19,000; 100=38,000; 500=112,000)

Return Period (years)	Peak Flow (cfs)	Source
2-year	H 1,420	Interpolated
5-year	H 3,120	Interpolated
10-year	5,500	Given
50-year	19,000	Given
100-year	38,000	Given
500-year	112,000	Given

Dataset 2 – Alternative Case (10=5,000; 50=17,000; 100=37,000; 500=112,000)

Return Period (years)	Peak Flow (cfs)	Source
2-year	H 1,230	Interpolated
5-year	H 2,645	Interpolated
10-year	5,000	Given
50-year	17,000	Given
100-year	37,000	Given
500-year	112,000	Given

Dataset 3 – Lower Range (10=4,500; 50=16,000; 100=36,000; 500=112,000)

Return Period (years)	Peak Flow (cfs)	Source
2-year	H 1,060	Interpolated
5-year	H 2,470	Interpolated
10-year	4,500	Given
50-year	16,000	Given
100-year	36,000	Given
500-year	112,000	Given

Conclusion:

The interpolated 2-year and 5-year flows for all three datasets follow consistent patterns, ranging from approximately 1,060–1,420 cfs for the 2-year event and 2,470–3,120 cfs for the 5-year event. These values align well with the trend defined by the 10-year through 500-year flows. The power-law relationship provides a reliable and consistent interpolation method for estimating intermediate discharges across varying datasets.

Intermediate design discharges (e.g., 2-yr and 5-yr) were estimated using a log–log interpolation of peak discharge versus return period, consistent with standard hydrologic practice (Chow et al., 1988; USGS WRI 03-4169; FEMA G&S Appendix C; San Diego County Hydrology Manual, Section 3.8.3).

Existing Condition HEC-RAS Model :

HEC-RAS HEC-RAS 5.0.7 March 2019
U.S. Army Corps of Engineers
Hydrologic Engineering Center
609 Second Street
Davis, California

```
X     X  XXXXXX    XXXX        XXXX       XX      XXXX
X     X  X        X    X      X   X     X  X    X
X     X  X        X           X   X    X    X   X
XXXXXXX  XXXX     X       XXX  XXXX     XXXXXX    XXXX
X     X  X        X           X  X     X    X        X
X     X  X        X    X      X   X    X    X        X
X     X  XXXXXX    XXXX       X    X   X    X   XXXXX
```

PROJECT DATA
Project Title: Carlton Oaks Existing
Project File : CarltonOaksExisti.prj
Run Date and Time: 10/6/2025 1:34:54 PM

Project in English units

Project Description:
UPPER SAN DIEGO RIVER EXISTING CONDITIONS
Profile 1 FEMA
100-Year Profile 2 FEMA Fwy Profile 3 BSI 100-Year

Revised Existing topo 2022
Record Floodway Locations

PLAN DATA

Plan Title: Plan 01
Plan File : r:\1759 DFB\Hyd\10-10-2025\HYD\CDFW\Existing Conditions Model\CarltonOaksExisti.p01

Geometry Title: UpperSanDiego-EX
Geometry File : r:\1759 DFB\Hyd\10-10-2025\HYD\CDFW\Existing Conditions Model\CarltonOaksExisti.g01

Flow Title : 100 Year Flow
Flow File : r:\1759 DFB\Hyd\10-10-2025\HYD\CDFW\Existing Conditions Model\CarltonOaksExisti.f01

Plan Summary Information:
Number of: Cross Sections = 20 Multiple Openings = 0
Culverts = 0 Inline Structures = 0
Bridges = 1 Lateral Structures = 0

Computational Information
Water surface calculation tolerance = 0.01
Critical depth calculation tolerance = 0.01
Maximum number of iterations = 20
Maximum difference tolerance = 0.3
Flow tolerance factor = 0.001

Computation Options
Critical depth computed only where necessary
Conveyance Calculation Method: At breaks in n values only
Friction Slope Method: Average Conveyance

Computational Flow Regime: Subcritical Flow

Encroachment Data
Equal Conveyance = True
Left Offset = 0
Right Offset = 0

River = San Diego River Reach = Reach 1

RS	Profile	Method	Value1	Value2
355	PF 5	1	1604.5	2269.4
345	PF 5	1	1217.3	2147.3
340	PF 5	1	1147.2	2067.2
330	PF 5	1	1293.6	2138.6
320	PF 5	1	848.3	2073.3
315	PF 5	1	831	2340.8
310	PF 5	1	559.1	2104.1
300	PF 5	1	434.3	1904.3
290	PF 5	1	270.7	1840.7
285	PF 5	1	472.1	1907.1
280	PF 5	1	608.4	1908.4
270	PF 5	1	341.7	901.7
260	PF 5	1	256.7	856.7
250	PF 5	1	357	1052
245	PF 5	1	686.6	1291.6
244	PF 5	1	459.7	960.1
242	PF 5	1	401	900.5
239	PF 5	1	246.2	906.2
230	PF 5	1	321.8	1056.8
220	PF 5	1	522.9	1492.9
210	PF 5	1	438	1478
200	PF 5	1	404.6	1494.6

FLOW DATA

Flow Title: 100 Year Flow
Flow File : r:\1759 DFB\Hyd\10-10-2025\HYD\CDFW\Existing Conditions Model\CarltonOaksExisti.f01

Flow Data (cfs)

River	Reach	RS	PF 4	PF 5
San Diego River	Reach 1	355	2470	1060
San Diego River	Reach 1	320	2645	1230
San Diego River	Reach 1	260	3120	1420

Boundary Conditions

River	Reach	Profile	Upstream	Downstream
San Diego River	Reach 1	PF 4		Normal S = 0.002
San Diego River	Reach 1	PF 5		Normal S = 0.002

GEOMETRY DATA

Geometry Title: UpperSanDiego-EX
Geometry File : r:\1759 DFB\Hyd\10-10-2025\HYD\CDFW\Existing Conditions Model\CarltonOaksExisti.g01

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 355

INPUT
Description:
Station Elevation Data num= 80

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	328.6	54.1	329.6	64.2	325.6	78.6	322.7	125.3	322.5
191.1	321.9	199.7	330.5	303.1	330.6	305.9	328.2	314.9	330.2
343.4	331	443.3	330.1	543	331.4	551.9	329.8	608.6	330
615.1	337.4	640.3	337.4	643.6	329.1	672	328.4	743.1	329.5
746.8	336.5	789.9	336.5	793.5	328.9	836.7	328.9	980.7	324.9
1031	325	1062.7	326.6	1066.4	336.1	1083.8	336.3	1090.8	326.3
1156	325.6	1239.4	323.7	1275.1	321.6	1361.3	321	1418.6	319.8
1446.7	316.6	1469.1	316.3	1506.5	316.7	1516.7	310.8	1537.2	310.1
1551.7	310.8	1563.9	314.9	1590.3	315.8	1604.5	319.7	1616.8	316.1
1666	315.1	1720.1	313.8	1733.1	311.4	1933.3	311.5	2090.2	312
2112.2	314.2	2137	316.4	2145.2	320.2	2164.3	321.8	2196.4	318.6
2209	313.6	2229.8	312.6	2258.6	312.6	2294	313.5	2306.7	315.2
2330.7	319.2	2365.6	319.9	2417.7	320.5	2464.8	318.9	2487.3	317.9
2527.9	317.8	2547.1	318.7	2582	322.5	2592.6	324.2	2640.3	323.9
2733.3	326	2773.3	328.7	2799.6	328.3	2837.5	329.1	2881.4	328.9
2888.7	330.5	2924.8	331.4	2990.2	330.4	2995.2	332.8	3009.4	332.2

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.06	1604.5	.05	2417.7	.06

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
1604.5 2417.7 360 310 350 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Permanent
0	1604.5	326	F
2417.7	3009.4	326	F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 345

INPUT
Description:
Station Elevation Data num= 87

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	328.5	49.4	329.1	102.6	328.5	110.8	325.5	147.2	324.7
222.2	324.8	279.9	324	297.8	318.7	332.6	318.3	342	322.6
352.2	328.6	409	329.7	414.3	338.4	436.9	338.4	443.4	329.4
479.4	328.7	533.4	328.1	539.9	334.4	654.6	334.4	663.1	327.7
761.2	327.7	831.1	325.5	841.3	334.3	870.8	334.3	875.7	325.4
919.5	323.7	960.7	323.6	995.9	324.3	1000.4	333.1	1039.7	333.1
1042.9	325.3	1092.1	322.8	1111.7	320.1	1171.1	320.2	1196.7	319
1218.4	314.4	1243.9	313.4	1260.5	315.7	1277.7	315.6	1287.1	312.5
1308.4	310.6	1331.5	309.8	1349.3	310.6	1357.5	314	1406.2	313.9
1473.3	313.3	1479.5	310	1754.1	310	1768.6	320.8	1784.4	328.6
1796.2	329.8	1811.8	323.1	1827.4	315.1	1847.9	313.7	1865	315.1
1881.8	319.8	1899.8	323.5	1942.8	322.9	1993.1	319.8	2004.9	316.5
2015.6	312.2	2033.1	312.5	2061.4	312.9	2065.9	312.2	2147.9	312.2
2160.3	316.1	2180.3	319.1	2223.2	319.9	2242.8	318	2258.3	317.9
2273.1	319.4	2284.9	321.6	2294.3	324.2	2319.3	325.5	2321.4	351.5
2360.3	351.5	2366.8	331.2	2419.1	331.4	2422.9	347.8	2478	347.8
2482.6	330.3	2500.2	330.1	2540.7	330.6	2574.2	329.3	2587	329.7
2658.4	333.8	2742.3	337.4						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val

```
       0     .06  1092.1     .05  2294.3     .06

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        1092.1  2294.3              400     335     125             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev  Permanent
       0   742.3     326       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 340

INPUT
Description:
Station Elevation Data    num=      81
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   326.7    43.2     327    89.6   327.9    94.4   326.4   102.4   324.9
     130   324.1   201.6   323.1   232.8   323.6   287.2   322.5   301.2     321
     312   313.1     344   313.4   353.2   317.7   361.6   325.1   382.4   325.4
   408.1   327.2   412.5   335.5   452.9   335.5   458.9   325.8   498.9   324.4
   541.7   325.2   559.3   325.7   597.3   325.8   630.1   325.1   705.7   324.9
   806.9   325.7   889.8   326.1   895.4   334.3   917.8   334.3     923   326.1
   955.8   324.1   987.8     325  1016.2     326  1018.6     336  1056.2   333.6
  1063.4     326  1106.2   324.8  1119.4   322.7  1140.2   317.5  1166.2   311.8
  1172.3   311.9  1182.7   315.6  1195.5   316.1  1201.1   310.6  1207.1   309.9
  1243.1   310.6  1276.3   315.7  1331.9   314.9  1350.7   311.8  1408.7     311
  1417.5   310.4  1588.3   310.4    1600   315.1  1626.4   315.7  1674.8   315.4
  1693.2   314.2  1722.4   314.4  1733.6   315.6  1752.4   317.4  1782.8   317.3
  1799.2   314.2  1807.6   311.3  1847.6   311.2  1929.2   311.9  1958.5   312.9
  1963.3   312.2  2053.3   312.2  2071.3   314.7  2096.5   316.6  2114.1   319.8
  2130.9   323.4  2156.1   324.1  2158.5   347.5  2320.2   347.5  2326.6   330.3
  2339.4   330.2  2347.8     331  2388.2   331.3  2422.2   330.3    2449   331.8
  2492.2   332.5

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0     .06  1106.2     .05  2130.9     .06

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        1106.2  2130.9              575     454     575             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev  Permanent
       0   992.2     326       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 330

INPUT
Description:
Station Elevation Data    num=      85
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   329.4     6.4   340.1      55   340.1    58.2   328.3   141.2   326.1
   185.4   328.3   231.5   330.2   243.2   325.1   474.7   320.1   525.2   321.6
   540.1   314.3   568.2   309.9     581   309.8   589.9   316.6   600.7   322.8
   620.3   323.5   669.7   323.1   674.1     332   706.7     332   712.3   323.7
   739.5   322.4   776.4   322.4   806.9   323.4   811.9     331   853.1     331
     858   323.1   901.3   324.3   907.3   326.5     951   327.2  1025.7   326.7
  1077.9   326.6  1084.3   329.3  1104.3   330.1  1107.6   336.6  1151.7   336.6
  1157.3   329.8  1199.9     326  1239.6   321.9  1254.4   316.3  1272.1   314.1
  1309.8   313.3  1339.5   311.3  1353.9   308.6  1358.9   308.5  1370.2   308.6
  1379.5     312  1426.4   313.8  1487.8   313.6  1504.2   310.2  1521.1   310.2
```

1556	313.2	1606.6	312.6	1668.3	312.9	1684.4	310	1832	310
1836.4	313.3	1844.4	317.8	1861.7	321.4	1879.7	316.5	1889.8	313.5
1945.9	314.8	1981.6	314	1996.9	322.1	2003.7	324.8	2013.3	323.4
2025.8	316.7	2041	312.5	2131.8	312.5	2142.6	314.9	2166.3	315.9
2183.1	318	2194.4	324.4	2217.2	324.6	2220.1	351.3	2263	351.3
2269.4	330.5	2329.6	329.8	2330.9	346.6	2382.3	346.6	2388.7	328.4
2403.5	325.8	2442.1	325.9	2477.4	324.8	2511.5	327.4	2573.6	331.2

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.06	1239.6	.035	2003.7	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
1239.6	2003.7	620	588	620	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev	Permanent
0	1173.6	329.3	F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 320

INPUT
Description: 320 start Revising per Existing Topo
Station Elevation Data num= 247

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	328.2	87.1	328.7	92.7	326.3	107.2	324.6	175.5	323.9
182.3	318.9	192.7	315.6	272.6	314.6	325.3	313.5	403.2	312.7
454.2	312.2	466.6	315.2	517.6	315.1	537.3	318.8	599.9	317.9
610.4	311.7	619.6	307.3	648.9	307.4	661	310.6	672.6	318.3
703.6	319.2	777.4	317.9	847.7	319	889.9	316.7	923.2	312
950.9	309.6	963	307.2	1073.2	307.2	1141.4	307.3	1188.68	313.32
1191.67	315.17	1193.79	318	1331.79	319	1339.45	318	1350.57	315.96
1357.34	315.58	1365.01	315.29	1370.12	314.92	1377.79	314.2	1383.57	313.96
1398.23	313.63	1403.34	313.64	1408.45	313.47	1418.67	313.45	1428.9	313.28
1431.45	313.38	1438.4	313.38	1441.67	313.44	1449.34	313.77	1457.01	313.94
1459.56	313.94	1467.23	314.1	1480	314.47	1485.12	314.7	1500.45	315.15
1513.23	315.42	1519.49	315.39	1536.22	315.49	1538.78	315.6	1543.89	315.6
1546.45	315.7	1551.56	315.73	1554.39	315.84	1566.89	315.8	1572	315.64
1581.8	315.62	1592.35	315.67	1597.56	315.94	1602.67	315.98	1607.78	316.12
1612.89	316.16	1621.87	316.53	1630.78	316.81	1640.85	316.99	1646.11	316.94
1653.78	317.32	1656.33	317.26	1664	317.37	1669.11	317.54	1674.59	317.45
1684.44	317.4	1688.41	317.47	1695.68	317.41	1702.33	317.55	1712.55	317.56
1717.66	317.65	1725.2	317.68	1730.44	317.61	1732.99	317.75	1740.66	317.8
1745.76	317.64	1750.87	317.35	1758.52	317.02	1763.25	316.5	1768.74	316.05
1773.84	315.78	1786.18	315.65	1792.88	315.71	1801.92	315.51	1809.58	315.08
1812.13	315.01	1824.62	314.23	1835.66	314.13	1842.76	314.25	1847.87	314.47
1858.48	315.05	1863.18	315.15	1865.74	315.31	1870.84	315.25	1883.87	315.25
1891.26	315.33	1901.47	315.11	1916.79	315.01	1924.45	315.03	1932.11	315.22
1942.32	315.25	1949.47	315.11	1952.53	314.97	1962.74	314.68	1975.5	314.71
1985.71	315.14	1993.37	315.73	1998.48	316.53	2003.58	316.99	2006.13	317.04
2008.71	316.89	2016.34	315.78	2021.45	315.34	2029.11	315.07	2036.77	314.66
2039.32	314.61	2046.8	314.62	2049.53	314.7	2052.08	314.59	2057.38	314.64
2062.29	314.84	2067.4	314.74	2072.5	314.96	2075.06	314.95	2080.16	315.16
2082.71	315.13	2085.27	314.82	2087.82	314.06	2092.92	312.23	2098.03	311.8
2103.14	311.22	2105.69	311.06	2108.24	311.1	2113.35	313.08	2115.9	313.67
2121	315.62	2126.11	316.67	2128.66	317.04	2133.77	317.22	2136.32	317.54
2138.87	318.2	2141.43	319.32	2143.98	319.82	2146.26	320.56	2149.08	321.65
2151.64	323.02	2154.19	324.02	2156.74	325.89	2164.4	326.49	2169.5	326.66
2179.72	326.74	2182.27	326.66	2188.2	326.66	2200.14	326.66	2220.56	325.88
2233.32	325.5	2248.64	325.38	2253.74	325.26	2258.85	325.57	2261.4	325.23
2263.95	324.48	2269.06	323.4	2274.16	322.81	2281.82	323.38	2289.48	323.65
2292.03	323.63	2294.59	323.78	2304.8	323.88	2312.45	323.89	2322.66	323.59
2330.32	323.06	2332.88	322.94	2343.09	323.56	2351.51	323.93	2355.85	324.38

2359.98	324.33	2371.17	323.75	2378.82	323.75	2383.93	323.82	2394.14	324.07
2401.8	324.55	2406.9	324.66	2414.56	324.71	2419.22	324.95	2424.77	325.38
2431.92	325.79	2442.5	326.03	2457.96	326.02	2465.61	325.83	2470.72	325.51
2473.27	324.65	2475.82	324.21	2480.93	323.73	2483.48	323.61	2488.59	323.53
2498.8	323.64	2503.87	323.63	2514.11	323.79	2525.03	323.76	2542.19	324.07
2547.3	324.54	2552.4	324.03	2557.51	324	2565.17	323.78	2575.38	323.86
2580.48	323.81	2585.59	323.85	2588.14	323.74	2592.74	323.78	2599.09	323.97
2603.46	324.01	2607.55	324.18	2616.02	324.39	2618.77	324.58	2623.88	325.09
2626.43	325.04	2628.71	325.18	2639.2	325.47	2643.52	325.68	2654.51	325.86
2657.06	325.94	2664.72	325.53	2667.27	325.61	2672.38	325.5	2677.49	325.56
2682.59	325.44	2692.19	325.58	2697.91	325.59	2700.46	325.68	2709.12	325.54
2717.58	325.62	2732.54	326.12						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.06	847.7	.035	1188.68	.03	2188.2	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
847.7	2188.2	260	405	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev	Permanent
0	847.7	323	F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 315

INPUT
Description: New Xsection
Station Elevation Data num= 490

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	326.37	4.8	326.34	10.25	325.97	18.78	326.48	24.07	325.99
29.36	326.09	33.27	325.91	36.26	326.09	40.19	325.99	42.58	326.17
50.51	327.44	58.4	328.05	60.99	328.38	63.58	328.43	66.17	328.86
72.23	329	76.53	328.8	81.71	328.87	84.29	328.5	89.47	328.36
94.67	328.06	96.71	328.06	111.18	327.7	118.46	327.35	123.62	327.53
126.27	327.46	131.56	327.67	136.85	327.44	147.43	327.27	152.72	327.38
158.01	327.29	160.66	327.38	169.56	327.36	176.53	327.45	179.18	327.38
193.24	327.36	199.19	327.24	202.86	327.28	208.12	327.19	221.26	327.09
229.15	326.97	238.18	326.93	246.87	326.81	250.12	326.89	255.36	326.78
260.59	326.92	265.83	326.8	271.06	326.85	276.29	326.7	284.14	326.8
297.23	326.9	299.85	327.1	312.82	327.04	318.17	327.21	326.02	327.19
331.25	327.4	333.87	327.36	344.37	327.56	357.51	327.73	362.77	327.99
378.47	328.15	381.17	328.06	389.05	328.38	396.94	328.35	402.2	327.89
412.2	326.25	417.97	325.61	425.85	325.37	428.08	325.17	438.99	325.28
444.25	325.41	457.39	325.86	460.02	325.88	465.78	326.16	475.79	326.53
478.42	326.71	488.93	326.25	507.82	325.83	517.84	325.65	537.22	325.21
544.13	325.24	547.14	325.01	552.01	324.42	555.08	324.23	565	322.89
570.41	322.24	578.3	321.47	580.93	321.53	586.18	321.96	588.81	322.97
591.44	324.28	596.6	325.5	599.32	326.03	601.95	326.13	604.68	325.49
609.84	323.29	612.47	322.34	615.09	321.85	620.35	321.4	626.51	321.35
638.42	321.12	641.38	321	649.26	320.41	652.31	319.94	654.29	319.38
657.15	318.28	662.41	316.69	665.03	316.24	668.18	315.36	670.17	314.59
672.15	314.25	675.55	313.97	683.43	313.74	693.98	313.53	702.17	313.63
707.09	313.88	712.35	313.57	717.6	313.67	722.86	313.41	730.74	313.47
736	313.83	742.66	313.42	745.57	313.57	750.76	313.25	754.4	313.25
759.66	313.96	762.28	313.92	767.54	313.27	771.37	313.4	773.35	313.69
775.43	314.33	778.05	314.44	780.68	313.86	785.94	313.33	791.25	313.12
797.16	313.23	801.71	313.54	807.08	313.34	809.6	313.37	814.85	313.07
820.11	312.95	827.99	312.92	833.25	313.19	838.51	312.56	841.14	312.66
843.76	313.1	846.39	312.78	848.76	313.01	851.65	314.27	854.71	315.29
856.91	315.79	862.16	316.46	864.79	316.36	867.42	315.93	877.93	316.18
880.5	316	888.45	315.06	893.7	314.63	896.33	315	898.96	314.85
901.59	313.95	904.32	312.53	906.85	310.87	909.47	309.59	914.73	307.71

917.36	307.42	919.99	307.69	922.62	308.49	926	309.161	927.87	309.36
933.13	310.41	937.01	310.47	951.53	311.12	956.79	310.59	962.04	310.61
967.3	312.27	972.56	313.48	975.18	313.79	980.44	313.81	985.67	313.53
988.33	313.89	991.63	313.82	993.58	314.06	996.21	313.6	1001.47	313.6
1004.1	313.84	1006.72	313.74	1011.98	313.23	1017.24	312.48	1021.39	310.39
1025.12	308.71	1030.38	307.53	1035.64	307.86	1038.27	308.3	1042.29	309.33
1047.19	310.83	1055.13	312.98	1059.29	314.37	1064.55	316	1098.72	316
1100.77	315.96	1106.72	314.27	1109.23	313.8	1114.49	313.05	1126.56	312.98
1130.26	312.91	1135.52	313	1140.77	313.22	1156.33	313.17	1164.43	312.91
1169.69	313.08	1178.15	314.01	1182.12	314.2	1190.06	314.34	1198	313.89
1201.23	313.62	1203.85	313.65	1214.37	313.2	1220.44	312.56	1223.79	312.45
1232.77	312.39	1235.39	312.59	1238.02	313.17	1243.28	314.01	1248.54	315.2
1255.54	317.25	1259.05	318.02	1264.31	318.44	1269.56	318.51	1275.39	318.26
1282.71	317.22	1287.96	316.27	1293.22	315.07	1295.23	314.8	1301.18	313.67
1306.36	313.11	1311.1	312.09	1319.5	311.14	1322.13	310.95	1324.76	311.12
1330.95	310.99	1340.53	311.2	1343.16	311.37	1351.04	312.67	1358.93	313.22
1366.81	313.38	1379.96	313.45	1382.67	313.53	1400.4	313.72	1414.13	314.06
1438.1	314.28	1443.04	314.25	1456.18	314.31	1463.9	314.28	1474.58	314.41
1477.21	314.38	1500.86	314.72	1503.49	314.82	1511.38	315.74	1514	315.87
1516.63	316.33	1519.26	316.22	1521.89	315.49	1532.4	314.76	1537.32	314.63
1543.27	314.62	1553.19	314.5	1561.13	314.16	1569.2	313.96	1578.99	314.01
1590.23	314.15	1595.48	313.98	1598.83	314.05	1606.77	313.95	1611.25	313.72
1624.4	313.9	1629.65	313.81	1637.54	314.06	1645.42	314.22	1658.36	315.53
1664.31	315.67	1666.45	315.59	1669.08	315.22	1679.59	313.45	1684.85	312.98
1690.11	312.97	1692.73	313.3	1698.22	314.93	1700.62	315.2	1707.97	315.52
1716.39	315.64	1719.87	315.58	1726.9	315.25	1737.42	315.48	1746.81	315.3
1753.18	315.3	1758.43	314.84	1763.68	314.61	1773.51	314.48	1782.05	314.62
1795.17	315.14	1797.79	315.51	1803.04	316.69	1808.29	318.96	1810.91	319.74
1813.53	320.21	1816.16	320.27	1826.65	320.18	1829.22	319.69	1831.9	318.68
1835.19	317.94	1839.17	317.27	1845.02	317.05	1850.27	315.76	1853.1	315.22
1858.14	314.48	1863.39	314.08	1868.64	314.03	1873.88	314.18	1878.45	314.47
1880.96	315.1	1884.94	316.46	1892.25	318.73	1896.87	320.5	1900.12	321.39
1902.84	321.62	1910.62	321.43	1918.49	321.38	1928.99	321.38	1934.24	321.11
1942.11	320.42	1947.36	320.22	1955.23	320.22	1965.72	320.36	1970.97	320.2
1982.43	319.25	1986.71	318.58	1998.35	314.39	2002.33	313.4	2010.29	312.47
2016.26	312.08	2023.45	311.78	2033.95	311.5	2038.14	311.66	2040.13	311.94
2044.44	312.99	2047.07	313.21	2052.31	312.41	2057.56	312.45	2062.81	312.32
2066	312.68	2070.68	312.52	2075.95	312.1	2078.55	312.28	2083.8	312.98
2085.89	312.93	2089.05	312.56	2094.3	312.54	2102.17	311.45	2104.79	311.33
2112.66	311.47	2115.29	311.45	2120.54	312.25	2125.39	312.12	2131.03	312.33
2136.28	311.9	2144.15	311.61	2146.78	311.65	2154.65	312.57	2159.9	311.97
2162.52	311.81	2173.44	311.95	2175.64	311.85	2181.4	312.49	2186.13	312.36
2199.47	312.96	2204.5	312.58	2207.27	312.53	2213.23	313.25	2215	313.37
2222.87	312.72	2231.14	312.34	2233.13	312.4	2243.86	312.18	2246.49	312.43
2259	312.31	2262.23	312.21	2267.48	312.46	2285.84	312.92	2288.47	313.18
2293.72	313.32	2301.59	313.09	2306.84	313.26	2312.08	313.67	2322.58	313.75
2332.62	314.53	2334.6	314.59	2339.4	315	2359.32	316.43	2364.56	316.73
2375.4	317.043	2382.93	317.06	2388.79	317.31	2393.43	317.38	2401.3	317.32
2403.92	317.08	2409.17	316.88	2417.04	316.86	2424.14	317.12	2427.54	317.33
2435.41	318.26	2438.07	318.44	2440.66	319.22	2443.28	321.2	2445.91	321.69
2451.15	321.81	2462.87	321.81	2472.15	321.75	2474.77	321.61	2480.02	321.72
2482.64	322.07	2485.27	323.31	2487.89	323.95	2493.78	323.92	2498.38	322.93
2501.74	323.04	2503.73	322.84	2506.26	323.23	2511.69	322.95	2516.75	322.91
2521.64	322.48	2532.5	322.41	2537.74	322.46	2550.86	322.4	2553.49	322.22
2556.11	321.83	2558.74	321.71	2567.4	321.58	2571.86	321.45	2577.1	321.46
2584.98	321.33	2587.6	321.71	2592.85	321.51	2598.09	321.08	2600.72	321.19
2611.21	321.84	2619.09	322.09	2629.58	322.28	2632.21	322.5	2634.83	322.49
2637.45	322.14	2645.33	322	2653.2	321.75	2661.07	321.38	2671.57	321.09
2676.89	321.57	2694.74	322.28	2697.8	322.79	2703.05	322.35	2708.3	322.22
2716.17	322.34	2726.67	322.59	2734.54	322.59	2737.16	322.66	2750.45	322.66
2763.4	322.81	2768.36	323.31	2774.33	323.04	2784.27	323.31	2794.89	323.53
2812.13	323.76	2826.38	324.07	2831.63	324.36	2834.25	324.62	2839.5	324.8
2842.12	324.62	2849.99	324.47	2860.49	324.58	2875.8	324.54	2879.78	324.38
2891.72	324.62	2897.23	324.54	2905.1	324.55	2910.34	324.06	2915.59	323.69
2918.22	323.64	2923.55	323.31	2928.71	323.19	2936.58	322.65	2941.83	322.76

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.06	926	.035	2375.4	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
926	2375.4	380	280	255	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev	Permanent
0	648.46	323	F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 310

INPUT
Description:
Station Elevation Data num= 490

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	329.1	5.08	329.21	15.37	329.76	23.08	329.9	28.78	330.25
38.52	330.96	43.66	331.42	53.95	332.24	56.52	332.32	59.1	332.04
61.67	331.54	66.81	330.01	71.83	328.21	79.67	325.55	82.18	324.97
84.82	323.91	87.39	323.12	90.46	322.95	92.53	323.03	102.89	323.69
107.03	323.7	113.24	323.5	118.26	323.06	123.6	323.06	149.12	323.56
159.41	323.73	161.98	323.93	164.56	324.45	167.13	324.66	172.27	324.31
185.13	323.9	187.71	323.63	195.43	323.43	210.55	323.16	223.73	323.02
236.59	322.93	247.8	322.25	249.46	322.06	254.01	320.94	257.18	320.38
259.75	320.2	264.35	320.27	270.04	320.24	274.7	320.53	277.76	320.96
290.63	320.73	296.4	320.75	300.92	320.95	303.49	320.9	305.74	320.4
311.21	319.67	313.79	319.06	318.93	319.01	324.36	319.13	334.37	319.07
336.94	318.95	339.52	318.45	344.66	316.25	347.13	315.7	352.38	313.34
355.4	312.92	360.1	312.78	363.68	312.92	371.96	312.91	378.11	313.06
385.83	312.62	390.98	312.84	396.12	312.66	401.27	312.71	403.84	312.51
411.56	312.7	423.69	312.42	434.03	312.75	442.31	312.71	445.01	312.49
447.58	312.74	450.16	312.54	455.3	312.6	460.45	312.29	465.59	312.35
470.74	312.59	475.89	312.38	481.03	312.82	483.6	313.44	488.75	313.36
493.9	312.55	496.47	312.46	504.19	312.47	506.76	312.61	514.48	312.49
519.63	312.15	522.2	312.16	527.15	312.58	529.22	312.36	532.49	312.34
535.06	312.16	540.21	312.02	545.36	312	550.5	312.23	555.65	312.35
558.22	312.63	560.79	312.64	563.37	312.33	566.47	312.25	571.09	311.96
576.23	311.97	580.95	312.2	586.53	311.83	596.82	311.96	601.64	311.84
605.8	312.133	612.26	313.36	614.83	313.96	622.55	315.03	632.84	314.96
635.41	314.5	640.56	314.33	649.24	312.49	653.42	311.09	656	310.45
658.57	309.42	661.14	308.05	663.72	307.66	666.29	307.98	668.86	308.97
671.43	309.69	676.58	310.4	684.3	308.36	689.45	307.23	697.16	305.65
699.74	305.31	707.46	305.25	709.24	305.45	712.6	306.81	715.18	308.38
719.59	310.28	722.9	311.42	725.8	311.73	728.04	312.61	733.19	316
761.49	316	767.18	315.55	774.36	312.98	776.93	312.27	779.6	311.77
782.07	311.57	787.22	311.41	789.95	311.49	802.66	311.37	807.8	311.42
820.67	311.33	829.26	311.58	841.25	312.26	845.82	312.4	848.97	312.38
856.16	312.07	859.27	311.86	861.84	311.39	866.98	309.91	869.56	309.39
872.13	309.06	874.7	308.93	877.28	308.99	882.42	309.32	885.13	309.83
890.14	310.47	893.41	311.22	897.55	311.85	903.01	312.19	908.15	312.18
918.44	311.88	927.97	311.77	949.11	311.85	959.61	312.03	965.83	312.32
969.97	312.43	977.62	312.42	985.34	312.55	990.49	312.56	995.64	312.43
1000.78	312.1	1008.5	311.89	1013.65	311.96	1026.51	311.89	1031.66	311.75
1036.19	311.52	1039.38	311.49	1044.52	311.63	1052.24	312	1054.81	311.97
1059.96	312.39	1065.16	312.59	1070.25	312.54	1075.4	312.62	1080.54	312.84
1085.69	313.19	1093.41	313.33	1101.13	313.94	1111.42	314.38	1113.99	314.42
1124.29	314.03	1129.3	314.01	1134.58	314.47	1144.87	316.03	1147.44	316.32
1152.59	316.63	1155.16	316.69	1165.45	315.78	1173.17	315.37	1178.32	315.54
1185.17	316.3	1188.61	316.27	1193.76	315.75	1198.9	314.8	1206.62	313.49
1212.07	312.89	1216.91	312.46	1222.06	311.79	1227.21	311.26	1229.78	311.14
1234.93	311.25	1240.07	311.76	1242.64	312.23	1250.36	314.01	1252.94	314.42
1255.51	314.6	1258.08	314.23	1260.66	313.31	1263.23	311.78	1265.8	310.76

1268.38	310.52	1278.67	310.39	1286.57	310.23	1294.11	310.26	1296.68	310.37
1301.82	311.25	1307.26	311.06	1312.12	310.68	1317.61	310.39	1324.98	310.29
1335.27	310.23	1342.99	310.24	1350.71	310.44	1361.06	310.97	1371.3	311.23
1384.16	311.81	1392.1	312.03	1396.24	312.28	1417.61	313.29	1425.33	313.88
1435.55	314.06	1440.77	314.22	1448.49	313.9	1451.06	313.64	1458.78	312.35
1461.35	312.07	1466.5	311.97	1469.07	312.1	1474.22	312.79	1476.94	313.26
1481.08	313.69	1497.37	314.45	1505.09	314.31	1510.24	314.06	1520.53	314.19
1530.82	314.19	1533.4	313.98	1541.12	312.94	1548.83	312.38	1553.98	312.2
1556.55	312.26	1563.85	312.66	1569.42	313.07	1577.14	313.29	1582.28	313.56
1590	313.29	1595.15	313.32	1597.72	313.5	1605.44	315.06	1608.01	315.28
1610.59	315.26	1613.16	314.94	1615.73	314.88	1620.88	315.48	1623.46	315.45
1626.24	314.56	1627.97	313.6	1631.18	312.77	1633.76	311.78	1636.33	311.88
1638.91	312.51	1644.06	312.97	1649.21	313.01	1654.82	312.95	1656.93	313.05
1659.51	312.39	1667.23	311.06	1669.81	311.12	1672.38	310.92	1685.8	310.84
1687.83	310.61	1690.41	311.09	1692.98	311.78	1695.56	312.14	1703.28	311.12
1705.86	311.12	1713.58	312.34	1716.16	312.53	1723.88	312.17	1726.46	312.23
1731.24	312.72	1734.18	312.88	1741.91	311.83	1747.06	312.28	1753.96	311.96
1759.93	311.9	1762.22	311.79	1765.08	311.35	1770.23	312.52	1772.55	312.42
1780.53	311.82	1783.1	311.53	1790.83	312.01	1793.4	312.02	1803.53	311.82
1808.85	311.27	1811.43	311.21	1814	311.34	1819.15	311.38	1821.73	311.3
1826.88	311.78	1829.45	311.73	1832.03	311.28	1834.51	311.31	1837.18	310.96
1839.75	311.22	1844.9	311.34	1855.2	311.75	1857.78	311.96	1861.36	312.89
1863.43	313.23	1870.65	313.95	1873.23	314.34	1878.38	315.39	1880.95	315.15
1886.1	313.94	1888.68	313.53	1896.4	313.35	1898.98	313.49	1904.13	314.2
1910.93	313.56	1914.43	313.41	1917.13	313.49	1919.58	313.35	1924.73	312.54
1927.3	312.28	1929.52	312.75	1935.03	313.18	1942.75	313.54	1945.33	313.85
1947.9	313.85	1953.05	314.31	1955.63	313.78	1958.44	313.45	1965.93	313.34
1971.08	313.66	1976.23	313.63	1981.38	313.05	1986.53	313.35	1989.42	313.28
1991.68	313.05	1996.83	312.93	1999.4	313.07	2007.13	312.97	2012.28	313.32
2017.43	313.29	2022.58	312.78	2025.15	312.77	2030.3	313.67	2032.88	313.89
2034.86	313.74	2040.6	313.71	2045.18	313.52	2048.33	313.61	2053.31	314.27
2056.05	314.4	2058.63	313.72	2061.2	313.35	2063.78	313.44	2066.35	313.34
2076.65	313.69	2084.38	312.79	2089.53	313.12	2097.25	313.01	2105.08	313.61
2110.13	313.67	2112.7	313.87	2115.28	314.66	2116.9	314.934	2123	316.05
2125.58	316.86	2128.15	318.04	2130.73	318.7	2138.45	318.8	2141.02	318.77
2143.6	319.05	2151.32	320.24	2161.62	321.3	2166.77	322.4	2169.35	322.3
2171.92	322.43	2177.37	322.38	2179.65	322.17	2182.22	322.19	2192.52	322.68
2200.25	322.69	2202.82	322.44	2220.3	322.29	2236.3	322.11	2244.02	322.08
2251.72	322.53	2264.62	322.01	2272.38	321.97	2277.5	322.14	2282.65	322.12
2287.8	321.95	2292.95	322.12	2300.67	322.15	2305.82	322.36	2308.4	322.15
2315.75	322.19	2324.67	322.12	2334.15	322.43	2336.72	322.25	2341.87	322.33
2352.17	322.21	2362.47	321.25	2367.62	321.06	2375.35	320.59	2377.92	320.34
2385.97	320.79	2394.23	321.01	2406.25	321.06	2411.4	321.33	2413.97	321.29
2419.12	320.91	2424.27	320.88	2437.15	320.25	2439.72	320.38	2442.3	320.71
2447.45	320.88	2450.02	320.84	2460.32	320.94	2466.52	320.85	2474.78	320.19
2478.35	319.99	2488.65	319.59	2493.37	319.57	2499.57	319.36	2506.67	319.35
2511.82	319.19	2519.54	319.19	2522.29	319.28	2529.84	319.14	2537.57	319.29
2545.29	319.02	2550.44	319	2560.74	318.75	2568.47	318.36	2581.34	318.29
2586.49	317.64	2591.64	315.46	2594.22	315.65	2596.79	316.37	2598.71	317.38
2601.94	318.79	2604.52	319.05	2609.67	320.17	2612.24	320.33	2621.43	320.13
2630.27	320.07	2640.57	320.23	2658.59	320.31	2668.89	320.28	2681.77	320.31
2689.49	320.25	2704.94	320.3	2712.67	320.44	2717.82	320.24	2720.24	320.31

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.06	605.8	.035	2116.9	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
605.8	2116.9	610	610	640	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Permanent
0	154.1	324.5	F
2354.1	2720.24	320	F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 300

INPUT
Description:
Station Elevation Data num= 491

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	363.62	3.76	364.84	6.33	365.19	12.17	365.6	20.43	366.25
26.94	366.72	32.09	367.16	34.66	367.3	39.81	367.77	42.39	367.38
44.96	364.93	47.54	363.01	50.11	362	55.53	359.5	60.42	356.51
65.57	352.38	68.14	350.81	72.05	348.73	75.87	346.52	80.31	343.61
83.59	341.76	86.17	339.91	88.74	338.43	91.32	337.12	93.89	335.58
99.05	332.11	101.62	330.56	106.77	327.26	109.21	325.76	111.92	323.95
114.5	322.72	117.07	321.83	119.65	321.5	124.8	321.55	135.1	321.78
138.12	321.9	147.98	322.08	155.7	322.12	158.28	322.25	160.85	322.06
166	320.39	168.58	319.77	171.15	319.37	176.31	319.45	181.47	319.31
184.03	319.33	189.18	319.17	195.93	318.67	200.06	318.45	204.19	318.46
207.21	318.71	214.93	318.96	217.51	318.94	220.09	318.77	225.24	318.77
227.81	318.61	235.54	318.54	245.48	318.5	248.41	318.58	256.14	318.49
275.26	318.38	279.32	318.42	287.04	318.18	292.97	318.17	299.92	318.06
302.5	317.97	305.07	318.04	307.65	317.92	315.37	317.92	320.52	318.23
323.1	318.31	328.25	318.71	330.13	318.36	335.98	317.51	341.13	316.98
346.28	316.88	348.85	316.63	354	315.94	356.58	315.74	359.15	315.88
363.17	315.29	366.88	314.59	369.36	314.38	374.61	314.2	377.62	313.77
382.33	313.67	384.91	313.92	387.48	314.64	389.8	315.46	392.63	316.03
397.78	315.67	400.21	315.24	404.46	313.99	408.08	313.32	413.24	313.4
415.81	313.3	418.39	312.84	420.96	312.63	426.11	312.48	428.69	312.23
431.3	311.32	436.41	311.42	438.99	311.65	441.86	311.75	446.9	311.71
449.29	311.66	457.02	312.95	462.17	312.74	464.74	312.87	472.47	312.76
474.66	312.02	477.62	311.19	480.19	310.81	482.77	310.71	485.34	310.74
487.92	310.25	490.5	309.47	493.07	308.37	497.37	306.9	498.22	306.71
503.56	306.78	507.69	306.68	511.1	306.43	515.95	305.62	518.02	305.57
523.97	306.06	526.55	306.1	529.13	306.76	532.47	307.96	534.53	308.52
539.43	308.82	544.58	308.81	547.15	308.94	549.73	308.86	552.3	308.93
554.88	309.25	560.03	309.64	570.33	311.01	572.91	311.66	578.06	312.75
583.21	314	614.11	314	615.06	313.79	617.12	313.07	619.26	312.59
621.84	312.43	624.41	312.44	632.14	313.33	634.71	313.46	639.86	313.31
647.59	312.87	652.74	312.41	660.47	311.88	668.19	311.43	686.22	310.67
701.77	310.19	711.97	309.81	717.12	309.58	727.43	309.51	732.58	309.4
737.73	309.12	742.88	308.93	750.6	308.75	758.33	308.29	765.78	308.03
771.21	308.03	776.36	308.34	784.08	309.38	791.81	310.2	794.38	310.42
799.54	310.55	807.26	310.29	809.84	310.27	817.56	310.06	822.71	310.06
825.65	310.18	833.01	310.65	840.1	310.62	845.89	310.41	850.43	310.47
853.62	310.76	856.62	311.15	861.34	311.52	866.49	311.52	871.64	311
876.8	310.12	884.52	309.81	889.67	309.53	895.85	309.43	897.92	309.46
907.7	310.04	910.27	310	915.43	309.75	920.58	309.22	925.73	308.8
930.88	308.25	936.03	308.48	941.18	309.08	946.33	308.58	953.66	308.29
961.78	308.34	970.18	308.32	972.08	308.39	974.31	308.66	977.23	309.39
979.81	310.3	982.57	310.99	984.63	311.28	987.53	311.43	995.26	311.18
1002.99	311.03	1010.71	310.97	1021.01	310.56	1031.32	310.39	1036.47	310.5
1041.62	310.54	1048.64	310.81	1069.95	312.11	1075.1	312.32	1077.67	312.49
1085.4	312.76	1093.12	312.9	1098.27	313.24	1103.42	313.89	1108.58	314.84
1113.73	315.96	1118.84	317.2	1121.45	317.75	1124.03	318.1	1126.6	318.3
1129.08	318.34	1131.75	317.95	1134.33	317.14	1139.49	315.87	1142.05	315.1
1147.2	313.33	1149.81	312.69	1152.36	312.2	1154.93	311.96	1160.08	311.75
1162.66	311.8	1165.23	312	1170.38	312.57	1172.96	312.39	1178.11	310.93
1181.14	310.24	1185.83	309.33	1189.03	309.1	1193.16	308.92	1196.14	308.88
1201.29	309	1206.44	309.38	1211.59	310.41	1215.87	311.48	1219.31	312.22
1224.13	312.88	1227.04	313.06	1232.19	313.06	1237.34	312.85	1242.49	312.52
1253.04	311.62	1257.17	311.5	1263.09	311.41	1275.97	311.53	1283.7	311.71
1291.42	312.08	1296.57	312.38	1309.45	313.02	1317.18	313.56	1324.9	314.16
1330.05	314.39	1337.93	314.27	1342.93	314	1345.51	313.74	1350.66	313.55
1353.23	313.53	1358.38	313.81	1360.96	314.38	1363.53	315.25	1366.11	316.43
1368.68	317.47	1371.26	318.15	1373.83	318.61	1376.41	318.56	1378.98	318.19
1384.14	317.14	1389.29	316.22	1394.44	315.51	1399.59	314.91	1404.74	314.07

1407.89	313.65	1412.02	313.43	1416.15	313.4	1422.34	313.24	1425.34	313.25
1430.49	313.69	1435.64	314.75	1445.94	317.43	1451.25	318.44	1456.24	319.14
1461.4	319.71	1469.12	319.94	1471.7	319.96	1476.85	319.81	1482	319.49
1487.15	319.28	1489.72	318.82	1492.3	318.01	1494.87	316.38	1497.45	315.02
1500.03	314.53	1502.6	314.32	1507.75	314.3	1512.9	314.57	1515.48	314.37
1518.05	313.94	1523.2	312.87	1525.78	312.52	1530.93	312.11	1536.08	311.99
1541.23	312.03	1546.38	312.22	1562.74	313.39	1566.98	313.66	1575.13	313.93
1590.16	314.01	1597.89	313.94	1605.61	313.76	1610.76	313.55	1618.49	313.31
1628.81	312.87	1631.37	312.81	1639.09	312.44	1644.24	312.36	1651.97	312.58
1657.12	312.82	1659.7	312.87	1662.27	312.61	1667.42	311.59	1670	311.19
1672.57	310.97	1680.3	310.75	1688.02	310.7	1693.18	310.84	1706.05	311.08
1708.63	311.2	1713.78	311.28	1726.65	311.56	1729.23	311.72	1734.11	311.86
1747.26	311.99	1752.41	312.11	1754.98	312.27	1757.56	312.67	1760.95	313.44
1765.28	314.53	1773.01	313.88	1780.74	313.91	1785.89	314.06	1791.04	314.37
1796.05	314.74	1798.76	314.86	1803.91	314.91	1809.07	314.62	1812.56	313.82
1814.63	313.23	1816.69	312.92	1818.76	312.06	1821.94	310.94	1827.09	310.43
1832.24	310.14	1837.39	310.09	1847.66	310.19	1852.85	310.53	1860.57	310.79
1868.3	310.56	1876.02	310.65	1878.6	310.85	1883.75	311.93	1888.9	311.87
1896.63	312.01	1901.78	312.82	1904.35	313.81	1909.5	315.61	1913.73	316.89
1917.8	318.441	1922.38	319.25	1935.26	320.39	1940.41	320.73	1948.13	321.38
1953.28	321.54	1961.01	321.22	1973.89	321.04	1981.87	320.99	1989.34	321.03
1999.64	321.39	2007.37	321.46	2009.94	321.34	2017.67	320.74	2027.97	320.31
2033.48	320.3	2043.42	320.87	2048.57	321.05	2064.45	321.34	2069.17	321.37
2074.32	321.31	2082.05	321.01	2087.2	320.91	2097.52	320.87	2101.62	320.74
2105.23	320.49	2107.8	320.16	2118.26	318.07	2120.68	317.66	2123.26	317.36
2126.4	317.16	2130.98	316.73	2140.85	316.14	2149.11	315.88	2151.58	315.87
2159.43	316.26	2164.46	316.76	2169.61	317.49	2174.76	318	2177.34	318.17
2182.49	318.37	2188.34	318.49	2196.59	318.47	2210.82	318.49	2228.84	318.99
2239.15	318.98	2241.72	318.92	2246.87	319.09	2252.34	319.17	2254.6	319.27
2260.6	319.7	2267.47	320.57	2270.05	320.63	2280.35	320.54	2285.5	320.66
2288.08	320.64	2293.63	320.86	2306.1	321.19	2316.34	321.41	2318.41	321.36
2324.13	321.4	2331.86	321.27	2342.16	320.97	2347.31	320.97	2349.88	321.09
2355.04	321.62	2362.76	322.83	2367.91	323.35	2375.64	323.58	2378.21	323.57
2383.36	323.35	2386.54	323.12	2393.67	322.88	2396.24	322.93	2398.93	323.22
2401.39	323.28	2403.97	323.5	2406.54	323.92	2409.12	324.87	2420.22	325.5
2421.99	325.53	2424.57	325.38	2432.3	325.32	2434.87	325.43	2442.29	325.29
2447.75	325.29	2454.68	325.44	2460.87	325.47	2468.35	325.44	2473.5	325.53
2483.8	325.03	2489.78	325.09	2493.91	325.34	2500.1	324.98	2509.56	324.93
2514.55	325.21	2517.28	325.18	2519.86	325.37	2522.81	325.93	2525.01	326.07
2527.58	325.84	2529.01	325.56	2532.73	324.57	2535.31	324.28	2543.03	323.89
2549.37	324.09								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.05	446.9	.06	1917.8	.05

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

446.9	1917.8	790	654	605	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev	Permanent
0	0		F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 290

INPUT
Description:
Station Elevation Data num= 492

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	334.95	2.48	334.94	5.04	335.09	10.15	335.25	20.39	335.69
25.51	335.81	35.74	335.7	41.9	335.452	43.42	335.38	45.98	335.47
51.09	335.9	56.33	336.67	60.43	336.96	63.89	337.26	66.45	337.41
71.56	337.81	74.12	337.94	81.44	338.2	89.48	338.53	92.03	338.56

97.15	338.81	102.27	339.01	107.39	339.11	109.95	339.21	117.15	339.36
122.74	339.56	128.18	339.82	140.65	340.22	145.77	340.31	150.89	340.5
156	340.81	158.56	340.56	161.12	339.73	163.68	338.65	168.8	336.4
171.36	335.41	176.47	333.21	184.15	330.13	188.57	328.73	194.39	326.74
199.07	325.3	202.06	324.25	204.62	323.54	207.18	323.31	212.3	323.54
217.41	323.5	224.28	323.38	230.21	323.22	235.33	323.36	236.17	322.59
236.88	322.23	237.88	321.09	240.44	315.58	243	310.28	244.02	310.18
248.12	310.78	250.68	310.8	255.8	310.47	258.35	310.5	260.91	310.35
263.47	310.32	266.29	310.62	271.15	310.77	276.27	311.11	281.38	311.08
291.62	310.71	296.74	310.61	299.3	310.74	306.97	310.61	309.53	310.42
312.09	310.32	314.65	310.34	317.21	310.49	319.77	310.51	324.88	309.98
330	310.01	333.51	310.26	335.12	310.45	342.79	310.23	347.91	310.25
353.03	310.44	360.71	310.94	365.02	311.73	368.38	311.91	370.94	311.83
373.5	311.49	378.62	311.09	381.18	310.6	383.92	310.27	386.29	310.17
388.85	308.91	391.41	306.63	393.97	303.15	396.53	302	399.09	301.71
401.65	301.92	404.21	302.6	407.03	303.05	409.32	302.93	414.44	303.16
415.43	303.38	419.56	304.71	422.12	305.17	427.23	306.6	429.79	307.01
440.03	308.25	445.15	308.69	447.7	308.69	450.26	308.52	452.82	308.62
455.38	309.64	457.94	311.68	460.5	312	483.53	312	486.09	311.97
488.64	311.01	491.2	310.39	493.76	309.98	496.32	309.72	499.45	309.55
505.75	309.28	511.68	308.9	513.68	308.84	516.8	308.86	524.63	309
530.93	309.03	535.12	309.1	537.28	309	541.42	308.97	547.52	309.03
552.64	308.92	555.2	308.96	560.31	309.16	562.4	309.29	565.43	309.58
570.55	309.77	573.11	309.82	580.79	309.66	588.47	309.38	593.59	309.4
596.15	309.67	601.27	310.39	603.83	310.66	606.39	310.69	608.95	310.51
614.07	310.32	619.19	310.37	621.75	310.49	624.31	310.78	629.55	310.85
634.55	311.12	637.11	311.16	642.23	311.34	647.34	311.38	652.46	311.47
657.58	311.42	672.94	311.07	676.68	311.09	680.62	311.05	685.74	311.07
690.86	311.15	693.42	311.14	701.1	311.34	711.34	311.5	716.46	311.45
728.17	311.15	731.82	310.95	734.47	310.69	739.49	310.53	744.61	310.62
749.16	310.92	765.09	312.84	770.21	313.34	780.45	314.16	783.01	314.15
785.57	313.99	790.69	313.48	793.25	312.9	798.37	311.37	806.05	309.57
811.17	308.62	816.29	308.06	818.85	307.86	821.41	307.8	828.89	307.78
834.2	307.73	836.76	307.66	841.88	307.69	844.44	307.62	849.56	307.59
857.24	307.33	859.8	307.31	862.36	307.4	870.04	307.78	875.16	307.96
880.28	308.38	882.84	308.51	898.14	308.53	903.32	308.61	911	308.67
917.03	308.81	923.79	308.79	926.35	308.84	928.91	308.99	931.47	309.53
934.03	310.22	939.15	311.31	941.71	311.77	946.83	312.84	951.95	314.08
954.51	314.76	959.63	315.75	964.75	316.81	972.43	317.94	975.78	318.4
979.98	318.86	982.67	319.01	985.23	318.91	990.35	318.25	995.47	317.33
1000.58	316.54	1003.14	316.07	1015.94	313.83	1021.06	313.03	1026.14	312.4
1028.74	312.15	1034.53	311.83	1036.42	311.77	1044.1	311.84	1051.78	312.04
1054.34	311.98	1059.46	311.59	1061.81	311.28	1067.14	310.25	1074.4	308.56
1077.38	307.97	1079.94	307.6	1085.06	307.12	1090.17	306.8	1095.29	306.63
1100.41	306.56	1105.53	306.32	1108.09	306.41	1115.77	306.91	1118.47	307
1126.01	307.35	1128.57	307.57	1131.13	307.88	1133.16	308.04	1138.81	308.25
1146.49	308.28	1159.29	308.11	1172.09	308.23	1174.65	308.35	1179.76	308.34
1184.88	308.45	1192.56	308.38	1197.68	308.29	1200.24	308.31	1210.48	308.27
1215.6	308.14	1223.28	308.12	1238.64	308	1248.88	308	1259.2	308.12
1266.79	308.05	1271.91	307.96	1274.47	308.01	1282.15	307.78	1284.71	307.77
1290.53	307.83	1294.95	307.81	1305.19	308.09	1312.87	308.34	1323.11	308.86
1330.79	309.41	1335.91	309.66	1341.03	309.72	1343.59	309.84	1349.29	310.02
1356.38	310.18	1361.88	310.19	1369.18	310.12	1374.3	310.18	1379.42	310.47
1384.96	311.01	1389.66	311.65	1394.78	312.07	1399.9	312.15	1405.02	312.06
1410.14	312.19	1412.7	312.42	1420.38	313.23	1428.06	314.2	1433.22	314.72
1435.74	314.87	1441.62	315.34	1443.41	315.4	1448.53	314.59	1453.65	314.03
1463.89	313.17	1468.9	312.91	1474.13	312.72	1476.69	312.67	1483.58	312.44
1487.78	312.16	1489.49	311.95	1492.05	311.36	1494.61	311.16	1497.17	310.85
1499.73	310.65	1502.47	310.7	1504.85	311.16	1507.41	311.03	1509.97	310.8
1512.53	310.71	1517.65	310.62	1522.77	310.79	1527.89	310.54	1530.44	310.07
1533	309.91	1804.33	309.91	1806.89	310.12	1812.01	311.64	1817.13	313.47
1822.25	314.57	1824.81	314.68	1829.93	315.06	1840.17	316.02	1842.73	316.07
1847.85	315.82	1850.41	315.81	1858.09	316.45	1863.21	317.2	1872.77	319.18
1876.01	319.78	1878.08	319.92	1881.13	320.38	1884.37	320.58	1893.92	321.1
1896.4	321.158	1899.04	321.22	1904.16	321.1	1909.28	320.86	1911.84	320.62
1916.96	320.39	1924.24	320.39	1927.2	320.45	1932.63	320.19	1940	319.51

1942.56	319.42	1945.22	319.63	1949.42	320.14	1952.8	320.48	1957.92	320.6
1963.04	320.95	1965.6	321.3	1968.16	321.77	1970.72	322.43	1973.27	322.89
1975.83	323.1	1978.8	323.21	1982.99	323.65	1986.07	324.19	1988.63	324.52
1993.75	325.28	1998.87	324.8	2001.43	324.73	2003.98	324.82	2006.55	325.48
2009.11	326.02	2011.67	326.23	2014.47	326.27	2019.35	326.03	2024.47	325.92
2027.03	326.06	2034.71	327	2039.83	327.86	2042.39	328.16	2045.95	328.72
2050.49	329.3	2057.75	330.11	2060.3	330.23	2065.42	330.29	2073.1	330.69
2075.66	330.89	2078.22	331.23	2080.78	331.66	2083.34	332.58	2085.9	333.41
2088.46	333.8	2091.02	334.06	2101.26	334.56	2103.82	334.74	2108.94	334.94
2111.5	334.8	2126.86	334.72	2139.66	334.78	2155.27	334.78	2157.57	334.76
2160.13	334.83	2162.69	335.06	2165.25	335.54	2168.07	336.17	2169.75	336.46
2173.95	337.71	2178.14	338.65	2180.61	338.75	2183.17	338.48	2186.54	337.93
2188.63	337.76	2190.85	337.68	2193.41	337.7	2195.97	337.81	2201.22	338.26
2206.21	338.4	2211.33	338.63	2216.45	338.98	2228.5	339.53	2230.6	339.71
2232.7	339.99	2236.92	340.69	2238.99	340.81	2247.16	341.05	2249.72	341.23
2252.28	341.3	2259.98	341.19	2262.52	341.27	2267.64	341.28	2275.32	341.45
2277.88	341.64	2283	341.62	2285.56	341.73	2290.68	341.81	2293.24	341.92
2300.92	342.05	2303.48	342.16	2311.16	342.34	2313.72	342.43	2321.4	342.58
2336.75	343.05	2346.99	343.25	2352.11	343.24	2359.79	343.48	2367.47	343.55
2375.15	343.77	2385.39	344.13	2393.07	344.32	2395.63	344.42	2398.19	344.43
2403.31	344.55	2408.43	344.77	2413.54	344.83	2416.1	344.96	2421.22	345.05
2423.78	345.04	2426.34	345.17	2431.46	345.61	2436.58	346.17	2441.7	346.51
2446.82	346.75	2449.38	346.92	2454.5	347.44	2464.74	349.03	2467.3	349.33
2472.42	349.63	2474.98	349.73	2485.22	349.91	2490.34	350.05	2495.46	349.81
2498.02	349.95	2500.57	350.54	2505.69	350.77	2518.49	350.65	2528.73	350.5
2533.85	350.28	2536.41	350.24	2539.06	350.35	2547.45	350.55	2551.77	350.69
2554.33	350.37	2556.89	349.95	2562.14	349.27	2567.13	348.72	2572.25	348.68
2574.73	348.48	2577.37	348.37	2585.05	348.43	2592.72	348.59	2595.28	348.57
2602.96	348.64	2607.9	348.59						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.05	41.9	.06	1896.4	.05

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
41.9	1896.4	695	653	645	.1	.3

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 285

INPUT
Description:
Station Elevation Data num= 492

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	328.08	5.36	327.9	13.04	327.81	20.42	327.63	23.27	327.6
28.38	327.65	30.94	327.84	33.5	327.9	38.61	327.34	41.17	327.22
46.29	327.12	48.84	327.33	51.4	328.1	53.96	329.12	59.07	331.78
61.63	332.78	64.19	333.33	66.75	333	69.31	332.31	71.86	331.37
77.21	329.64	82.09	329.24	87.21	328.96	89.77	328.87	92.32	328.68
102.55	328.29	106.66	328.39	115.77	328.51	120.46	328.52	123.48	328.64
128.13	328.69	138.36	328.65	143.48	328.56	148.59	328.31	151.15	328.11
153.71	327.31	157.14	326	161.38	324.5	163.94	323.95	166.5	323.71
171.61	324.68	173.96	324.96	176.73	325.48	179.28	326.21	182.38	326.23
189.52	325.81	194.63	326.06	199.75	326.21	202.3	326.22	207.42	326.35
212.53	326.41	217.65	326.53	220.21	326.53	222.76	326.65	233	326.81
238.11	326.66	245.48	325.93	250.9	325.66	256.01	325.19	261.13	325.05
263.69	325.11	271.36	325.71	284.15	326.54	289.26	326.57	298.06	326.29
307.17	326.12	312.28	326.1	314.84	326.03	325.07	326.01	330.19	325.92
337.86	325.69	342.97	325.48	348.09	325.74	350.65	325.97	353.21	326.01
355.76	325.58	358.32	324.9	360.88	323.82	365.99	322.04	368.55	321.48
371.11	321.19	373.67	321.59	381.34	323.66	383.9	323.9	391.57	324.11
399.24	324	406.92	323.76	411.64	323.5	414.59	323.41	417.15	323.71
419.7	324.46	422.26	323.7	427.38	320.83	430.57	318.08	432.49	316.55

434.78	315.33	436.88	314.48	440.17	313.71	442.72	313.87	445.28	313.59
447.84	313.45	452.95	313.58	457.91	313.02	460.63	312.89	463.18	312.49
468.1	311.01	469.1	310.844	470.53	310.72	473.42	310.8	475.97	310.41
483.65	310.22	486.2	309.87	489.46	309.7	491.57	309.43	493.67	308.78
496.43	308.55	498.99	308.62	502.08	308.43	503.99	307.97	506.29	308.27
509.22	308.09	511.78	308.15	516.9	308.5	519.45	308.45	522.01	308.5
525.22	308.8	527.13	308.87	530.08	308.71	532.24	308.38	534.8	307.73
537.36	307.41	539.91	307.41	542.05	307.53	545.03	307.98	547.59	307.95
552.7	308.11	555.26	308.47	557.82	308.67	560.38	308.5	565.18	308.07
573.16	307.98	575.7	307.69	578.28	307.77	580.84	307.97	583.39	307.93
585.95	307.73	588.51	307.69	591.07	307.99	593.62	307.77	596.18	307.13
601.3	306.27	606.41	304.69	611.64	303.64	614.09	303.34	619.2	303.17
624.08	303.84	626.87	304.04	629.43	303.83	631.99	303.51	637.11	302.44
639.66	301.75	642.22	301.64	644.78	302.31	655.01	305.34	657.73	306.12
660.12	306.62	662.68	306.75	666.14	306.69	668.25	306.75	670.35	306.66
672.91	306.76	678.03	308.2	680.59	308.98	683.14	310	712.42	310
721.51	307.88	726.62	307.13	731.74	306.97	739.41	307.09	744.53	307.42
748.17	307.41	754.76	307.28	757.31	307.08	759.87	306.67	762.43	306.03
769.21	304.75	770.1	304.54	772.66	304.31	777.62	304.16	782.89	304.24
790.56	304.12	795.68	304.58	800.8	304.13	803.35	303.64	809.17	304.17
810.64	304.54	813.91	304.79	817.58	304.83	821.26	305.09	823.89	305.18
828.1	305.1	831.49	305.1	834.04	304.93	838.62	305.07	841.72	305.05
844.28	304.91	846.83	304.9	851.24	305.06	857.06	305.2	867.29	305.76
872.41	306.19	877.52	306.45	880.68	306.7	885.2	306.63	887.76	306.98
890.31	307.13	892.87	306.97	897.99	307.31	900.54	307.74	903.1	307.84
905.66	307.44	908.51	307.3	912.23	307.37	915.89	307.3	918.45	307.59
922.75	308.19	926.96	308.43	928.68	308.64	931.16	308.07	933.79	307.62
936.35	307.72	944.02	307.88	946.58	307.99	951.7	308.02	954.3	307.91
958.51	307.9	961.93	307.99	964.82	307.94	969.6	307.76	974.72	307.94
979.83	308.2	982.39	308.24	990.06	308.5	992.62	308.65	998.47	308.83
1007.97	308.97	1013.08	308.88	1017.4	308.62	1023.31	308.46	1033.54	308.49
1036.1	308.43	1041.21	308.09	1046.33	307.83	1053.16	307.67	1059.47	307.6
1066.79	307.56	1071.91	307.65	1074.19	308	1076.29	308.15	1082.14	307.8
1084.71	308.03	1087.25	307.96	1094.47	307.9	1097.48	308.02	1107.71	308.02
1112.05	307.97	1115.39	308.01	1120.46	307.91	1122.57	307.95	1128.18	307.93
1130.73	307.84	1135.85	307.9	1138.41	307.82	1143.52	307.45	1148.64	306.83
1153.75	306.32	1158.87	305.98	1163.98	305.8	1171.66	305.75	1179.33	305.94
1189.56	306.38	1194.67	306.51	1197.23	306.64	1204.9	307.22	1217.69	308.01
1223.53	308.45	1229.84	309.04	1236.15	309.78	1240.35	310.41	1248.38	311.87
1253.5	312.58	1256.06	312.84	1258.62	313	1261.17	313.06	1263.73	313.02
1268.85	312.8	1276.52	312.7	1282.42	313.19	1288.73	313.85	1291.86	314.02
1296.98	313.98	1299.54	313.88	1302.1	313.41	1304.65	312.54	1307.21	311.41
1309.77	310.56	1312.33	310.3	1317.44	310.17	1322.56	310.16	1327.67	310.2
1332.9	310.56	1335	310.58	1343.02	310.11	1358.36	309.92	1366.04	309.74
1370.76	309.71	1378.83	309.79	1381.38	309.78	1389.06	310.08	1394.17	310.1
1402.31	309.89	1409.52	309.45	1414.63	308.94	1422.31	308.41	1432.54	308.06
1435.09	307.91	1440.17	307.81	1445.32	307.8	1452.79	307.62	1460.67	307.59
1465.79	307.71	1475.5	307.99	1481.13	308.19	1491.36	308.49	1496.48	308.79
1499.04	309.06	1501.59	309.22	1504.15	309.49	1511.82	310.15	1514.38	310.3
1519.5	310.41	1522.05	310.1	1524.61	308.95	1527.17	308.06	1529.73	307.57
1534.84	307.25	1539.96	307.08	1547.63	306.91	1555.3	306.93	1560.42	307.08
1562.98	307.49	1565.53	308.08	1568.09	308.34	1570.65	308.28	1575.76	307.83
1583.2	307.63	1586	307.52	1591.11	307.57	1596.23	307.71	1600.02	307.7
1604.23	307.61	1611.57	307.59	1616.85	307.47	1621.8	307.52	1624.36	307.48
1629.48	307.56	1634.59	307.44	1642.26	307.41	1648.4	307.33	1655.05	307.15
1660.17	307.17	1667.84	307.08	1670.4	307.17	1675.51	307.19	1678.07	307.29
1685.74	307.8	1688.36	307.68	1693.42	307.3	1698.53	307.24	1701.09	306.25
1703.65	304.77	1706.21	303.85	1708.76	303.14	1713.88	303.14	1718.99	302.71
1721.55	302.62	1724.11	302.75	1726.67	302.98	1729.22	303.11	1731.78	303.53
1734.34	303.85	1739.45	304.83	1742.01	305	1744.57	305.03	1747.13	305.28
1754.8	305.24	1759.92	305.31	1762.47	305.45	1766.19	305.49	1772.7	305.73
1775.26	305.73	1782.93	305.86	1790.61	305.87	1795.72	305.79	1800.84	305.92
1803.4	306.05	1811.07	306.71	1814.56	307.12	1818.74	307.71	1826.42	309.05
1831.39	309.74	1836.65	310.28	1841.91	310.45	1844.01	310.45	1851.99	310.31
1854.41	310.23	1858.73	309.93	1867.34	309.22	1869.9	309.08	1887.8	308.58
1895.47	308.48	1900.59	308.53	1913.38	309.06	1918.49	309.18	1923.61	309.45

1926.16	309.7	1933.84	310.33	1938.95	310.58	1944.07	311.01	1947.07	311.4
1951.74	311.85	1954.3	312.16	1959.41	312.63	1964.2	313.194	1972.82	314.19
1977.32	314.62	1979.87	314.96	1987.55	315.87	1992.66	316.34	1995.22	316.46
2000.34	316.41	2002.89	316.3	2005.45	316.06	2008.07	315.69	2015.68	315.26
2023.35	315.6	2025.91	315.87	2036.14	317.44	2041.26	318.14	2045.93	318.85
2058.55	319.91	2064.28	320.57	2071.95	321.17	2074.51	321.28	2081.68	321.43
2089.85	321.9	2092.41	321.95	2094.97	322.12	2100.61	322.79	2105.2	323.15
2112.87	323.18	2117.99	323.38	2120.55	323.57	2123.1	323.96	2125.66	324.53
2133.33	325.92	2138.45	327.09	2143.56	328.19	2148.99	329.64	2151.46	330.19
2153.8	331.02	2156.35	331.36	2158.91	331.42	2161.47	331.36	2164.03	331.55
2166.58	331.93	2169.14	333.45	2171.7	334.81	2174.26	335.88	2176.33	335.45
2179.37	335.18	2181.93	335.48	2184.49	336.22	2189.6	337.38	2193.16	338.43
2197.28	339.52	2202.39	340.36	2204.95	340.7	2207.51	340.84	2210.06	341.09
2215.18	341.09	2218.221	341.02						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.05	469.1	.06	1964.2	.05

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
469.1	1964.2	640	688	660	.1	.3

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 280

INPUT
Description:
Station Elevation Data num= 460

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	332.56	5.17	332.57	10.16	332.16	12.86	332.01	20.99	331.83
35.91	331.55	38.48	331.47	41.04	331.15	43.6	330.94	46.16	330.97
53.84	330.75	74.34	330.07	79.46	329.97	89.71	329.56	94.83	329.5
117.88	328.95	120.45	328.85	123.01	329	125.57	328.75	130.69	328.39
135.82	328.16	143.5	327.95	146.06	327.97	151.18	327.79	156.31	327.76
158.87	327.66	161.43	327.77	163.99	327.59	166.55	327.2	169.3	327.11
171.68	326.93	179.36	326.75	184.49	326.95	187.05	326.99	189.61	326.78
194.73	326.12	199.85	325.92	202.8	326.07	204.98	326.06	212.66	325.48
217.79	325.03	220.35	324.91	228.03	325	235.72	325.2	238.4	325.2
246.77	325.49	251.09	325.69	261.43	325.34	269.02	325.19	271.9	325.06
276.7	324.98	281.83	324.77	286.95	324.68	294.63	324.34	302.32	324.72
310	325.01	315.13	325.01	320.06	325.21	325.37	325.22	327.93	325.16
333.06	324.7	338.18	324.78	340.74	324.75	343.1	324.63	358.67	324.11
363.8	323.91	368.92	323.64	381.73	323.08	389.41	322.81	391.97	322.66
397.1	322.53	402.22	322.28	407.34	321.79	412.47	321.53	417.59	321.17
420.57	320.88	427.84	320.29	430.4	320.23	438.08	320.28	440.64	320.39
448.33	320.11	450.89	320.16	456.01	320.04	461.14	319.8	463.7	319.73
476.51	319.25	491.87	318.59	497	318.44	509.81	317.88	512.37	317.69
516.9	317.48	520.05	317.42	525.18	317.19	527.74	317.29	532.86	318.2
535.42	318.74	537.98	319.74	543.11	322.47	545.67	323.72	548.2	324.155
550.79	323.83	553.35	322.81	555.91	321.69	560.87	318.53	563.6	318.13
566.16	316.66	567.15	314.97	569.24	311.77	571.28	308.37	573.43	308.88
578.97	309.83	584.39	309.08	586	309.09	589.21	308.61	594.34	308.44
596.9	308.52	600.65	309.01	604.58	309.2	606.94	309.44	612.27	309.8
615.31	309.95	622.52	309.69	625.08	308.6	627.64	308.3	629.97	308.27
635.32	307.81	637.88	307.7	640.45	307.69	645.57	307.47	648.13	307.46
650.69	307.67	653.25	307.51	658.38	307.36	661.38	307.18	671.19	306.97
673.75	307.01	678.87	307.46	684.41	307.34	686.51	307.37	689.12	307.55
699.36	307.77	701.92	307.76	704.49	307.5	707.05	307.06	709.54	307.4
711.63	307.53	714.73	307.89	717.92	307.67	719.86	307.3	724.98	306.78
727.54	306.82	730.1	307.01	732.66	307.3	734.67	307.27	737.79	307.09
740.35	307.07	745.14	306.62	750.59	306.69	755.72	306.66	757.7	306.82
761.89	306.76	766.08	306.58	773.65	307.14	776.21	307.19	778.77	306.94
781.33	306.5	783.89	306.23	786.46	306.3	789.11	306.11	794.14	306.18

799.58	306.15	801.83	306.37	809.51	306.39	812.07	306.34	814.63	306.44
817.2	306.32	822.32	306.4	824.88	306.11	830.99	306.06	835.13	306.22
837.69	306.26	840.25	306.48	845.37	307.05	847.93	307.18	850.5	306.88
853.06	306.83	858.18	306.85	865.87	306.44	868.43	306.52	870.99	306.42
877.06	306.55	878.67	306.53	881.29	306.34	886.36	306.34	891.11	306.48
896.6	306.9	900.09	306.82	904.29	306.53	906.85	306.71	909.41	306.64
912.66	306.75	924.78	306.93	932.47	306.64	935.03	306.86	937.78	306.99
942.71	307.02	945.27	306.98	950.4	307.09	952.96	307.23	958.08	307.71
965	307.32	968.33	307.2	975.47	306.81	978.57	306.72	981.14	306.77
983.7	306.97	988.04	306.9	991.38	307.09	993.94	306.93	996.51	306.34
999.07	305.99	1000.6	306.05	1006.54	306.07	1009.31	305.92	1011.88	305.68
1014.44	304.2	1015.26	303.54	1017.35	302.17	1019.56	301.18	1021.54	300.63
1024.68	299.55	1027.24	298.96	1029.63	298.83	1032.37	298.84	1034.93	299.11
1037.49	299.54	1040.05	299.42	1042.61	299.04	1046.67	299.04	1050.3	298.92
1052.86	299.72	1055.04	300.96	1057.98	302.77	1060.55	304.24	1063.11	305.17
1065.67	305.93	1211.68	305.92	1216.8	305.95	1219.36	306.05	1222.56	305.96
1227.05	306.01	1229.61	305.86	1232.17	305.91	1237.29	306.18	1239.86	306.68
1242.42	307.07	1250.1	306.62	1252.66	306.05	1255.22	305.21	1257.79	304.56
1260.35	304.31	1265.47	304.52	1268.03	304.82	1273.16	305.13	1278.28	305.36
1280.84	305.65	1285.96	305.82	1287.47	305.67	1293.48	305.38	1298.77	305.18
1301.33	304.97	1303.9	304.96	1311.58	305.15	1316.7	305.12	1321.83	304.99
1325.17	305	1326.95	304.88	1332.07	305.01	1334.63	304.86	1339.76	303.84
1344.88	303.49	1350.29	304	1352.56	304.1	1355.13	303.93	1360.25	304.2
1362.81	304.56	1367.93	305.4	1369.14	305.5	1373.06	305.59	1380.74	305.64
1385.82	305.84	1388.43	305.78	1396.36	306.17	1401.23	306.26	1408.92	306.5
1414.04	306.51	1417.3	306.59	1421.73	306.53	1431.97	306.69	1434.54	306.66
1437.1	306.73	1442.22	306.72	1447.34	306.77	1449.91	306.72	1452.47	306.8
1457.59	306.71	1459.18	306.79	1462.71	306.8	1465.27	306.6	1470.4	306.54
1472.96	306.65	1478.03	306.72	1480.12	306.67	1486.4	306.26	1490.89	306.07
1496.01	306.03	1498.97	306.06	1508.82	306.05	1513.94	305.92	1519.07	306.09
1521.63	306.12	1524.19	306	1526.75	305.66	1537	304.17	1542.12	303.61
1547.24	303.28	1552.37	303.2	1559.69	303.22	1570.3	303.53	1575.42	303.78
1580.55	304.28	1585.67	304.93	1590.79	305.38	1593.35	305.49	1603.6	305.47
1609.95	305.63	1613.85	305.67	1618.97	305.65	1624.09	305.57	1631.78	305.6
1634.34	305.54	1637.17	305.58	1656.01	306.14	1659.95	306.29	1665.08	306.32
1670.2	306.52	1677.89	306.54	1680.45	306.51	1688.13	306.06	1693.25	305.8
1699.99	305.3	1708.36	304.81	1712.55	304.66	1718.83	304.5	1726.56	304.43
1735.58	304.46	1744.49	304.38	1752.17	304.25	1759.86	304.04	1766.99	303.98
1772.66	304.08	1780.35	304.33	1782.91	304.48	1790.59	305.11	1795.72	305.41
1800.5	305.52	1805.96	305.43	1808.53	305.2	1811.09	304.8	1816.21	304.2
1821.33	303.75	1823.53	303.62	1829.02	303.5	1834.14	303.53	1839.26	303.46
1844.47	303.75	1846.95	303.68	1849.51	302.64	1852.07	302.47	1854.94	302.68
1857.03	302.98	1859.76	303.01	1864.88	302.81	1867.5	302.42	1869.6	302.74
1872.57	302.92	1877.69	304.58	1880.25	305.14	1882.81	305.6	1887.93	305.86
1890.5	305.94	1898.18	305.88	1903.3	305.98	1908.43	306.18	1910.99	306.16
1917.76	306.24	1921.24	306.2	1925.13	306.38	1931.48	306.74	1936.6	306.94
1949.17	307	1951.97	307.2	1957.1	307.33	1959.69	307.28	1963.83	307.36
1972.2	307.61	1977.59	307.64	1984.77	307.83	1991.05	307.91	1998.08	308.16
2003.21	308.71	2005.71	309.03	2010.89	309.38	2016.01	309.22	2021.6	309.25
2023.7	309.34	2026.26	310.27	2028.82	311.83	2036.5	315.19	2039.05	316.03
2041.38	316.48	2043.49	317.28	2046.71	318.01	2049.27	318.07	2054.37	318.42
2056.93	318.84	2059.48	318.77	2064.59	318.78	2067.14	318.88	2069.69	319.14
2072.25	319.82	2074.8	319.32	2077.35	319.03	2085.02	318.99	2094.22	319.12
2100.34	319.25	2102.67	319.25	2105.44	319.41	2113.1	319.41	2118.21	319.69
2120.77	319.5	2128.43	319.62	2133.53	319.65	2143.75	319.79	2148.85	319.82
2156.52	319.94	2166.73	319.8	2169.28	319.94	2176.94	320.09	2184.6	319.9
2189.33	319.63	2192.27	319.57	2194.82	319.4	2199.93	319.62	2202.48	319.8
2210.14	320.04	2217.8	320.1	2222.91	320.05	2228.02	319.84	2228.86	319.94

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.05	548.2	.06	2021.6	.05

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
548.2	2021.6	1135	1021	1060	.1	.3

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 270

INPUT
Description:
Station Elevation Data num= 488

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	311.5	4.03	311.65	16.61	311.94	19.12	311.97	21.64	312.03
24.15	312.03	29.18	312.16	31.7	312.19	36.73	312.32	41.76	312.25
46.79	311.94	49.3	311.84	51.82	311.69	54.33	311.61	56.85	311.5
59.36	311.42	60.08	311.37	64.39	311.01	66.91	310.91	69.42	310.97
74.45	311.42	79.48	311.69	82	311.77	89.54	311.94	92.06	312.07
94.57	312.16	97.09	312.19	99.6	312.14	102.12	312.06	104.63	312.03
107.15	311.97	109.66	311.88	112.18	311.81	117.21	311.75	122.24	311.61
127.27	311.53	129.78	311.47	132.3	311.38	134.81	311.25	137.33	311.15
139.84	311.18	142.36	311.53	144.87	312.01	147.39	312.7	149.9	313.69
152.42	314.88	154.93	315.98	157.45	317.13	159.96	318.05	162.48	318.62
164.99	318.75	167.51	318.29	170.02	317.3	175.05	314.66	177.57	313.56
179.95	312.91	182.6	312.1	185.11	311.55	187.63	311.23	190.14	311.18
191.52	311.33	192.66	311.41	195.17	311.51	196.06	311.51	197.69	311.56
200.2	311.37	202.72	311.24	205.23	311.32	207.75	311.48	210.26	311.59
212.78	311.62	215.29	311.7	217.81	311.74	220.99	311.75	222.84	311.74
225.35	311.87	230.38	311.95	232.9	312.02	235.41	312.02	237.93	311.98
245.92	312.1	248.18	312.15	250.5	312.12	253.02	312.18	255.53	312.27
258.05	312.32	260.56	312.34	264.05	312.28	265.59	312.23	270.62	312.45
273.14	312.47	276	312.44	280.68	312.47	283.2	312.43	285.71	312.47
288.23	312.56	290.74	312.78	293.51	313.12	295.77	313.37	298.29	313.79
300.31	314.03	303.32	314.27	305.83	314.64	308.35	314.52	310.86	314.22
313.38	313.85	315.89	313.36	318.37	313.13	320.92	312.84	323.44	312.68
325.24	312.46	326.85	312.3	327.5	312.19	329.77	311.98	330.98	311.89
333.5	311.35	334.3	311.14	335.32	310.81	336.01	310.63	336.57	310.57
338.53	310.25	341.04	310.03	343	309.18	346.07	307.77	347.9	307.02
348.59	306.76	349.45	306.68	350.17	306.56	351.1	306.49	356.13	306.26
358.65	306.62	361.16	307.17	361.5	307.22	363.57	307.83	364.53	307.86
366.4	307.82	368.3	307.63	369.22	307.6	370.56	307.44	371.22	307.43
372.05	307.32	372.83	307.29	373.74	307.14	376.25	307.23	378.77	306.35
379.63	305.86	380.52	305.46	381.28	305.05	381.89	304.89	384.16	304.39
386.43	304.04	388.69	303.57	391.34	303.06	391.82	302.94	393.23	302.76
394.65	302.31	395.49	301.98	396.37	301.71	397.47	301.86	397.76	301.86
398.89	302.06	400.02	302.49	401.4	303.07	402.29	303.13	403.12	303.04
403.92	303.07	406.43	303.47	406.82	303.47	408.77	303.14	408.95	303.13
411.46	302.35	413.98	302.35	419.01	302.5	420.42	302.42	424.04	302.26
426.55	301.75	427.22	301.74	429.07	301.65	431.58	301.9	434.1	302.29
436.29	302.2	436.61	302.16	439.13	301.98	439.85	302.13	440.82	302.4
441.64	302.57	444.16	303.14	446.67	303.42	449.19	303.32	451.7	302.62
453.97	301.69	456.73	300.53	459.25	299.76	461.76	299.35	463.48	299.2
466.79	298.87	469.31	298.5	471.82	297.98	472.55	297.86	474.81	297.57
476.85	297.34	479.37	297.19	481.88	297.12	484.4	297.09	489.43	297.09
491.94	298.11	494.46	299.66	496.97	300.43	499.49	300.96	502.01	301.63
504.52	302.39	507.03	303.35	509.55	304.95	539.73	305.61	540.54	305.27
541.55	304.77	542.24	304.48	544.76	303.76	547.27	303.25	549.79	302.53
552.3	302.08	554.82	301.81	559.85	301.45	562.36	301.34	564.88	301.31
567.39	301.38	570	301.5	572.42	301.59	574.94	301.76	577.45	301.96
579.97	302.24	582.48	302.56	583.59	302.77	585	302.99	587.51	303.28
590.03	303.47	592.66	303.54	594.93	303.65	597.57	303.88	600.09	304.2
602.6	304.62	605.12	304.92	606.26	305.02	608.52	305.17	615.18	305.5
617.69	305.81	620.21	306.25	622.72	306.76	625.24	307.07	627.75	306.92
630.27	306.18	632.78	305.14	635.3	304.4	637.81	304.03	640.33	303.91
642.84	303.9	645.36	303.92	647.88	304.11	650.39	304.41	652.9	304.63
655.42	304.56	660.45	303.85	662.97	303.56	665.48	303.37	668	303.25
670.51	303.24	673.03	303.28	676.51	303.42	680.57	303.63	683.09	303.74
685.6	303.75	688.45	303.71	690.63	303.61	693.15	303.45	698.18	303.19
700.69	303.16	705.72	303.15	708.24	303.19	710.75	303.19	715.78	303.26

718.3	303.24	720.81	303.06	723.33	302.7	726.37	302.13	728	301.88
730.87	301.34	733.17	301.06	736.48	300.82	738.42	300.64	740.93	300.33
743.45	300.11	745.96	299.96	755.83	299.73	758.54	299.71	763.57	299.7
773.63	299.75	776.14	299.81	778.85	300.07	780.76	300.32	783.69	300.5
786.2	300.56	788.72	300.72	791.23	300.96	794.36	301.36	796.26	301.63
801.16	302.46	803.81	303.02	806.32	303.44	808.84	303.71	810.22	303.74
812.49	303.67	813.87	303.57	816.38	303.34	818.9	303.15	821.41	302.91
823.93	302.39	831.47	300.23	836.5	298.74	839.02	298.74	841.53	298.89
844.05	299.36	846.56	299.95	849.08	300.36	851.02	300.47	854.11	300.54
856.62	300.5	859.14	300.37	862.35	300.29	864.62	300.28	866.68	300.39
869.2	300.26	871.71	300.09	874.23	300.16	874.9	300.23	875.95	300.41
876.74	300.48	879.26	300.32	881.77	300.46	885.01	300.81	886.2	301.09
886.8	301.16	887.28	301.15	889.32	301.2	889.55	301.23	891.85	301.35
894.35	301.52	896.86	301.85	899.38	302.54	901.3	303.229	901.89	303.44
904.41	304.47	906.92	305.85	909.44	307.53	909.94	307.79	911.95	308.72
914.47	309.28	916.98	309.24	919.5	309.16	921.27	309.15	923.54	309.11
927.04	309.01	929.56	309.06	932.07	309.18	937.1	309.31	939.62	309.45
944.65	309.79	949.68	310.22	952.19	310.41	954.71	310.56	957.53	310.69
959.74	310.83	962.07	310.9	964.33	310.84	966.6	310.75	968.87	310.63
972.31	310.38	973.4	310.32	977.34	310.14	979.86	310.08	982.37	310.12
984.73	310.19	987	310.22	992.43	310.35	994.95	310.44	998.33	310.65
999.98	310.73	1002.49	310.95	1005.01	311.09	1012.55	311.78	1016.46	312.03
1020.1	312.23	1022.61	312.42	1025.13	312.67	1030.16	312.9	1032.67	312.96
1035.19	313	1036.86	313.09	1040.22	313.2	1045.25	313.34	1053.57	313.51
1055.01	313.52	1060.32	313.77	1062.83	313.92	1065.34	314.19	1067.85	314.57
1072.87	315.46	1075.38	315.88	1077.89	316.24	1080.4	316.5	1082.91	316.73
1085.42	316.89	1090.44	317.06	1092.95	317.1	1095.46	317.09	1097.97	317.06
1100.48	316.99	1102.99	316.89	1105.5	316.69	1108.01	316.44	1112.62	316.02
1115.54	315.8	1118.05	315.71	1120.56	315.73	1123.07	315.7	1125.58	315.37
1128.09	315.17	1130.6	315.16	1133.11	315.18	1135.62	315.34	1137.97	315.68
1140.28	316.07	1143.15	316.62	1144.89	316.9	1148.17	317.29	1150.68	317.64
1153.19	318.16	1161.02	319.73	1163.23	320.12	1165.74	320.67	1168.25	321.25
1170.76	321.86	1173.27	322.52	1175.78	323.04	1178.29	322.95	1180.8	322.81
1184.06	322.87	1190.84	322.88	1193.28	322.94	1195.86	322.97	1200.88	323.11
1203.39	323.08	1205.9	323.1	1211.72	323.25	1215.94	323.38	1218.45	323.41
1220.96	323.38	1223.47	323.46	1228.49	323.46	1231	323.44	1233.51	323.44
1243.55	323.47	1248.59	323.41	1250.89	323.4	1253.59	323.37	1256.1	323.37
1261.12	323.39	1263.63	323.53	1266.14	323.4	1268.65	323.19	1271.16	322.96
1273.94	322.73	1276.18	322.38	1278.68	322.19	1280.85	322.18	1283.7	322.07
1285.46	321.83	1286.21	321.69	1288.72	320.97	1291.23	320.78	1293.74	320.73
1294.68	320.68	1295.38	320.59	1296.98	320.49	1298.14	320.52	1298.76	320.49
1301.27	320.62	1303.9	320.66	1306.14	320.74				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.05	343	.06	901.3	.05

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

343	901.3	1000	951	815	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Permanent
0	278.7	314.64	F
1201.7	1306.14	333.8	F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 260

INPUT
Description:
Station Elevation Data num= 458

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	314.92	3.45	315.01	6.04	315.17	7.03	315.37	8.63	315.64
9.07	315.63	11.1	315.49	13.14	315.27	13.81	315.22	15.18	315.17

16.4	315.16	19.25	314.89	21.29	314.76	23.33	314.69	29.35	314.53
37.12	314.41	39.71	314.41	42.3	314.34	47.48	314.28	50.07	314.28
51.85	314.55	52.67	314.69	55.26	315.25	57.85	315.78	60.44	316.08
63.03	316.68	65.62	317.52	68.21	318.28	73.39	319.57	76.31	320.2
78.57	320.6	81.16	320.96	83.75	321.1	86.34	321.04	88.53	320.94
91.52	320.77	94.11	320.67	96.6	320.51	100.76	320.28	104.47	320.05
107.06	319.93	109.65	319.74	112.24	319.59	119.09	319.12	123.17	318.89
127.79	318.56	130.38	318.4	132.97	318.17	135.56	317.9	138.15	317.65
141.51	317.29	151.1	316.35	151.69	316.3	153.69	316.19	155.77	316.1
157.81	316.04	158.87	315.98	164.05	315.03	166.64	314.89	169.23	314.79
171.82	314.81	174.11	314.87	177.01	314.89	179.6	314.98	182.26	315
184.78	314.95	187.37	314.84	189.96	314.7	195.14	314.49	197.73	314.46
200.32	314.26	202.63	314.16	210.78	313.72	213.27	313.55	215.86	313.42
220.7	313.11	223.01	312.98	226.22	312.76	228.81	312.67	231.16	312.75
231.4	312.77	233.19	313.06	233.99	313.2	236.58	313.83	237.27	313.89
239.2	313.926	241.34	313.16	242.5	312.57	243.38	312.16	244.36	311.61
245.42	310.84	247.46	309.41	249.54	308	252.13	306.73	253.57	306.16
254.72	305.66	257.31	304.26	259.9	303.04	261.72	302.43	262.49	302.21
263.76	302.23	265.08	302.27	267.67	302.52	268.43	302.69	269.87	302.98
271.91	303.26	272.85	303.33	273.94	303.35	274.5	303.44	275.44	303.52
275.98	303.53	277.97	303.62	280.06	303.54	280.62	303.53	283.21	303.44
288.39	303.36	290.98	303.2	293.57	303.21	296.16	303.19	298.75	303.05
300.43	303.01	303.94	303	306.54	302.97	311.71	302.85	314.3	302.84
316.73	303.11	319.48	303.24	322.07	303.18	324.88	302.73	325.7	302.62
326.92	302.4	327.82	302.16	328.96	301.76	329.84	301.6	330.99	301.46
333.03	301.3	335.02	301.09	337.11	301.15	340.2	301.33	341.18	301.44
342.04	301.43	342.79	301.48	343.22	301.43	344.82	301.34	347.97	301.22
350.56	300.82	351.38	300.62	353.15	300.23	354.4	299.81	355.45	299.42
357.49	298.58	358.33	298.25	363.51	297.13	363.98	297.06	365.65	296.87
366.88	296.75	367.69	296.7	368.69	296.55	371.28	296.28	373.87	296.22
375.84	296.01	376.46	295.92	379.05	295.65	379.92	295.61	381.64	295.59
384.23	295.73	384.63	295.83	386.03	296.09	386.82	296.3	389.41	297.47
390.11	297.72	391.99	298.29	394.19	299.03	394.58	299.12	397.17	299.64
399.76	300.36	400.3	300.45	402.3	300.74	404.94	301.01	407.53	301.51
408.46	301.64	409.47	301.86	411.88	302	438.61	302	441.2	301.53
443.12	301.07	443.79	300.93	446.38	300.71	448.97	300.74	454.15	300.98
456.74	301.04	459.33	301.25	461.92	301.57	464.51	301.84	467.1	301.98
474.87	302.04	477.46	302.08	482.64	302.14	485.23	302.21	490.4	302.29
492.99	302.38	495.58	302.51	498.16	302.75	500.76	303.05	506.31	303.46
508.53	303.59	511.12	303.67	513.71	303.54	516.3	303.08	518.89	302.54
521.48	301.94	524.07	301.55	526.66	301.25	529.25	301.12	534.43	300.81
537.02	300.69	539.61	300.75	542.2	300.72	545.05	300.63	549.12	300.56
552.56	300.48	555.15	300.56	560.33	300.81	563.4	301.08	568.1	301.52
570.69	301.84	573.28	302.12	578.46	302.76	583.78	303.33	586.22	303.56
588.81	303.77	591.4	303.95	593.99	304.06	599.17	304.17	601.76	304.26
604.35	304.28	606.94	304.35	612.12	304.38	614.71	304.33	617.3	304.24
619.89	304.11	620.48	304.07	625.07	303.69	627.66	303.45	638.02	302.62
640.86	302.36	643.2	302.18	650.97	301.44	653.56	301.27	658.74	301.05
663.92	300.88	666.51	300.89	669.4	300.84	671.69	300.74	674.28	300.67
679.46	300.44	682.05	300.42	687.22	300.48	689.81	300.41	692.4	300.29
694.99	300.09	697.58	299.85	700.17	299.56	702.02	299.38	702.76	299.32
705.35	299.2	720.89	300.88	731.25	299.16	739.02	298.81	746.79	300.31
759.14	299.26	759.74	299.12	761.14	299.45	762.33	299.69	763.18	299.67
764.4	299.58	765.22	299.56	766.32	299.63	767.51	299.74	770.1	300.46
771.33	300.71	772.69	301.01	775.28	301.97	775.86	302.06	777.44	302.25
777.87	302.24	780.46	302.11	783.05	302.11	788.23	302.27	790.82	302.42
793.74	302.83	795.78	303.03	797.82	303.19	798.59	303.24	801.18	303.44
802	303.488	803.77	303.62	805.97	303.65	806.36	303.67	808	303.83
808.96	303.94	811.55	304.35	814.14	304.81	816.73	305.39	819.32	305.9
821.91	306.32	824.3	306.53	827.09	306.61	830.42	306.55	832.27	306.56
834.86	306.46	836.53	306.37	840.04	306.21	842.63	306.12	845.22	306.16
847.81	306.22	850.4	306.33	852.99	306.53	855.58	306.84	858.17	307.24
860.76	307.69	863.35	308.2	865.94	308.79	868.54	309.32	871.13	309.6
873.2	309.9	875.24	310.16	879.32	310.65	881.49	310.89	885.43	310.74
886.67	310.72	891.54	310.57	893.58	310.55	895.62	310.5	897.65	310.42
899.62	310.32	902.21	310.25	903.77	310.33	904.8	310.36	905.8	310.5

906.61	310.53	907.39	310.61	907.84	310.69	909.5	310.79	910.16	310.86
911.92	311.12	912.57	311.17	915.16	311.27	915.99	311.19	917.27	311.25
918.03	311.25	919.05	311.34	920.34	311.5	922.93	311.75	928.22	312.1
930.71	312.4	932.29	312.53	933.3	312.59	935.89	312.72	938.6	312.79
940.44	312.85	943.66	312.86	944.52	312.87	946.25	312.93	948.84	313.06
952.67	313.18	958.78	313.34	961.79	313.39	964.38	313.47	969.56	313.52
972.15	313.5	974.74	313.58	977.33	313.57	979.15	313.62	982.51	313.69
985.86	313.72	990.28	313.79	995.47	314.25	998.06	314.32	1000.65	314.49
1001.57	314.56	1004.95	314.87	1008.42	315.14	1011.01	315.24	1013.6	315.21
1016.19	315.27	1021.37	315.29	1023.96	315.31	1026.02	315.63	1026.55	315.68
1029.14	315.8	1030.09	316.09	1031.04	316.44	1032.13	316.8	1034.17	317.55
1034.59	317.75	1036.2	318.64	1036.91	319.01	1039.5	319.94	1042.09	321.26
1044.68	323.16	1045.26	323.43	1046.39	324.01	1049.86	325.43	1050.47	325.56
1052.46	325.9	1056.58	326.15	1057.64	326.2	1060.65	326.2	1065.41	326.3
1070.59	326.34	1073.18	326.42	1074.92	326.44	1081.03	326.47	1083.54	326.46
1086.13	326.48	1088.72	326.55	1091.31	326.56	1096.49	326.67	1099.08	326.68
1101.4	326.66	1104.26	326.67	1106.85	326.65	1109.44	326.65	1111.59	326.63
1117.7	326.62	1119.74	326.59	1122.4	326.53	1124.99	326.5	1129.93	326.48
1135.35	326.4	1137.94	326.38	1140.12	326.28	1143.12	326.13	1146.23	325.93
1148.3	325.84	1153.48	325.68	1158.45	325.35	1166.14	324.68	1169.02	324.48
1174.2	323.92	1174.75	323.89	1179.39	323.43	1181.98	323.25	1184.57	323.42
1184.94	323.42	1187.16	323.31	1189.75	323.36	1194.93	323.44	1197.17	323.49
1200.11	323.49	1202.7	323.53	1205.29	323.53	1207.88	323.5	1209.39	323.46
1211.43	323.38	1213.46	323.28	1216.09	323.2				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.05	239.2	.06	802	.05

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
239.2	802	1050	1031	1000	.1	.3

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 250

INPUT
Description:
Station Elevation Data num= 487

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	318.928	4.622	319.038	12.594	319.122	15.7	319.219	18.322	319.25
20.943	319.338	23.564	319.328	27.682	319.281	31.428	319.298	39.292	319.281
44.535	319.187	47.157	319.187	50.459	319.114	52.399	319.125	55.021	319.054
62.416	318.932	65.506	318.795	70.749	318.707	73.37	318.703	75.992	318.391
78.613	317.554	81.234	316.809	83.856	316.561	85.869	316.428	89.098	316.266
91.72	315.968	94.341	315.712	99.584	315.049	102.274	314.726	106.26	314.353
110.069	314.028	112.691	313.926	115.312	313.884	117.933	313.746	120.555	313.65
125.798	313.318	130.175	313.011	133.662	312.813	144.147	312.28	146.118	312.16
152.011	311.755	154.633	311.639	159.875	311.35	166.047	311.046	170.361	310.792
172.982	310.674	175.603	310.607	183.468	310.352	188.71	310.219	193.953	310.062
199.196	309.855	204.438	309.773	207.06	309.75	209.681	309.688	212.303	309.656
214.924	309.594	222.788	309.485	225.834	309.401	228.031	309.372	230.652	309.268
233.273	309.196	239.784	308.97	243.77	308.875	249.002	308.688	252.117	308.545
256.866	308.38	262.108	308.25	267.351	308.042	269.973	307.991	272.594	308.021
277.055	307.809	280.458	307.777	283.628	307.611	285.701	307.475	287.614	307.426
293.565	307.157	296.186	307.075	303.557	306.759	305.55	306.696	309.293	306.625
311.914	306.531	317.157	306.412	321.493	306.266	325.021	306.077	330.445	305.822
335.513	305.529	339.41	305.056	343.388	304.625	346.013	304.263	349.353	303.693
351.262	303.297	353.887	302.877	359.794	302.391	363.273	302.183	367.011	301.849
367.998	301.875	369.239	302.008	372.261	302.203	374.886	302.224	376.203	302.187
380.135	302.17	385.148	302.097	388.01	301.744	389.125	301.636	395.884	301.094
398.509	301.045	403.046	300.767	405.034	300.679	407.026	300.502	408.999	300.22
411.029	300.153	413.031	300.017	416.842	299.881	419.037	299.753	423.041	299.565
427.045	299.351	433	299.093	442.986	298.66	450.829	298.328	453.443	298.379

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 455.072 298.488 459.076 298.625 461.678 298.649  463.08 298.758 463.901 298.687
 468.942 296.956 471.744 296.116 474.358 295.412 476.972  295.75 479.095 296.279
 479.587 296.345 481.097 296.243 482.201 296.233 486.033 295.852  487.43 295.658
 489.105 295.329 491.107 295.062 495.273 294.729 497.887 294.724 503.137 294.783
 505.122 295.088 505.729 295.272 508.343 296.433 509.127 296.681 511.692 297.173
 513.572 297.348 516.186  297.87 517.136 298.003   518.8 298.328 521.414 298.563
 523.143 298.407 525.145 298.181 526.642 298.086 529.256 298.099 534.484 298.083
 539.713 298.088 543.166 298.045 545.168 297.986  547.17 297.994 550.169 297.953
 555.397 297.948 561.186 298.101  563.24 298.188 565.854 298.239 568.468 298.253
 571.198 298.237 573.696 298.195 575.202 298.335 577.204 298.444 581.538 298.578
 584.152 298.496 587.216 298.792 589.686 299.081  591.22 299.309 591.995 299.358
 597.241 299.156  599.23 299.099 602.451 299.272 605.065 299.439 607.679 299.382
 609.241 299.244 612.908  298.86 615.248 298.771 618.136 298.726  620.75 298.641
 622.906 298.445 625.259 298.278 625.978 298.188 628.592 298.041  636.43  298.08
  639.28  298.03  643.28  298.28  646.89  298.37  649.51  298.16  652.12  298.06
   657.3  297.94  659.96  298.02   663.3  298.24  665.19  298.34   667.8  298.58
  671.31  298.71  675.32  298.89  678.26  298.85   686.1  298.97  688.72   298.9
  691.33  298.91  693.95  298.92  696.56  298.98  720.09  298.98 721.369  298.98
 730.543 298.924 735.771 298.775 743.613 298.594 747.398 298.566 751.403 298.467
 753.405 298.359 756.684 298.062 759.298 297.771 761.414 297.454 764.526 297.108
 767.421 296.918  775.43 296.779 779.435 296.725 782.825 296.724 785.442 296.906
 788.053 297.174 790.667 297.385 794.005 297.451 798.509  297.49  801.46 297.458
 805.464 297.319 809.469 297.046  811.58 296.941 814.194 296.898 822.036 296.682
 827.265 296.816 829.879 297.049 832.493 297.312 835.107 297.782 837.721 298.441
 839.503 298.723 842.949 299.318 845.563  299.62 848.178 299.615 850.792 299.474
 853.406 299.259  856.02     299 858.634 298.962  863.53 299.131 866.476 298.998
 871.705 298.622 876.933 298.563 879.547 298.438 881.551 297.634 883.553 296.565
 884.775 295.994 885.556 295.797 887.558 295.464 890.003 295.188 893.565  295.29
 895.231 295.307 897.846 295.236  900.46 295.278 901.574 295.379 903.576 295.626
 905.219 295.733 910.916 295.938 911.585  296.03 913.587 296.412 916.144 297.125
 918.758 297.651 921.597 297.904 923.987 297.987 925.601 298.006 927.603  297.97
 929.215 297.874 931.829 297.785 937.615 297.634   944.9  297.38 947.514 297.413
 949.628 297.641 952.742 297.906 955.356 297.938  957.97 298.115 960.584 298.247
 963.198 298.316 968.427 298.267 973.659 298.438 978.883 298.519 984.111 298.868
 986.725 298.921 991.954 298.969 994.568  299.08 997.182 299.1331005.024 299.365
1007.695 299.5971010.252 299.7241012.866 299.883  1013.9 300.0011015.481 300.215
1018.095 300.274 1021.71 300.2741028.551 300.3881031.165 300.2551033.779 300.195
1036.393 300.2711039.007 300.3071041.622 300.453 1046.85 300.6631052.078  300.74
1054.692 300.629 1059.92 300.2791062.534 299.9971067.763 299.3441070.377 298.971
1075.605 298.0761078.219 297.9791080.833 298.1171083.781 298.4521086.062 298.629
1088.676 298.608 1091.29 298.5551093.904 297.9251096.518 297.0151099.132   296.5
1101.746 296.4381106.974   296.51112.203 296.7131114.817 296.7811120.045 297.118
1122.659 297.3541125.273 297.5351127.887 297.7461130.501 297.9061133.115  298.11
1137.843 298.3551140.958 298.6111146.186 298.9011151.414 299.0491153.861 299.102
1159.868 298.9721161.871 298.9691167.099 299.0291169.713  299.011172.327 299.028
1175.886 298.9851177.555  298.991181.893 299.0461183.895 299.104  1187.9 299.273
1190.626 299.415 1193.24 299.5211198.468 299.7951203.696 300.0351206.311 300.082
1213.929 300.0511219.381 299.9721221.995 299.8711224.609 299.7081227.223 299.514
1229.838  299.381232.452 299.211 1237.68 299.0891242.908 299.1071245.522 299.174
1248.136 299.2791248.453 299.164 1249.97 298.992 1250.75 298.5391251.973 297.689
1253.365 296.5331253.975 296.0981255.979   295.51257.979 295.5571259.982 295.662
1263.821 295.6121264.527 295.6871266.435 295.9931269.049 296.1781271.663 295.745
1273.998 295.8681276.891 296.1081279.506 296.0551280.005 296.0981282.007 296.124
1284.734 296.3071286.011 296.4831287.348 296.5831289.962 296.8521292.576 296.984
 1295.19 296.7531296.023 296.936 1297.39 297.1311300.027 297.6071301.154 297.706
 1302.03 297.7051303.033  297.861308.261 297.7471310.039 297.7511313.489 297.705
1316.103 297.6151318.717 297.2081322.052 297.1421324.412 297.1561326.057 297.135
1329.174 297.0451332.064 297.1421334.066  297.331337.016 297.727 1339.63 297.799
1340.073 297.8631342.244 298.3551344.077 298.894 1346.08 299.5591347.472 300.086
1350.087  301.221352.701 302.4291356.091 304.0331357.929 304.6961360.096  305.23
1360.543 305.3061363.157 306.0091365.771 306.3281367.187 306.2931368.385 306.316
1370.999 306.6951373.614 306.8681376.228 306.5691378.116 306.2521380.119 305.969
1381.456 305.6671384.123 305.3451386.684 305.584 1390.13  305.861394.134 306.118
1397.141 306.2351399.755 306.4451402.144 306.5911404.983 306.8151407.597 307.184
1410.211 307.4421412.825 307.573 1416.16 307.7021418.053  307.861420.667 308.133
1423.282 308.4381425.896 308.7741431.124 309.5081432.178 309.8391433.738 310.512
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 1434.18 310.8381436.182 312.1361438.185 312.658 1441.58 313.1771442.189 313.318
1444.191 313.9691446.809 315.5381449.423 316.7531450.198 317.1471452.037 318.278
1454.203 319.7781456.205 320.9171458.207 321.9761459.258 322.806 1460.21 323.423
1461.291 324.4121462.212 325.5121462.493 325.6711464.214 328.0971465.107 329.251
1466.216 330.2341466.786 330.3391467.721  330.86 1472.95  330.981478.178 330.999
1480.792 331.0631484.237 330.9691486.956 330.9381491.248     3311496.477 331.118
1499.091 331.049 1504.26 331.0311506.262 331.0041509.547     3311512.161 330.969
1514.776 330.969 1517.39 330.938

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0     .05  696.56     .06  1013.9     .05

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           433  1013.9              700     701     615              .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev  Permanent
    1222 1517.39     300       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 245

INPUT
Description:
Station Elevation Data    num=     499
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0     332    2.84  332.19    5.61  331.73    8.38  331.47   11.15  331.35
   13.91  331.34   16.68  331.19   22.22  331.11   27.76  330.97   36.57  330.92
   47.13  330.62   52.67  330.54   55.44  330.59   58.21  330.86   60.98  331.66
   63.74  332.05   66.51  331.88   72.05   331.1   74.82  331.13   78.38  331.34
   80.35  331.62   83.47  331.43   85.89  330.53   88.66  328.99   91.43  328.22
    94.2  326.76    96.6  325.29   98.48  324.29   102.5   322.5  105.27  322.02
  110.81  321.97  122.87  321.76  138.49  321.39  146.79  321.17  157.87  320.93
  160.64  320.84  180.01   320.7   182.9  320.72  193.86  320.68  204.93  320.51
  218.77  320.18  224.18  320.09  232.61  319.89  246.45   319.6  263.06  319.16
  267.33   319.1  274.14  318.93  279.67  319.02  282.44  318.94  287.98  319.34
  290.75  319.66  296.28  319.88  299.05  320.09  304.59  320.63  310.13  320.93
  315.66  321.01  317.04  320.71  323.97  318.15  327.36  317.19   329.5  317.06
  332.27  317.08  357.38     317  368.26  316.94   382.1   316.9  386.89  316.81
  393.17  316.75  398.65  316.84  407.02   316.8  415.32  316.63  427.63  316.42
  431.93  316.38  458.69  315.94  462.56  315.75  467.92  315.56  470.69  315.66
  476.22  315.73  484.53  315.91   487.3  315.91  491.66  316.05  496.21  316.07
  509.44  316.44  514.98  316.44  520.52  316.71  523.29  316.79  526.05  316.64
   528.1  316.82  537.13  316.66  539.36  316.75  542.66   316.7  556.51  316.75
  567.58  316.72  570.35  316.78  578.65  316.84  581.42  316.78  586.96  316.96
  590.62  316.81  591.89  316.86  595.26   317.4  602.26   317.7  603.57  317.54
  608.08  316.74  617.41  316.59  622.95  316.31  628.48  316.16  629.41  315.13
  631.37  310.13  633.16  306.96  634.02  305.95  636.79  305.58  639.56  304.94
  645.09  304.22  647.86  304.06   653.4  304.17   655.7 304.089  659.43  303.85
   661.7  303.59  666.93  303.22  670.01  302.56  672.56  302.12  676.31  301.19
  681.08  299.79  686.62  298.64   693.2  297.84   695.4  297.65  698.83  297.15
  701.22  296.89  704.46  296.87  706.33  296.77  711.53  296.66  717.07  296.31
  719.84  296.21  722.61  296.46  725.09  296.35  728.84  296.63  730.91  296.98
  736.45  296.78   740.1   296.9  747.61  296.93  749.48     297  751.36  296.92
  755.11  296.59  758.59  296.54  761.36  296.61  766.37  296.48  769.67  296.55
  771.99   296.2  773.87  295.68  775.75  295.39  777.97  295.44  780.74  295.95
  783.51  296.63  785.13  296.61  788.88  296.38  791.81  296.51  794.51  296.75
  797.35  297.11  800.12  297.15  802.01  296.98  803.89  297.03  805.99  297.36
  808.42  297.47  811.82  297.32   818.9  296.76  825.03  296.92   827.8  296.77
  830.57  295.86   835.1  295.52  843.29  295.61  847.04  295.56  849.95  295.74
  858.25  296.46  863.92  297.64  866.56  298.01  871.43   298.2   880.4  298.09
  882.68  298.15  885.94  297.99   888.7   297.4  891.47  296.65  894.24  294.91
  897.01  292.78  899.78  291.77  901.44  291.49  904.95   291.1  908.95  291.11
```

910.85	291.03	919.16	291.38	924.69	291.73	927.46	292.07	930.23	292.55
933	292.91	938.53	293.22	941.3	293.57	944.6	293.75	949.61	294.29
952.1	294.81	955.14	295.33	960.68	296.05	966.22	296.28	968.99	296.5
971.75	296.56	980.06	296.47	982.83	296.5	985.87	296.35	991.13	296.54
993.9	296.58	1002.21	296.24	1007.74	295.79	1012.13	296.12	1015.89	296.33
1021.37	296.38	1027.19	296.13	1032.66	296.1	1035.43	296.16	1040.28	295.83
1043.73	295.98	1049.27	295.7	1054.8	295.28	1060.34	295.51	1065.88	295.65
1068.65	295.89	1074.18	296.73	1076.95	296.71	1085.26	296.34	1088.02	296.28
1101.87	296.43	1107.4	296.07	1110.17	296	1115.32	296.16	1118.48	296.02
1121.24	296.25	1124.01	296.36	1126.78	296.28	1129.55	296.33	1137.85	296.69
1143.39	297.12	1146.16	297.68	1160.35	297.39	1165.54	297.2	1167.85	297.25
1173.84	297.03	1177.23	297.12	1184.92	297.09	1190.45	297.31	1195.99	297.19
1201.53	296.88	1209.12	296.24	1212.6	296.01	1220.9	295.67	1226.44	295.56
1234.75	294.97	1243.05	294.53	1248.59	294.5	1254.21	294.22	1259.66	294.29
1261.65	294.84	1263.53	295.06	1267.96	295.29	1271.03	295.35	1273.5	295.72
1276.66	295.67	1279.04	295.4	1281.81	295.43	1287.7	295.836	1292.88	295.97
1295.42	295.86	1298.42	295.89	1301.18	296.15	1304.8	295.61	1306.72	295.44
1309.49	295.37	1312.26	295.62	1314.18	296.05	1317.79	296.63	1320.56	297.38
1325.44	297.46	1328.87	297.78	1331.64	297.63	1337.17	297.01	1339.94	297.08
1342.71	297.44	1346.08	297.33	1348.25	297.45	1351.01	298.15	1356.55	300.77
1359.32	301.34	1362.09	301.39	1364.86	301.25	1368.59	300.94	1373.16	300.46
1381.47	299.84	1387	299.65	1392.54	299.72	1398.08	299.53	1400.84	299.5
1405.55	299.76	1409.15	299.66	1411.92	299.41	1414.69	298.92	1417.45	298.11
1422.99	296.16	1424.87	296.01	1426.75	296.09	1428.53	296.39	1434.06	298.55
1436.83	299.2	1440.47	299.75	1445.14	300.21	1451.14	300.54	1458.64	300.66
1462.4	300.62	1472.82	300.69	1481.13	300.56	1486.66	300.53	1492.2	300.65
1500.5	300.61	1506.04	300.75	1509.3	300.95	1516.8	301.57	1524.31	302.39
1528.06	302.74	1530.96	303.09	1533.72	303.57	1539.26	304.83	1542.03	305.23
1545.25	305.49	1554.32	305.78	1561.41	306.33	1564.18	306.59	1569.71	307.23
1575.25	308.43	1578.02	308.92	1583.55	309.7	1586.22	309.89	1589.09	309.93
1594.63	309.6	1597.4	309.23	1605.7	307.12	1614.36	305.23	1619.54	304.41
1631.24	303.35	1635	303.13	1641.69	302.83	1644.46	302.81	1652.76	302.55
1659.38	302.24	1672.14	301.39	1674.91	301.18	1680.45	300.97	1688.75	300.85
1704.41	300.81	1710.9	300.76	1716.43	300.91	1724.74	301.29	1730.28	301.62
1733.04	301.67	1741.35	302.46	1746.89	302.82	1754.8	303.2	1760.69	303.44
1764.45	303.76	1769.03	304.23	1771.8	304.78	1777.34	306.9	1779.45	307.45
1782.87	307.91	1785.64	307.95	1789.72	308.37	1791.18	308.62	1794.46	309.59
1798.21	310.87	1801.37	311.79	1805.72	312.31	1809.47	312.62	1816.98	312.88
1824.48	312.94	1832.7	312.77	1835.47	313.06	1841.01	314.5	1846.99	315.71
1853.75	317.19	1858.25	318.37	1860.39	319.21	1863.16	320.56	1865.4	322.04
1871.22	326.19	1873.26	327.09	1874.23	327.69	1877.01	329.75	1879.77	331.55
1882.64	333.1	1885.3	334.05	1888.07	334.39	1893.61	334.27	1895.77	334.34
1901.91	334.27	1907.03	334.3	1912.99	334.09	1918.52	334.13	1924.06	333.97
1929.6	333.97	1937.9	333.91	1955.81	333.89	1960.05	333.76	1964.35	333.72
1968.35	333.47	1973.89	332.63	1979.43	331.73	1985.82	331.12	1987.73	331
1993.45	330.46	1996.04	330.33	2004.34	330.65	2009.88	330.75	2018.18	330.91
2025.22	330.99	2034.79	331	2040.33	330.93	2045.87	330.91	2048.63	330.8
2051.66	330.78	2057.11	330.57	2059.71	330.69	2066.49	331.27	2070.78	331.72
2079.09	332.37	2087.39	333.11	2092.76	333.34	2098.23	333.4	2101.23	333.5
2109.54	333.38	2115.27	333.52	2124.65	333.5	2127.33	333.59	2135.91	333.6
2139.99	333.73	2145.29	333.81	2148.29	334.13	2151.06	334	2156.6	334.06
2170.44	334.65	2173.21	335.34	2175.98	337.02	2178.75	338.58	2181.51	339.28
2192.59	339.58	2200.89	339.16	2206.43	338.83	2211.97	338.69	2217.5	338.73
2220.46	338.62	2228.58	338.57	2234.11	338.33	2239.09	338.3	2245.19	338
2250.35	337.65	2253.49	337.36	2257.85	336.81	2261.8	336.21	2267.03	335.65
2270.1	335.38	2272.87	334.97	2281.17	335.14	2283.94	335.09	2286.71	335.16
2290.31	335.15	2306.09	334.97	2308.86	334.88	2314.39	334.84	2319.93	334.69
2325.47	334.66	2331	334.5	2333.77	334.48	2342.08	334.25	2347.61	334.06
2350.38	334.05	2355.92	333.9	2361.04	333.71	2364.22	333.68	2369.76	333.72
2375.3	333.94	2383.45	334.18	2389.14	334.31	2400.21	334.27	2414.05	333.97
2416.82	334.07	2422.36	334.84	2424.83	335.33	2427.9	335.55	2432.33	335.68
2434.21	335.89	2441.74	336.53	2444.51	336.81	2450.04	337.19	2455.58	337.39
2462.35	337.43	2469.85	337.65	2474.96	337.45	2498.59	337.08		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val

```
       0    .045   655.7      .1  1287.7     .11

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         655.7  1287.7            140.2   147.4     160             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0     642  313.25       F
  1371.7 2498.59  313.25       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 244

INPUT
Description: MAST BLVD BRIDGE  (NORMAL BRIDGE ROUTINE)-Stop revising
Station Elevation Data    num=      35
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   312.5   104.5   308.1   201.3   303.9   207.8   307.1   216.5   307.1
   237.5   311.6   319.8   312.8   335.5   307.7   367.8   307.6   459.7   307.8
   508.9   294.9   585.6   293.1   617.1   292.2   638.9   293.1   772.1   293.3
   888.2   294.6   935.1   293.5   960.1     296  1085.7   298.3  1166.8   300.4
  1260.7   300.5    1360   300.3  1440.6   300.4  1502.7   300.3  1537.7   307.6
  1602.1   309.9  1641.1   327.9  1787.9   328.1    1896   326.7  1953.2   313.1
  2022.1   315.9    2161   318.3  2292.6   325.1  2385.9   332.9  2498.4   333.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1   459.7    .065   960.1    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         459.7   960.1            104.8   124.6     145             .3       .5
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0   459.7   311.5       F
   960.1  2498.4   311.5       F

BRIDGE


RIVER: San Diego River
REACH: Reach 1            RS: 243

INPUT
Description:
Distance from Upstream XS =      35
Deck/Roadway Width        =      55
Weir Coefficient          =     2.6
Upstream  Deck/Roadway Coordinates
    num=       2
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
   459.7     315   311.5   960.1     315   311.5

Upstream Bridge Cross Section Data
Station Elevation Data    num=      35
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   312.5   104.5   308.1   201.3   303.9   207.8   307.1   216.5   307.1
   237.5   311.6   319.8   312.8   335.5   307.7   367.8   307.6   459.7   307.8
   508.9   294.9   585.6   293.1   617.1   292.2   638.9   293.1   772.1   293.3
   888.2   294.6   935.1   293.5   960.1     296  1085.7   298.3  1166.8   300.4
  1260.7   300.5    1360   300.3  1440.6   300.4  1502.7   300.3  1537.7   307.6
  1602.1   309.9  1641.1   327.9  1787.9   328.1    1896   326.7  1953.2   313.1
  2022.1   315.9    2161   318.3  2292.6   325.1  2385.9   332.9  2498.4   333.7

Manning's n Values        num=       3
```

```
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1   459.7    .065   960.1    .045

Bank Sta: Left   Right    Coeff Contr.   Expan.
         459.7   960.1             .3       .5
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0   459.7   311.5       F
   960.1  2498.4   311.5       F

Downstream  Deck/Roadway Coordinates
    num=       2
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     401     315   311.5   900.5     315   311.5

Downstream Bridge Cross Section Data
Station Elevation Data    num=      35
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   316.8     112     313   208.4   309.6   275.7   312.9     401   311.6
   456.4   294.1     515   292.1   549.1   291.7   573.4     293   615.3   292.5
   683.3     294     754   293.8   833.8   293.1   848.7   292.9   881.7   298.9
   900.5   309.6   933.7   309.6   993.7   311.6  1109.5   310.6  1250.9   313.9
  1354.6   317.3  1496.3   321.3  1588.4   321.9  1606.6   328.4    1621   329.1
  1637.1   321.6    1734   320.7  1900.1   316.2  2003.5   313.7  2112.3   317.6
  2154.7   320.9  2210.3     328  2252.9   327.8  2328.2   325.6  2378.2   322.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1     401    .065   900.5    .045

Bank Sta: Left   Right    Coeff Contr.   Expan.
           401   900.5             .3       .5
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0     401  313.25       F
   900.5  2378.2  313.25       F

Upstream Embankment side slope              =       0 horiz. to 1.0 vertical
Downstream Embankment side slope            =       0 horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .98
Elevation at which weir flow begins         =     315
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  5

Pier Data
Pier Station     Upstream=   543.2    Downstream=   484.3
Upstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5
Downstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5

Pier Data
Pier Station     Upstream=   626.6    Downstream=   567.7
Upstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5
Downstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5

Pier Data
```

```
Pier Station     Upstream=   709.9    Downstream=     651
Upstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5
Downstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5

Pier Data
Pier Station     Upstream=   793.2    Downstream=   734.3
Upstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5
Downstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5

Pier Data
Pier Station     Upstream=   876.6    Downstream=   817.7
Upstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5
Downstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Do not add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 242

INPUT
Description:
Station Elevation Data    num=      35
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   316.8     112     313   208.4   309.6   275.7   312.9     401   311.6
   456.4   294.1     515   292.1   549.1   291.7   573.4     293   615.3   292.5
   683.3     294     754   293.8   833.8   293.1   848.7   292.9   881.7   298.9
   900.5   309.6   933.7   309.6   993.7   311.6  1109.5   310.6  1250.9   313.9
  1354.6   317.3  1496.3   321.3  1588.4   321.9  1606.6   328.4    1621   329.1
  1637.1   321.6    1734   320.7  1900.1   316.2  2003.5   313.7  2112.3   317.6
  2154.7   320.9  2210.3     328  2252.9   327.8  2328.2   325.6  2378.2   322.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1     401    .065   900.5    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           401   900.5              165     224     270              .3       .5
```

```
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0     401  313.25       F
   900.5  2378.2  313.25       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 239

INPUT
Description:
Station Elevation Data    num=      34
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0     314    87.1   311.2   151.3   308.5   183.2   306.4   215.4   304.6
   241.3     303   280.1   296.8   314.7   293.9     339   292.9   379.6   294.4
   403.2   292.6   425.4   293.1   463.7   294.4   483.9   291.8   506.5   290.7
   551.3   292.7   620.7   293.2   628.9   295.7     642   299.6   662.4   296.3
   712.8   296.7   745.9   295.3     808   296.4   955.9   298.3  1077.2   298.6
  1096.1   296.4  1143.4   295.9  1251.8   296.4  1289.9   298.8  1360.3   299.6
  1377.5   302.7  1402.9   313.3  1426.5   325.9  1436.2   326.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1   241.3    .065     642    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         241.3     642             385     413     515             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0   201.8  313.25       F
   906.2  1436.2  313.25       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 230

INPUT
Description:
Station Elevation Data    num=      39
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0     312    65.6   310.4   137.8   306.5   207.5   304.8   265.4   303.7
   291.2   300.1   331.4   299.8   351.6   295.4     389   294.6   407.4   291.3
   454.2   291.8   462.3   290.4   477.6   289.8   534.6   290.2   554.3   293.8
   641.2   293.6   754.1   293.5   854.5   294.1     957   293.2   982.8   292.3
   997.6   294.6  1024.6   297.5  1044.3   298.8  1136.2   298.2  1228.8     298
  1299.8     296  1370.7     296    1433   296.9  1442.5   299.6  1459.2   298.3
  1470.3   296.6  1517.5     295  1523.6   297.2  1550.3   301.8  1578.7   304.4
    1682   307.7  1783.3   310.7  1933.2   315.6  2031.8   320.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1   331.4    .065   854.5    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         331.4   854.5             460     487     430             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0    61.8  313.25       F
  1233.8  2031.8  313.25       F

CROSS SECTION
```

RIVER: San Diego River
REACH: Reach 1 RS: 220

INPUT
Description:
Station Elevation Data num= 43

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	324	93.8	319.7	217.1	314.8	297.3	308	374.5	304.6
393.2	301.5	420.3	299.8	439.7	295.9	465.5	296.2	484.2	299.8
534.9	296.3	649.9	293.8	675.5	292.1	713.9	292.3	756.2	290
798.1	288.8	821.5	289.8	922.4	289.9	957.7	292.4	1018	292.8
1064.1	291.5	1181.5	291.6	1265.8	291.3	1290.2	294.1	1314.9	297
1364.7	297.1	1483.6	297	1523.5	296	1602.5	296	1626.8	297.7
1646.9	298.6	1670.2	296.6	1761.1	297.9	1817.3	299.2	1831.2	296.4
1867.1	295.6	1937.3	298.2	2007.5	300.4	2031.6	304.8	2049.2	303.8
2077.8	303.4	2093.8	308.1	2142.9	309.4				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.1	484.2	.065	957.7	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
484.2	957.7	0	0	0 .1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Permanent
0	56	313.25	F
1681.8	2142.9	313.25	F

SUMMARY OF MANNING'S N VALUES

River:San Diego River

Reach	River Sta.	n1	n2	n3	n4
Reach 1	355	.06	.05	.06	
Reach 1	345	.06	.05	.06	
Reach 1	340	.06	.05	.06	
Reach 1	330	.06	.035	.045	
Reach 1	320	.06	.035	.03	.045
Reach 1	315	.06	.035	.045	
Reach 1	310	.06	.035	.045	
Reach 1	300	.05	.06	.05	
Reach 1	290	.05	.06	.05	
Reach 1	285	.05	.06	.05	
Reach 1	280	.05	.06	.05	
Reach 1	270	.05	.06	.05	
Reach 1	260	.05	.06	.05	
Reach 1	250	.05	.06	.05	
Reach 1	245	.045	.1	.11	
Reach 1	244	.1	.065	.045	
Reach 1	243	Bridge			
Reach 1	242	.1	.065	.045	
Reach 1	239	.1	.065	.045	
Reach 1	230	.1	.065	.045	
Reach 1	220	.1	.065	.045	

SUMMARY OF REACH LENGTHS

River: San Diego River

Reach	River Sta.	Left	Channel	Right
Reach 1	355	360	310	350
Reach 1	345	400	335	125
Reach 1	340	575	454	575
Reach 1	330	620	588	620
Reach 1	320	260	431	405
Reach 1	315	380	280	255
Reach 1	310	610	610	640
Reach 1	300	790	654	605
Reach 1	290	695	653	645
Reach 1	285	640	688	660
Reach 1	280	1135	1021	1060
Reach 1	270	1000	951	815
Reach 1	260	1050	1031	1000
Reach 1	250	700	701	615
Reach 1	245	140.2	147.4	160
Reach 1	244	104.8	124.6	145
Reach 1	243	Bridge		
Reach 1	242	165	224	270
Reach 1	239	385	413	515
Reach 1	230	460	487	430
Reach 1	220	0	0	0

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS
River: San Diego River

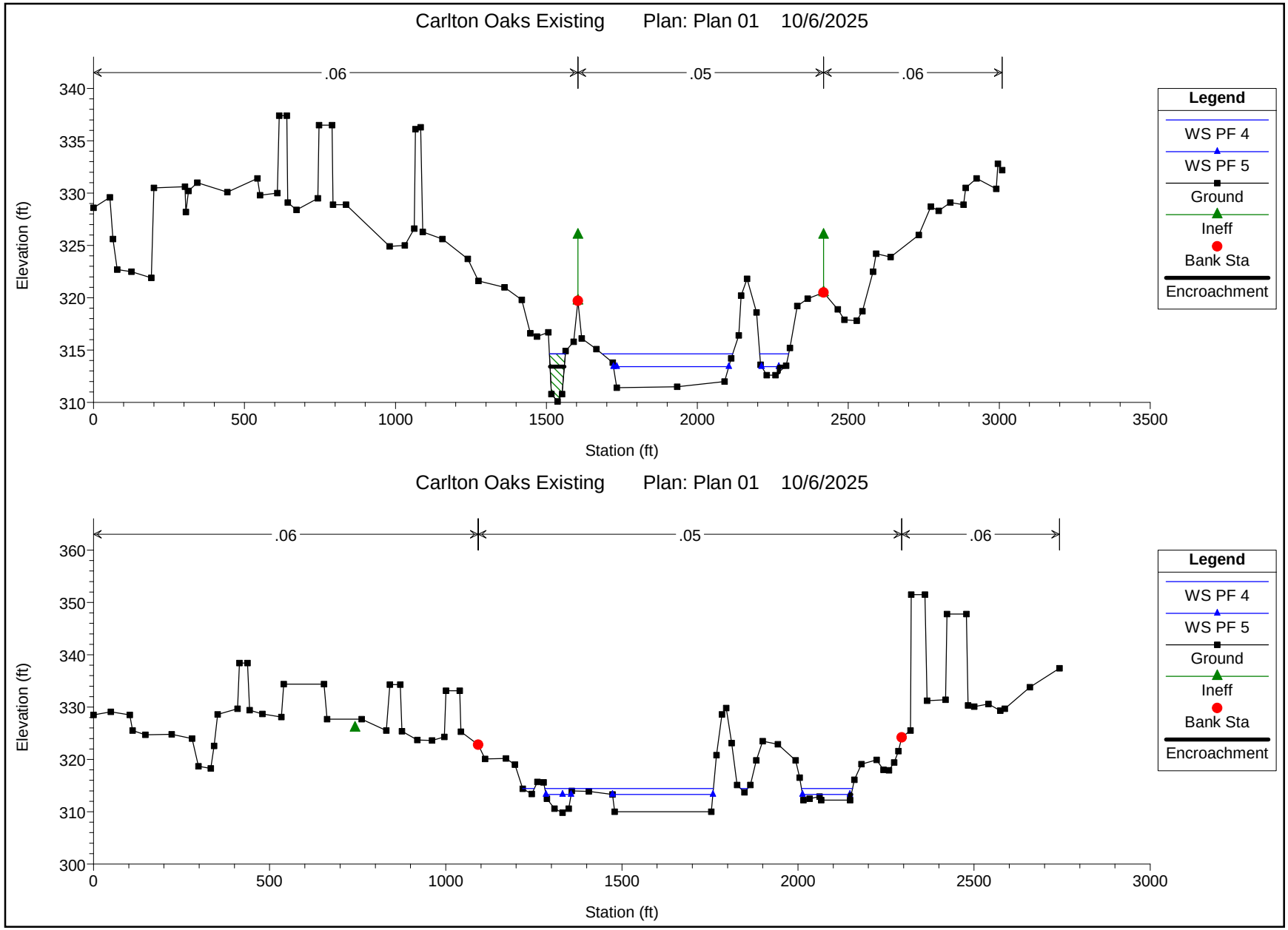
Reach	River Sta.	Contr.	Expan.
Reach 1	355	.1	.3
Reach 1	345	.1	.3
Reach 1	340	.1	.3
Reach 1	330	.1	.3
Reach 1	320	.1	.3
Reach 1	315	.1	.3
Reach 1	310	.1	.3
Reach 1	300	.1	.3
Reach 1	290	.1	.3
Reach 1	285	.1	.3
Reach 1	280	.1	.3
Reach 1	270	.1	.3
Reach 1	260	.1	.3
Reach 1	250	.1	.3
Reach 1	245	.1	.3
Reach 1	244	.3	.5
Reach 1	243	Bridge	
Reach 1	242	.3	.5
Reach 1	239	.1	.3
Reach 1	230	.1	.3
Reach 1	220	.1	.3

HEC-RAS Plan: Existing-PL1 River: San Diego River Reach: Reach 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach 1	220	PF 4	3120.00	288.80	293.58	291.96	293.65	0.002001	2.12	1472.53	632.35	0.22
Reach 1	220	PF 5	1420.00	288.80	292.60	290.96	292.65	0.002003	1.70	872.86	572.75	0.20
Reach 1	230	PF 4	3120.00	289.80	294.91	293.77	295.01	0.004550	2.52	1213.15	625.88	0.31
Reach 1	230	PF 5	1420.00	289.80	294.07	292.18	294.13	0.005448	2.05	702.09	593.75	0.31
Reach 1	239	PF 4	3120.00	290.70	296.42	294.40	296.54	0.002927	2.71	1179.79	609.62	0.26
Reach 1	239	PF 5	1420.00	290.70	295.39	293.65	295.45	0.002031	1.82	780.12	338.57	0.21
Reach 1	242	PF 4	3120.00	291.70	296.93	294.39	296.99	0.001410	2.03	1539.34	423.40	0.19
Reach 1	242	PF 5	1420.00	291.70	295.74	293.80	295.77	0.001034	1.36	1042.92	413.12	0.15
Reach 1	243		Bridge									
Reach 1	244	PF 4	3120.00	292.20	297.16	294.74	297.22	0.001388	1.95	1597.74	523.04	0.18
Reach 1	244	PF 5	1420.00	292.20	295.92	294.16	295.95	0.001223	1.38	1029.83	454.24	0.16
Reach 1	245	PF 4	3120.00	291.03	297.62	296.63	297.76	0.020198	3.04	1042.01	634.05	0.41
Reach 1	245	PF 5	1420.00	291.03	296.32	295.18	296.53	0.044436	3.74	380.45	291.61	0.57
Reach 1	250	PF 4	3120.00	294.72	300.12	298.63	300.17	0.001395	1.68	1839.85	889.58	0.20
Reach 1	250	PF 5	1420.00	294.72	299.60	297.79	299.63	0.001554	1.49	956.15	582.42	0.20
Reach 1	260	PF 4	3120.00	295.59	302.84		303.04	0.007767	3.61	864.74	403.48	0.43
Reach 1	260	PF 5	1420.00	295.59	302.12		302.21	0.004527	2.40	592.76	340.90	0.32
Reach 1	270	PF 4	2645.00	297.09	305.17	301.78	305.21	0.000954	1.68	1573.91	479.02	0.16
Reach 1	270	PF 5	1230.00	297.09	303.84	300.85	303.86	0.000834	1.26	977.84	414.16	0.14
Reach 1	280	PF 4	2645.00	298.83	306.71		306.76	0.002788	1.71	1544.41	1024.79	0.25
Reach 1	280	PF 5	1230.00	298.83	305.35		305.41	0.003506	2.01	613.39	379.01	0.28
Reach 1	285	PF 4	2645.00	301.64	308.37		308.41	0.002094	1.61	1639.27	960.26	0.22
Reach 1	285	PF 5	1230.00	301.64	307.12		307.16	0.001922	1.60	769.79	428.04	0.21
Reach 1	290	PF 4	2645.00	301.71	310.18		310.25	0.003932	2.00	1321.01	896.94	0.29
Reach 1	290	PF 5	1230.00	301.71	308.99		309.06	0.004861	2.05	601.45	462.44	0.32

HEC-RAS Plan: Existing-PL1 River: San Diego River Reach: Reach 1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach 1	300	PF 4	2645.00	305.57	312.08		312.13	0.002196	1.77	1502.73	810.33	0.23
Reach 1	300	PF 5	1230.00	305.57	311.08		311.12	0.002205	1.49	826.00	567.27	0.22
Reach 1	310	PF 4	2645.00	305.25	312.98	311.46	313.04	0.001079	1.87	1501.20	1114.31	0.26
Reach 1	310	PF 5	1230.00	305.25	312.11	309.94	312.16	0.001356	1.72	718.86	645.43	0.28
Reach 1	315	PF 4	2645.00	307.53	313.45	312.68	313.60	0.003809	3.05	860.76	689.52	0.48
Reach 1	315	PF 5	1230.00	307.53	312.67	311.55	312.79	0.003643	2.56	451.73	392.29	0.45
Reach 1	320	PF 4	2645.00	307.20	313.77	309.07	313.81	0.000182	1.70	1552.86	570.55	0.15
Reach 1	320	PF 5	1230.00	307.20	312.87	308.34	312.89	0.000070	0.99	1245.14	268.17	0.08
Reach 1	330	PF 4	2470.00	308.50	313.95	311.54	314.00	0.000703	1.87	1382.89	725.73	0.22
Reach 1	330	PF 5	1060.00	308.50	312.94	310.83	312.97	0.000460	1.37	802.06	503.90	0.18
Reach 1	340	PF 4	2470.00	309.90	314.26	311.90	314.29	0.000570	1.40	1767.09	670.19	0.15
Reach 1	340	PF 5	1060.00	309.90	313.17	311.33	313.18	0.000454	0.96	1104.07	588.11	0.12
Reach 1	345	PF 4	2470.00	309.80	314.44	311.26	314.47	0.000483	1.30	1905.73	676.93	0.14
Reach 1	345	PF 5	1060.00	309.80	313.28	310.73	313.30	0.000258	0.87	1217.43	490.62	0.10
Reach 1	355	PF 4	2470.00	311.40	314.64	312.75	314.70	0.001163	1.87	1322.66	581.36	0.21
Reach 1	355	PF 5	1060.00	311.40	313.42	312.23	313.46	0.001296	1.48	715.93	438.93	0.20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Elevation (ft)
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330
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320
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310
0
500
1000
1500
2000
2500
3000
3500
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
Encroachment
Carlton Oaks Existing Plan: Plan 01 10/6/2025
.06
.05
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Elevation (ft)
360
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330
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Station (ft)
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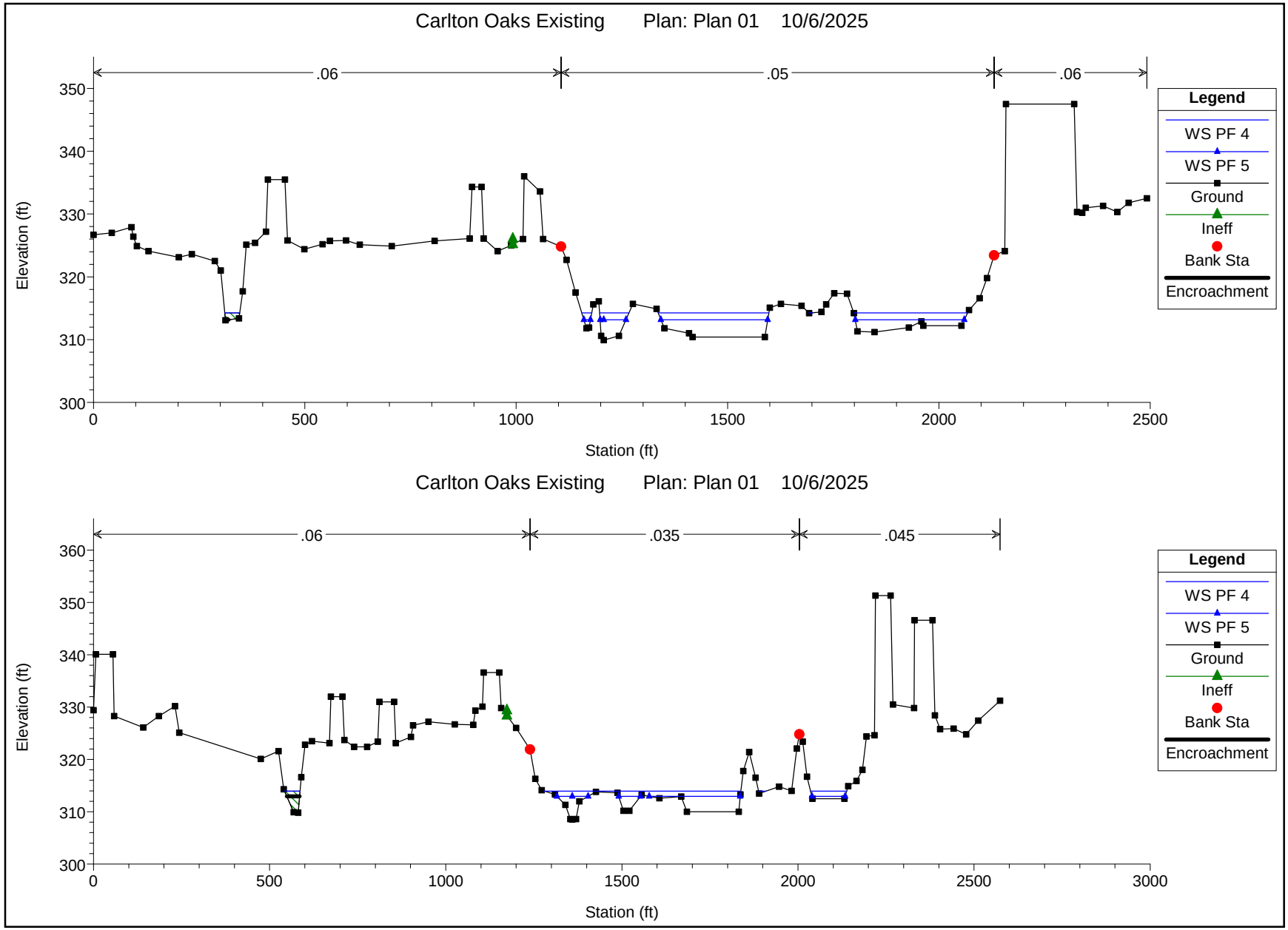
Ground
Ineff
Bank Sta
Encroachment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Station (ft)
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WS PF 5
Ground
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Encroachment
Carlton Oaks Existing Plan: Plan 01 10/6/2025
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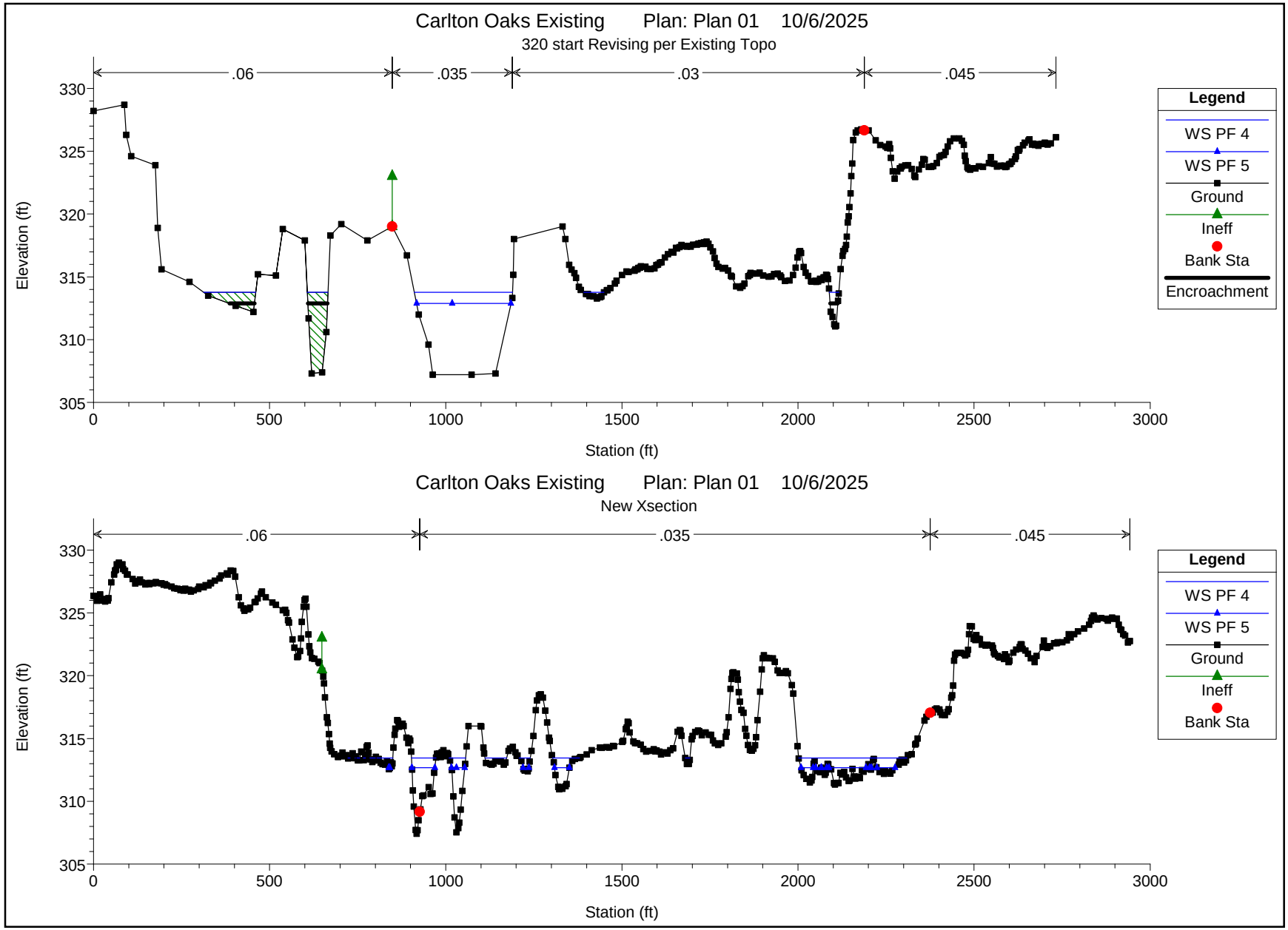
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Station (ft)
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WS PF 5
Ground
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Encroachment
Carlton Oaks Existing Plan: Plan 01 10/6/2025
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Elevation (ft)
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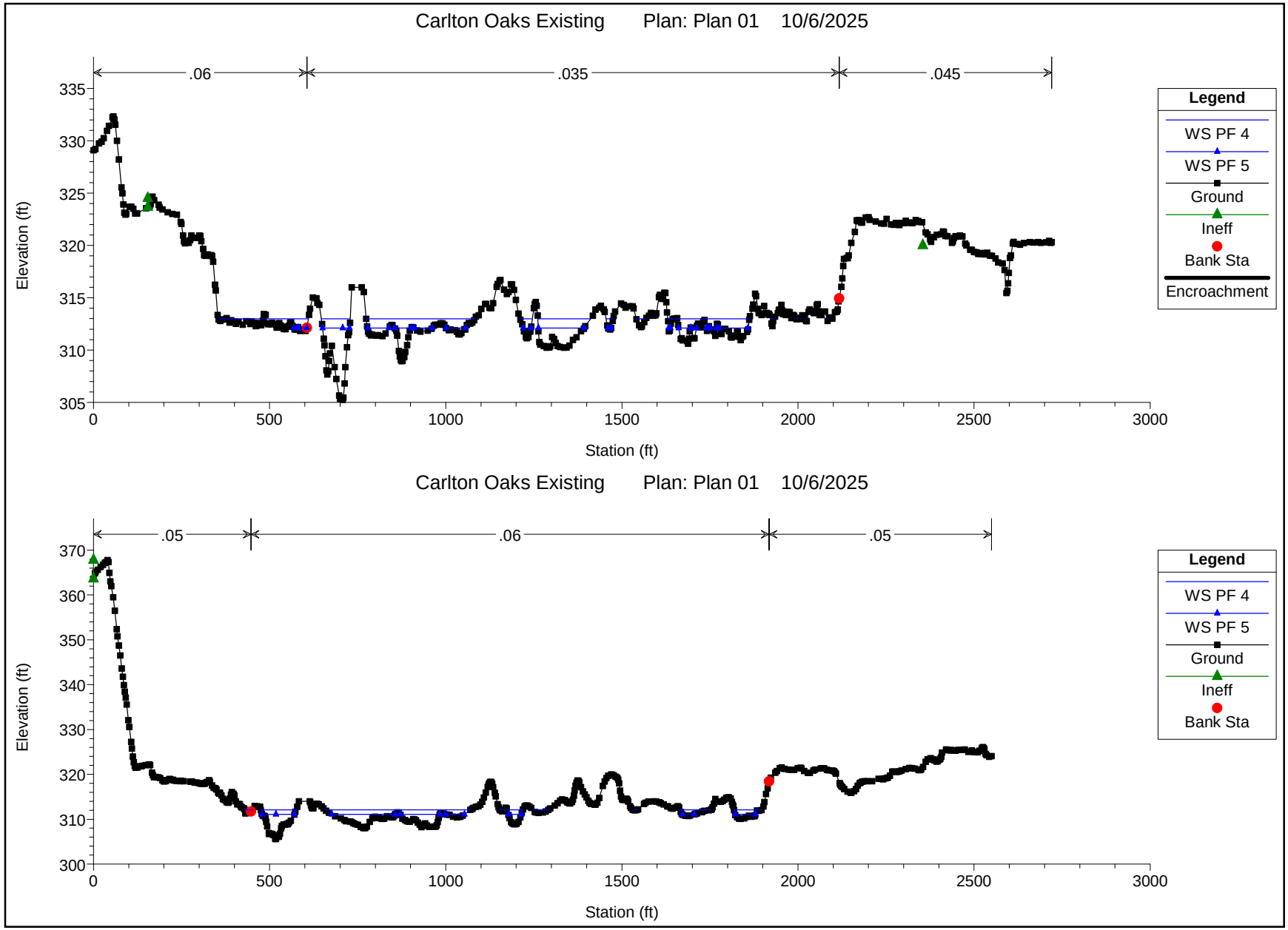
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WS PF 5
Ground
Ineff
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Encroachment
Carlton Oaks Existing Plan: Plan 01 10/6/2025
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Elevation (ft)
Station (ft)
Legend
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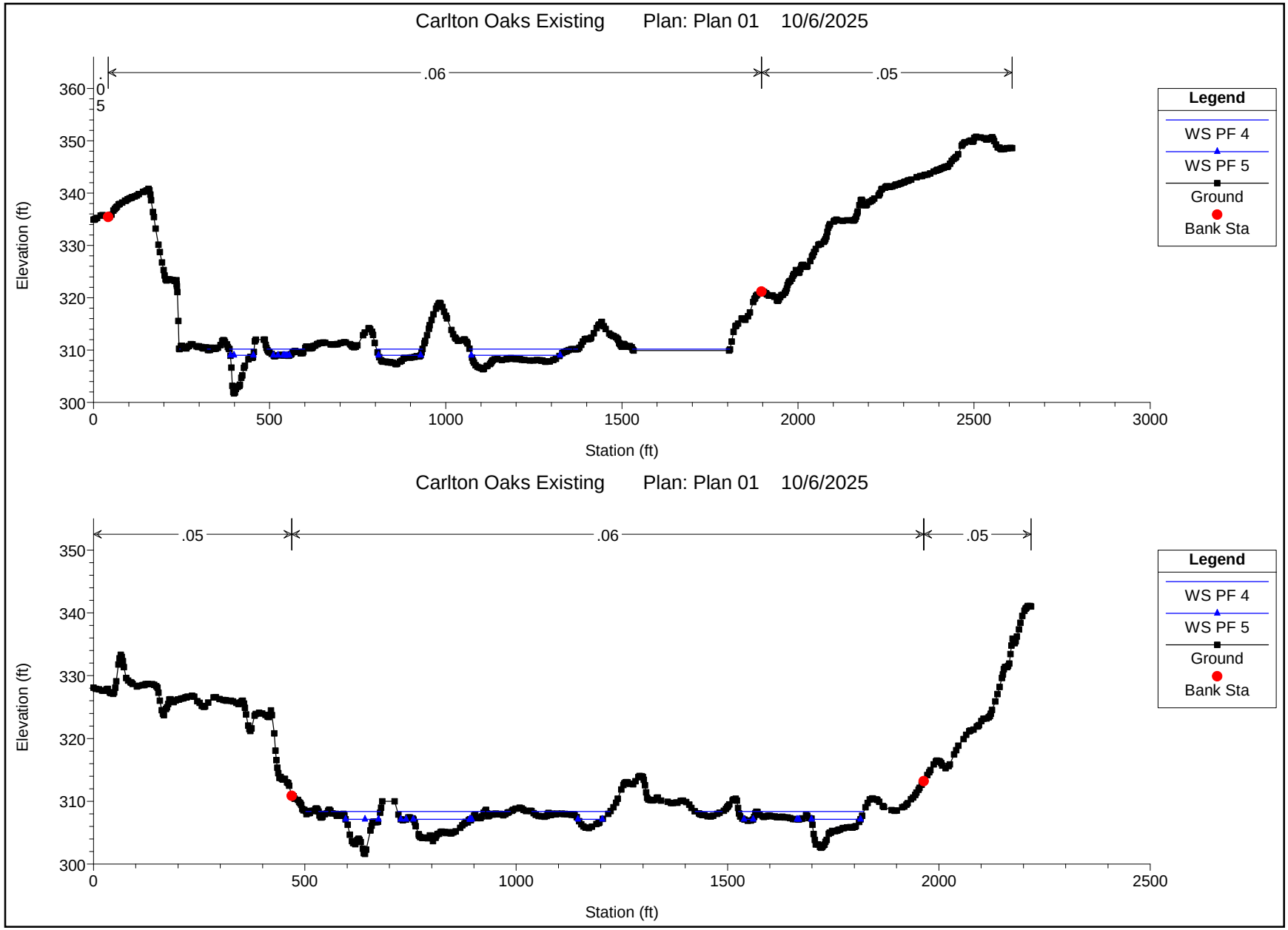
WS PF 5
Ground
Ineff
Bank Sta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Elevation (ft)
Station (ft)
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WS PF 5
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Bank Sta
Carlton Oaks Existing Plan: Plan 01 10/6/2025
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Station (ft)
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WS PF 5
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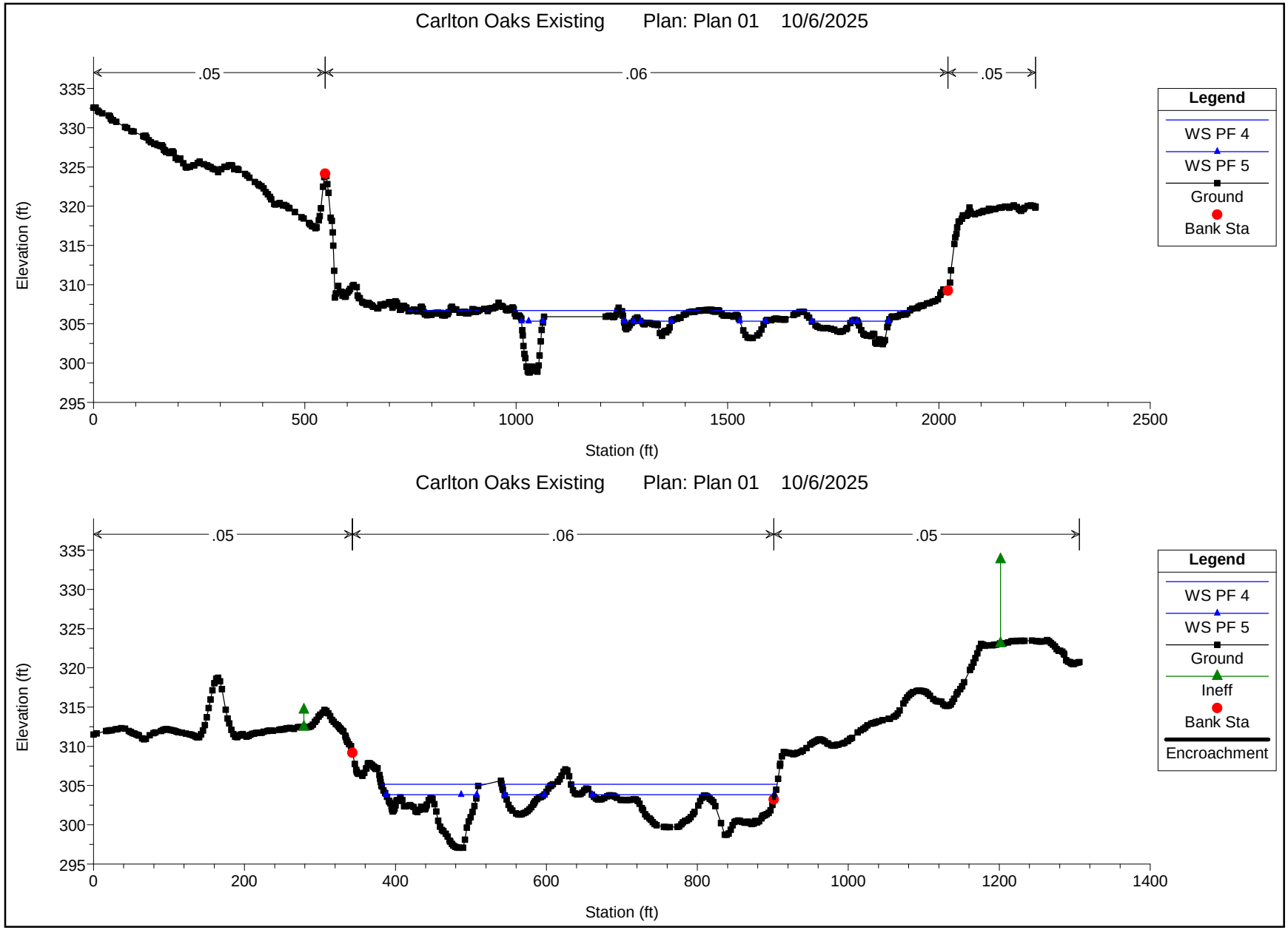
Bank Sta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1000
1500
2000
2500
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Bank Sta
Carlton Oaks Existing Plan: Plan 01 10/6/2025
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Elevation (ft)
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Legend
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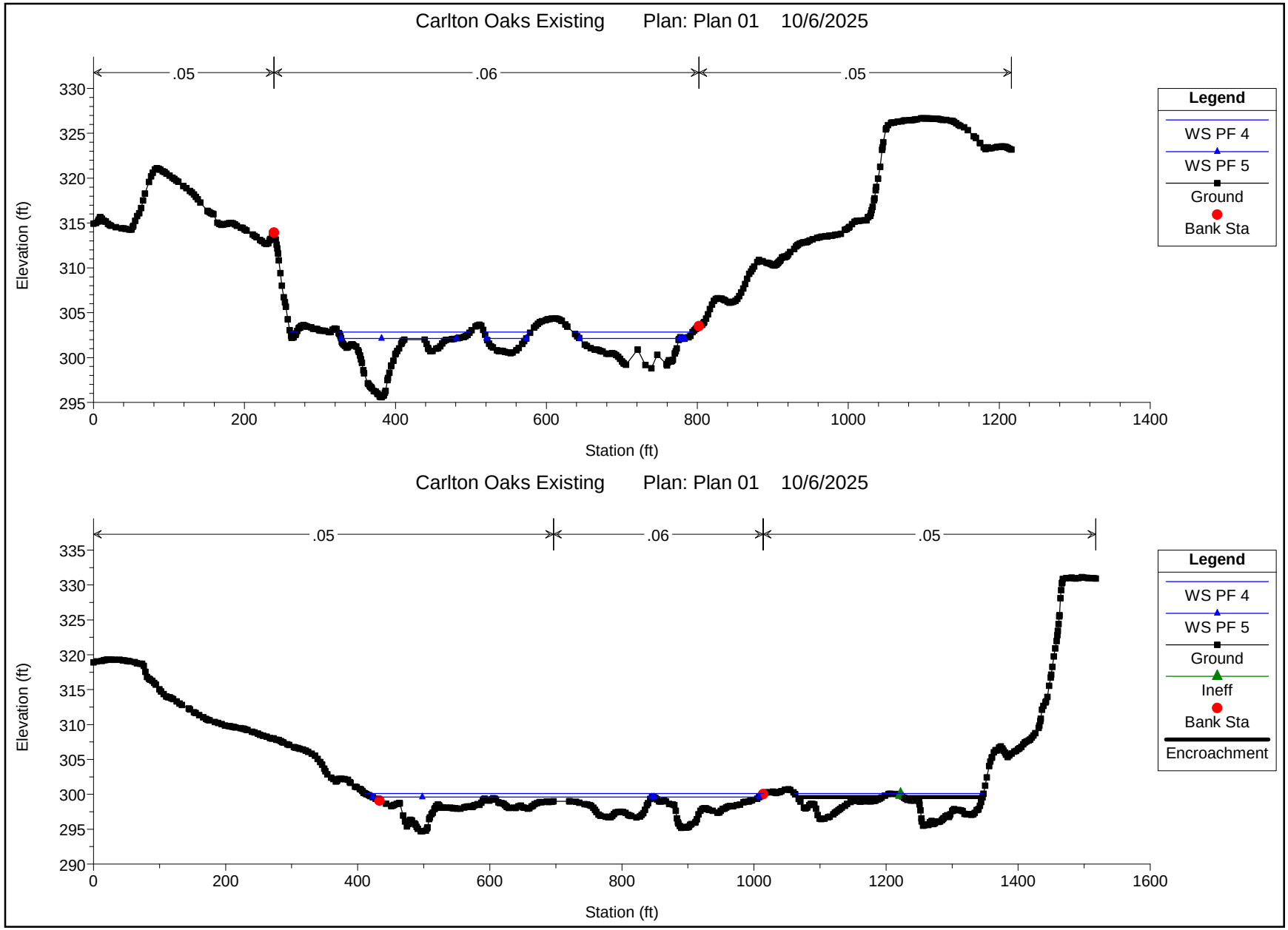
Ineff
Bank Sta
Encroachment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Station (ft)
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WS PF 5
Ground
Bank Sta
Carlton Oaks Existing Plan: Plan 01 10/6/2025
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Elevation (ft)
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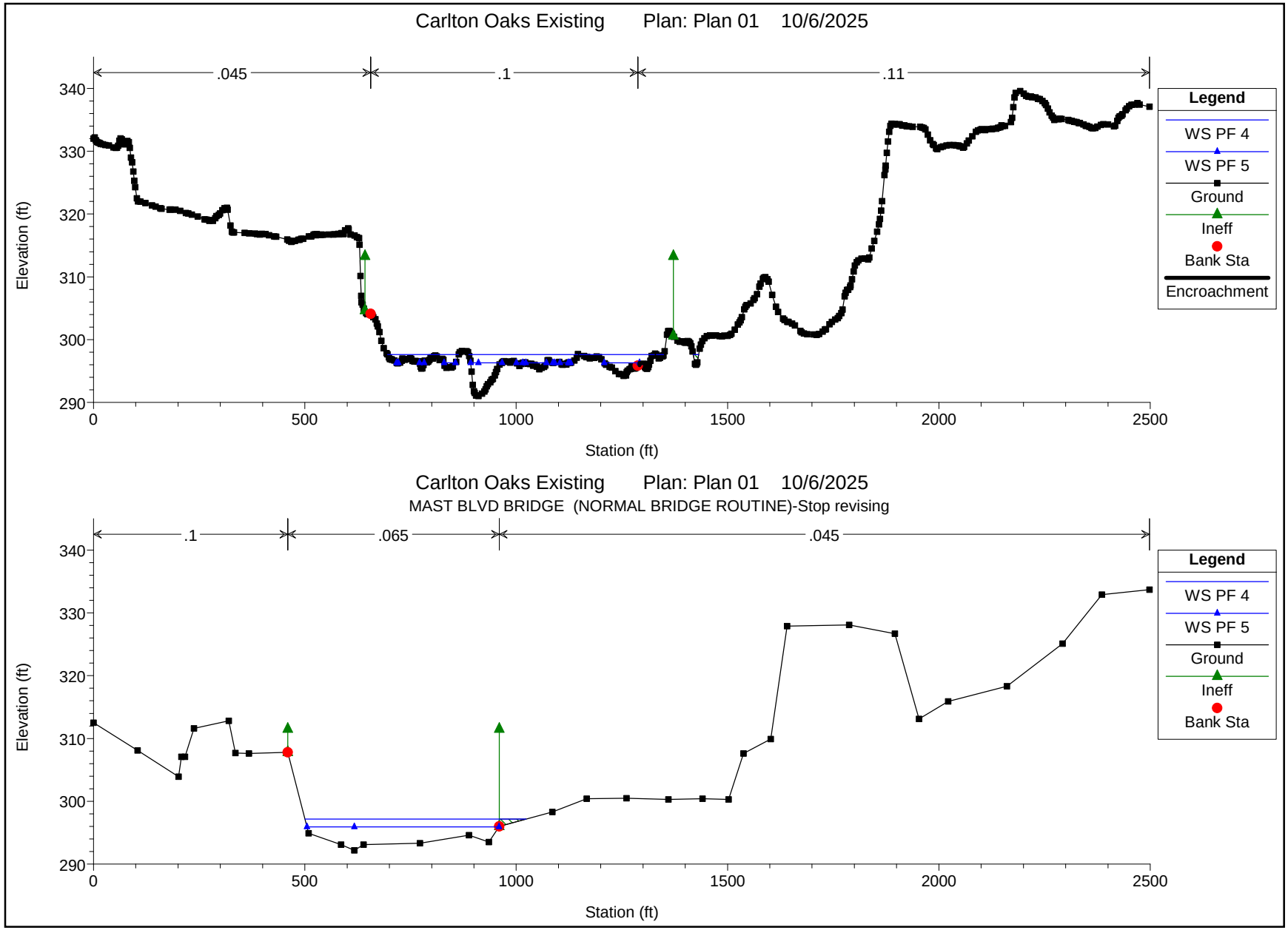
Bank Sta
Encroachment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1500
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2500
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
Encroachment
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MAST BLVD BRIDGE (NORMAL BRIDGE ROUTINE)-Stop revising
.1
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.045
Elevation (ft)
340
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Station (ft)
Legend
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Ground
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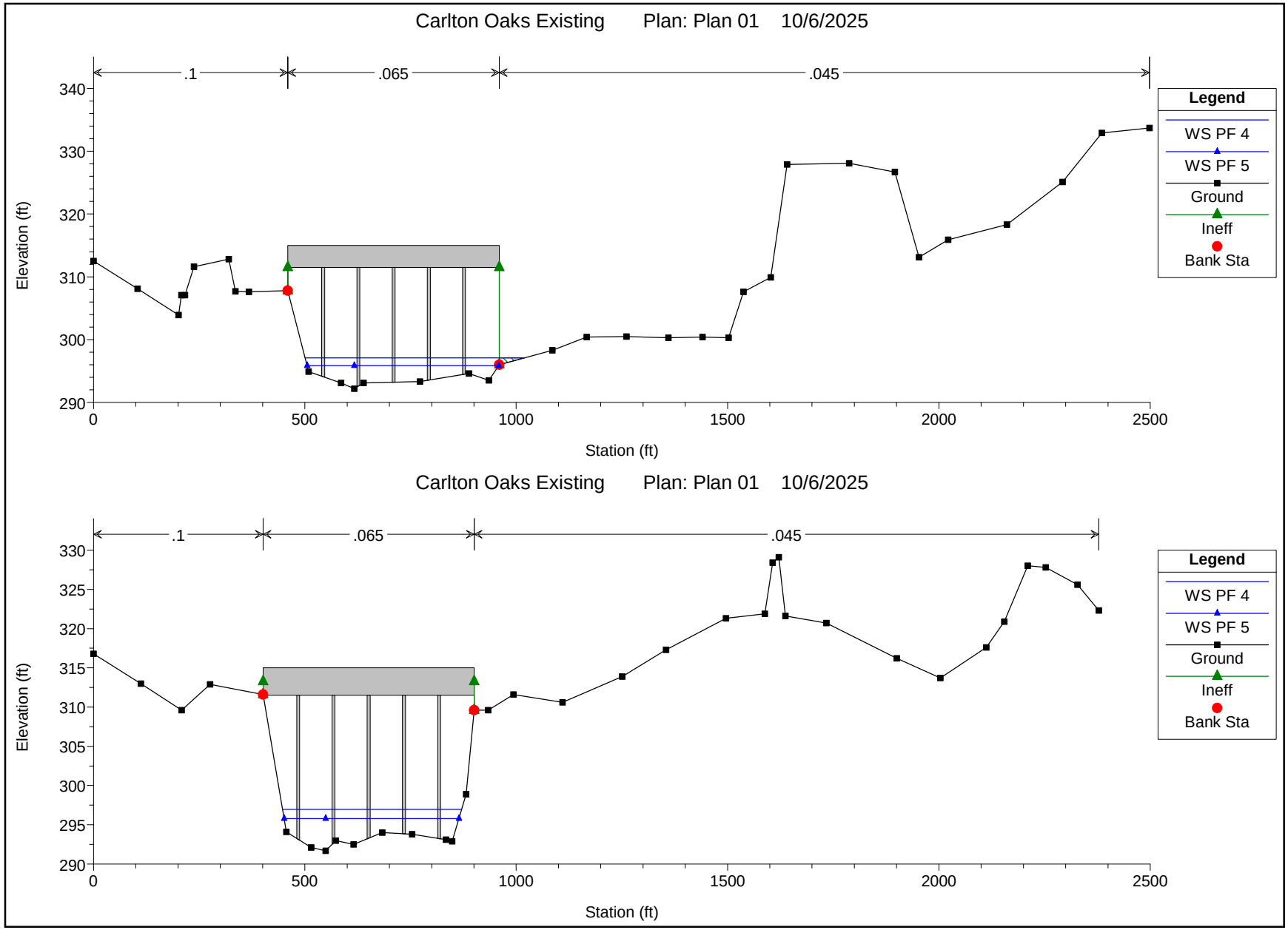
Bank Sta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Elevation (ft)
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1500
2000
2500
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
Carlton Oaks Existing Plan: Plan 01 10/6/2025
.1
.065
.045
Elevation (ft)
330
325
320
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310
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Station (ft)
Legend
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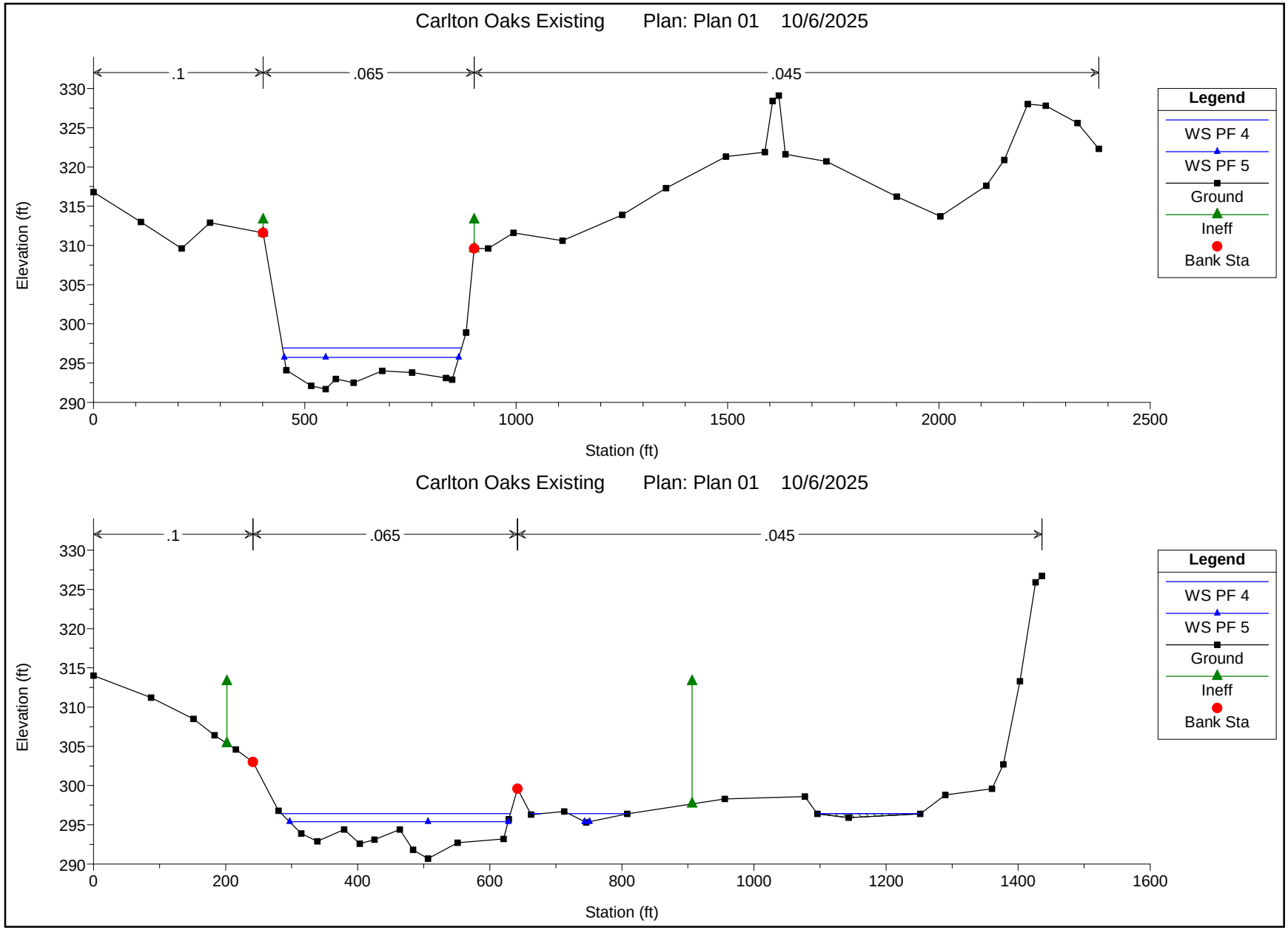
Bank Sta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Elevation (ft)
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
Carlton Oaks Existing Plan: Plan 01 10/6/2025
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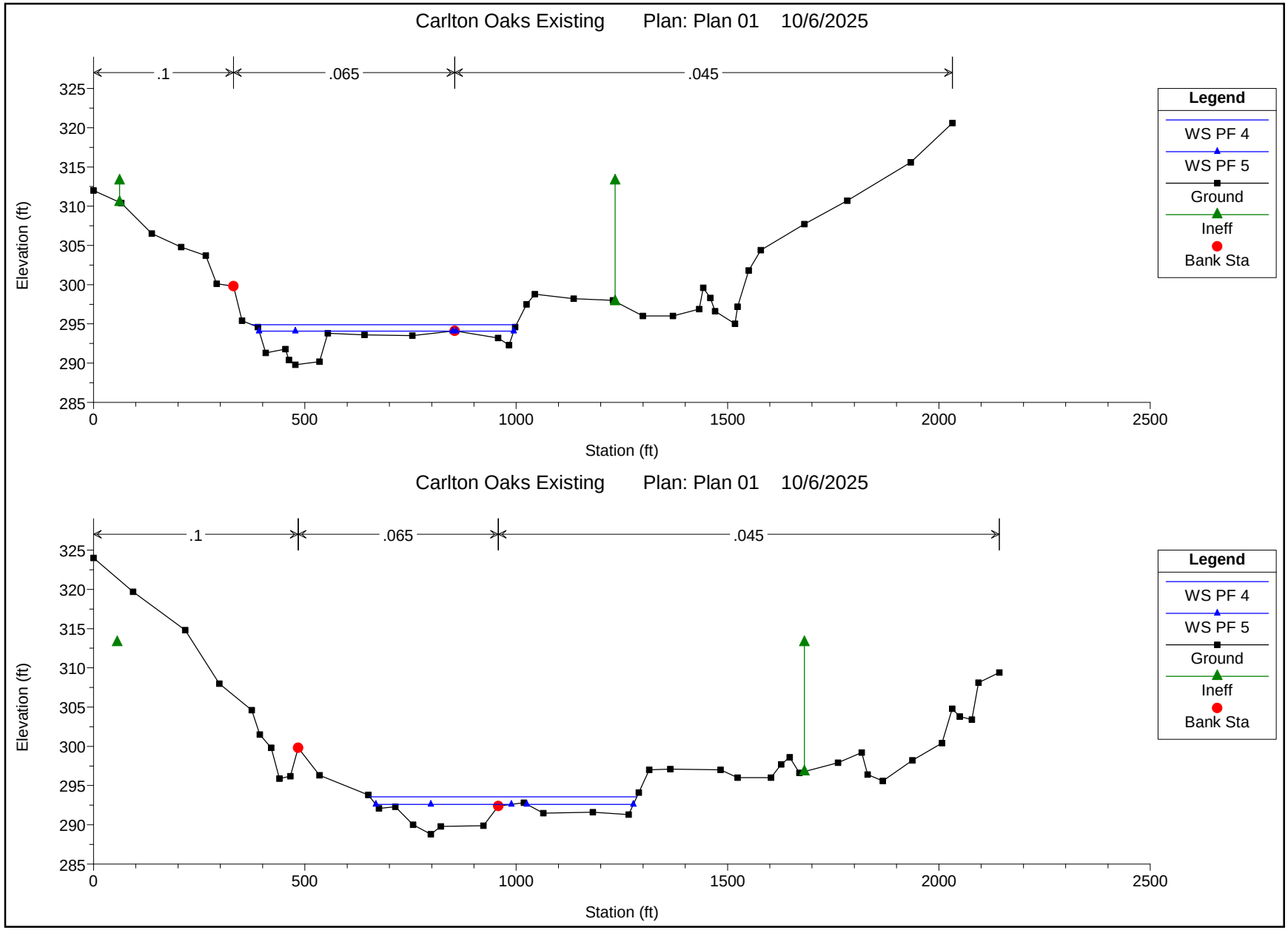
.045
Elevation (ft)
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta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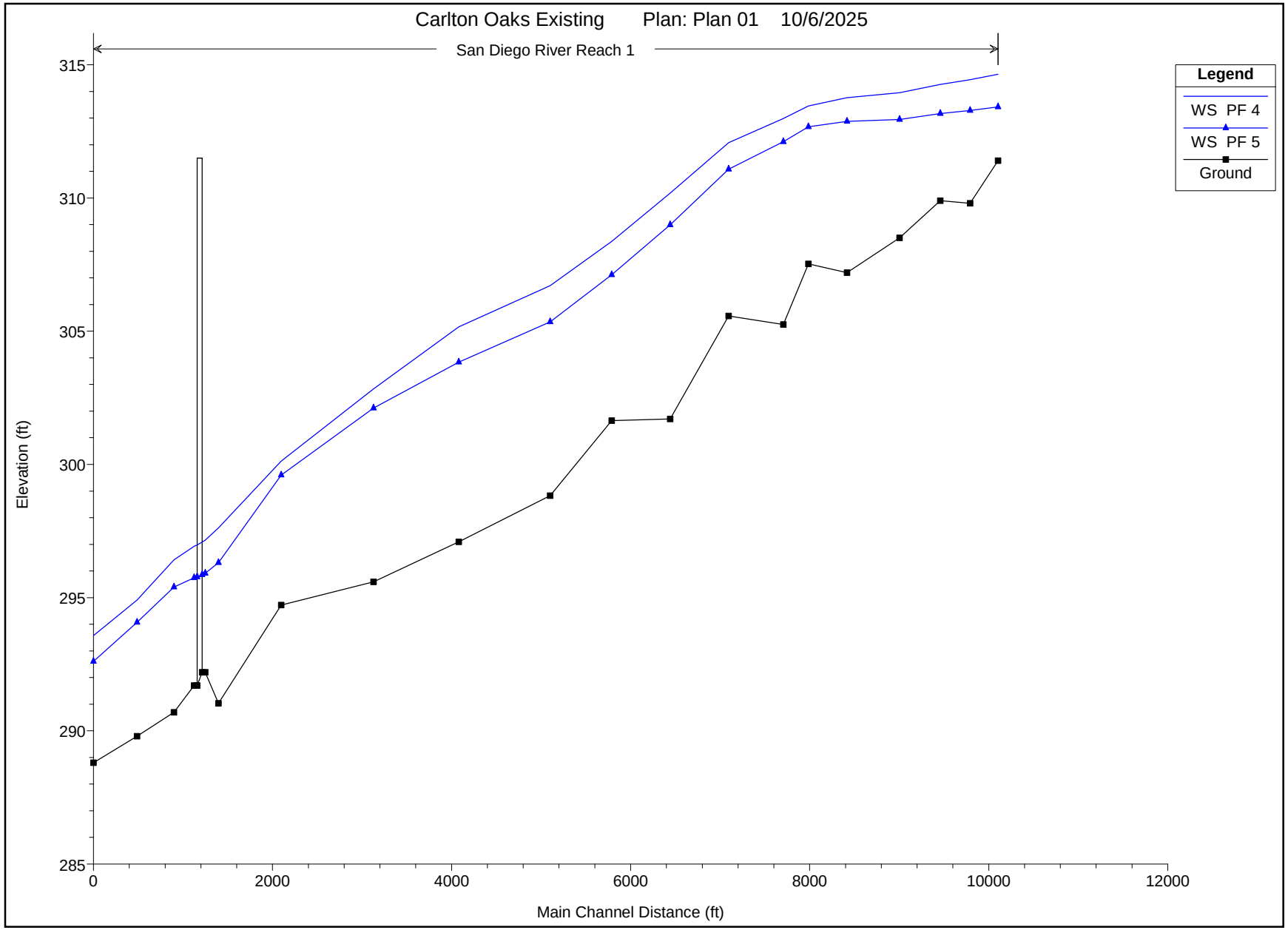
.065
.045
Elevation (ft)
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
Carlton Oaks Existing Plan: Plan 01 10/6/2025
.1
.065
.045
Elevation (ft)
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta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San Diego River Reach 1
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WS PF 5
Ground
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305
300
295
290
285
0
2000
4000
6000
8000
10000
12000
Main Channel Distance (ft)

Proposed Condition HEC-RAS Model :

HEC-RAS HEC-RAS 5.0.7 March 2019
U.S. Army Corps of Engineers
Hydrologic Engineering Center
609 Second Street
Davis, California

```
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PROJECT DATA
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Project File : CDFWCarltonOaksPR.prj
Run Date and Time: 12/30/2025 1:58:30 PM

Project in English units

Project Description:
UPPER SAN DIEGO RIVER PROPOSED CONDITIONS
Profile 1 FEMA
100-Year Profile 2 FEMA Fwy Profile 3 BSI 100-Year

Revised Existing topo 2022+ Proposed 2022
Revised Flood
way proposed conditions

PLAN DATA

Plan Title: Plan 01
Plan File : r:\1759 DFB\Hyd\10-10-2025\HYD\CDFW\Proposed Conditions\CDFWCarltonOaksPR.p01

Geometry Title: revised-UpperSanDiego-PR
Geometry File : r:\1759 DFB\Hyd\10-10-2025\HYD\CDFW\Proposed Conditions\CDFWCarltonOaksPR.g01

Flow Title : 100 Year Flow
Flow File : r:\1759 DFB\Hyd\10-10-2025\HYD\CDFW\Proposed Conditions\CDFWCarltonOaksPR.f01

Plan Summary Information:
Number of: Cross Sections = 20 Multiple Openings = 0
Culverts = 0 Inline Structures = 0
Bridges = 1 Lateral Structures = 1

Computational Information
Water surface calculation tolerance = 0.01
Critical depth calculation tolerance = 0.01
Maximum number of iterations = 20
Maximum difference tolerance = 0.3
Flow tolerance factor = 0.001

Computation Options
Critical depth computed only where necessary
Conveyance Calculation Method: At breaks in n values only

Friction Slope Method: Average Conveyance
Computational Flow Regime: Subcritical Flow

Encroachment Data
Equal Conveyance = True
Left Offset = 0
Right Offset = 0

River = San Diego River Reach = Reach 1

RS	Profile	Method	Value1	Value2
355	PF 5	1	1604.5	2269.4
345	PF 5	1	1217.3	2147.3
340	PF 5	1	1147.2	2067.2
330	PF 5	1	1293.6	2138.6
320	PF 5	1	848.3	1725.2
315	PF 5	1	796	1690.6
310	PF 5	1	436.8	1277.4
300	PF 5	1	360.4	1520.7
290	PF 5	1	250.7	1725
285	PF 5	1	472.1	1907.1
280	PF 5	1	608.4	1938.4
270	PF 5	1	341.7	931.7
260	PF 5	1	256.7	856.7
250	PF 5	1	357	1052
245	PF 5	1	686.6	1291.6
244	PF 5	1	459.7	960.1
242	PF 5	1	401	900.5
239	PF 5	1	246.2	906.2
230	PF 5	1	321.8	1056.8
220	PF 5	1	522.9	1492.9

FLOW DATA

Flow Title: 100 Year Flow
Flow File : r:\1759 DFB\Hyd\10-10-2025\HYD\CDFW\Proposed Conditions\CDFWCarltonOaksPR.f01

Flow Data (cfs)

River	Reach	RS	PF 4	PF 5
San Diego River	Reach 1	355	2470	1060
San Diego River	Reach 1	320	2645	1230
San Diego River	Reach 1	260	3120	1420

Boundary Conditions

River	Reach	Profile	Upstream	Downstream
San Diego River	Reach 1	PF 4		Normal S = 0.002
San Diego River	Reach 1	PF 5		Normal S = 0.002

GEOMETRY DATA

Geometry Title: revised-UpperSanDiego-PR
Geometry File : r:\1759 DFB\Hyd\10-10-2025\HYD\CDFW\Proposed Conditions\CDFWCarltonOaksPR.g01

CROSS SECTION

RIVER: San Diego River

REACH: Reach 1 RS: 355

INPUT
Description:
Station Elevation Data num= 80

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	328.6	54.1	329.6	64.2	325.6	78.6	322.7	125.3	322.5
191.1	321.9	199.7	330.5	303.1	330.6	305.9	328.2	314.9	330.2
343.4	331	443.3	330.1	543	331.4	551.9	329.8	608.6	330
615.1	337.4	640.3	337.4	643.6	329.1	672	328.4	743.1	329.5
746.8	336.5	789.9	336.5	793.5	328.9	836.7	328.9	980.7	324.9
1031	325	1062.7	326.6	1066.4	336.1	1083.8	336.3	1090.8	326.3
1156	325.6	1239.4	323.7	1275.1	321.6	1361.3	321	1418.6	319.8
1446.7	316.6	1469.1	316.3	1506.5	316.7	1516.7	310.8	1537.2	310.1
1551.7	310.8	1563.9	314.9	1590.3	315.8	1604.5	319.7	1616.8	316.1
1666	315.1	1720.1	313.8	1733.1	311.4	1933.3	311.5	2090.2	312
2112.2	314.2	2137	316.4	2145.2	320.2	2164.3	321.8	2196.4	318.6
2209	313.6	2229.8	312.6	2258.6	312.6	2294	313.5	2306.7	315.2
2330.7	319.2	2365.6	319.9	2417.7	320.5	2464.8	318.9	2487.3	317.9
2527.9	317.8	2547.1	318.7	2582	322.5	2592.6	324.2	2640.3	323.9
2733.3	326	2773.3	328.7	2799.6	328.3	2837.5	329.1	2881.4	328.9
2888.7	330.5	2924.8	331.4	2990.2	330.4	2995.2	332.8	3009.4	332.2

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.06	1604.5	.05	2417.7	.06

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
1604.5	2417.7	360	310	350 .1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Permanent
0	1604.5	326	F
2417.7	3009.4	326	F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 345

INPUT
Description:
Station Elevation Data num= 87

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	328.5	49.4	329.1	102.6	328.5	110.8	325.5	147.2	324.7
222.2	324.8	279.9	324	297.8	318.7	332.6	318.3	342	322.6
352.2	328.6	409	329.7	414.3	338.4	436.9	338.4	443.4	329.4
479.4	328.7	533.4	328.1	539.9	334.4	654.6	334.4	663.1	327.7
761.2	327.7	831.1	325.5	841.3	334.3	870.8	334.3	875.7	325.4
919.5	323.7	960.7	323.6	995.9	324.3	1000.4	333.1	1039.7	333.1
1042.9	325.3	1092.1	322.8	1111.7	320.1	1171.1	320.2	1196.7	319
1218.4	314.4	1243.9	313.4	1260.5	315.7	1277.7	315.6	1287.1	312.5
1308.4	310.6	1331.5	309.8	1349.3	310.6	1357.5	314	1406.2	313.9
1473.3	313.3	1479.5	310	1754.1	310	1768.6	320.8	1784.4	328.6
1796.2	329.8	1811.8	323.1	1827.4	315.1	1847.9	313.7	1865	315.1
1881.8	319.8	1899.8	323.5	1942.8	322.9	1993.1	319.8	2004.9	316.5
2015.6	312.2	2033.1	312.5	2061.4	312.9	2065.9	312.2	2147.9	312.2
2160.3	316.1	2180.3	319.1	2223.2	319.9	2242.8	318	2258.3	317.9
2273.1	319.4	2284.9	321.6	2294.3	324.2	2319.3	325.5	2321.4	351.5
2360.3	351.5	2366.8	331.2	2419.1	331.4	2422.9	347.8	2478	347.8
2482.6	330.3	2500.2	330.1	2540.7	330.6	2574.2	329.3	2587	329.7
2658.4	333.8	2742.3	337.4						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.06	1092.1	.05	2294.3	.06

```
Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        1092.1  2294.3              400     335     125              .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev  Permanent
       0   742.3     326       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 340

INPUT
Description:
Station Elevation Data    num=      81
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   326.7    43.2     327    89.6   327.9    94.4   326.4   102.4   324.9
     130   324.1   201.6   323.1   232.8   323.6   287.2   322.5   301.2     321
     312   313.1     344   313.4   353.2   317.7   361.6   325.1   382.4   325.4
   408.1   327.2   412.5   335.5   452.9   335.5   458.9   325.8   498.9   324.4
   541.7   325.2   559.3   325.7   597.3   325.8   630.1   325.1   705.7   324.9
   806.9   325.7   889.8   326.1   895.4   334.3   917.8   334.3     923   326.1
   955.8   324.1   987.8     325  1016.2     326  1018.6     336  1056.2   333.6
  1063.4     326  1106.2   324.8  1119.4   322.7  1140.2   317.5  1166.2   311.8
  1172.3   311.9  1182.7   315.6  1195.5   316.1  1201.1   310.6  1207.1   309.9
  1243.1   310.6  1276.3   315.7  1331.9   314.9  1350.7   311.8  1408.7     311
  1417.5   310.4  1588.3   310.4    1600   315.1  1626.4   315.7  1674.8   315.4
  1693.2   314.2  1722.4   314.4  1733.6   315.6  1752.4   317.4  1782.8   317.3
  1799.2   314.2  1807.6   311.3  1847.6   311.2  1929.2   311.9  1958.5   312.9
  1963.3   312.2  2053.3   312.2  2071.3   314.7  2096.5   316.6  2114.1   319.8
  2130.9   323.4  2156.1   324.1  2158.5   347.5  2320.2   347.5  2326.6   330.3
  2339.4   330.2  2347.8     331  2388.2   331.3  2422.2   330.3    2449   331.8
  2492.2   332.5

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0     .06  1106.2     .05  2130.9     .06

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        1106.2  2130.9              575     454     575              .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev  Permanent
       0   992.2     326       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 330

INPUT
Description:
Station Elevation Data    num=      85
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   329.4     6.4   340.1      55   340.1    58.2   328.3   141.2   326.1
   185.4   328.3   231.5   330.2   243.2   325.1   474.7   320.1   525.2   321.6
   540.1   314.3   568.2   309.9     581   309.8   589.9   316.6   600.7   322.8
   620.3   323.5   669.7   323.1   674.1     332   706.7     332   712.3   323.7
   739.5   322.4   776.4   322.4   806.9   323.4   811.9     331   853.1     331
     858   323.1   901.3   324.3   907.3   326.5     951   327.2  1025.7   326.7
  1077.9   326.6  1084.3   329.3  1104.3   330.1  1107.6   336.6  1151.7   336.6
  1157.3   329.8  1199.9     326  1239.6   321.9  1254.4   316.3  1272.1   314.1
  1309.8   313.3  1339.5   311.3  1353.9   308.6  1358.9   308.5  1370.2   308.6
  1379.5     312  1426.4   313.8  1487.8   313.6  1504.2   310.2  1521.1   310.2
    1556   313.2  1606.6   312.6  1668.3   312.9  1684.4     310    1832     310
```

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  1836.4   313.3  1844.4   317.8  1861.7   321.4  1879.7   316.5  1889.8   313.5
  1945.9   314.8  1981.6     314  1996.9   322.1  2003.7   324.8  2013.3   323.4
  2025.8   316.7    2041   312.5  2131.8   312.5  2142.6   314.9  2166.3   315.9
  2183.1     318  2194.4   324.4  2217.2   324.6  2220.1   351.3    2263   351.3
  2269.4   330.5  2329.6   329.8  2330.9   346.6  2382.3   346.6  2388.7   328.4
  2403.5   325.8  2442.1   325.9  2477.4   324.8  2511.5   327.4  2573.6   331.2

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0     .06  1239.6    .035  2003.7    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        1239.6  2003.7             620     588     620             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0  1173.6   329.3       F
  2187.3  2573.6   321.5       F

LATERAL STRUCTURE


RIVER: San Diego River
REACH: Reach 1            RS: 322

INPUT
Description:
Lateral structure position     = Next ot right bank station
Distance from Upstream XS =
Deck/Roadway Width        =     100
Weir Coefficient          =     3.1
Weir Flow Reference       = Water Surface
 Weir Embankment Coordinates    num =        2
     Sta    Elev     Sta    Elev
       0   323.5      75   323.5

Weir crest shape                          = Broad Crested


Number of Culverts =  4

Culvert Name     Shape      Rise    Span
Culvert #1           Box       8      12
FHWA Chart # 8 - flared wingwalls
FHWA Scale # 3 - Wingwall flared 0 deg. (sides extended straight)
Solution Criteria = Highest U.S. EG
Culvert Upstrm Dist  Length    Top n  Bottom n  Depth Blocked  Entrance Loss Coef   Exit Loss Coef
                       88     .013     .013        0                   .2               .3
Upstream   Elevation =  313
           Centerline Station =  10
Downstream Elevation =  312.5
           Centerline Station =  10

Culvert Name     Shape      Rise    Span
Culvert #2           Box       8      12
FHWA Chart # 8 - flared wingwalls
FHWA Scale # 3 - Wingwall flared 0 deg. (sides extended straight)
Solution Criteria = Highest U.S. EG
Culvert Upstrm Dist  Length    Top n  Bottom n  Depth Blocked  Entrance Loss Coef   Exit Loss Coef
                       78     .013     .013        0                   .2               .3
Upstream   Elevation =  313
           Centerline Station =  23
Downstream Elevation =  312.5
           Centerline Station =  23

Culvert Name     Shape      Rise    Span
Culvert #3           Box       8      12
```

```
FHWA Chart # 8 - flared wingwalls
FHWA Scale # 3 - Wingwall flared 0 deg. (sides extended straight)
Solution Criteria = Highest U.S. EG
Culvert Upstrm Dist  Length    Top n  Bottom n  Depth Blocked  Entrance Loss Coef   Exit Loss Coef
                       68.3     .013     .013        0                   .2               .3
Upstream   Elevation =  313
           Centerline Station =  36
Downstream Elevation =  312.5
           Centerline Station =  36

Culvert Name     Shape      Rise    Span
Culvert #4           Box       8      12
FHWA Chart # 8 - flared wingwalls
FHWA Scale # 3 - Wingwall flared 0 deg. (sides extended straight)
Solution Criteria = Highest U.S. EG
Culvert Upstrm Dist  Length    Top n  Bottom n  Depth Blocked  Entrance Loss Coef   Exit Loss Coef
                         50     .013     .013        0                   .2               .3
Upstream   Elevation =  313
           Centerline Station =  49
Downstream Elevation =  312.5
           Centerline Station =  49

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 320

INPUT
Description: 320 start Revising per Proposed conditions-Resort East
Station Elevation Data    num=     168
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   328.2    87.1   328.7    92.7   326.3   107.2   324.6   175.5   323.9
   182.3   318.9   192.7   315.6   272.6   314.6   325.3   313.5   403.2   312.7
   454.2   312.2   466.6   315.2   517.6   315.1   537.3   318.8   599.9   317.9
   610.4   311.7   619.6   307.3   648.9   307.4     661   310.6   672.6   318.3
   703.6   319.2   777.4   317.9   847.7     319   889.9   316.7   923.2     312
   950.9   309.6     963   307.2  1073.2   307.2  1141.4   307.3 1188.68  313.32
 1193.79     318 1331.79     319 1339.45     318  1430.1     309    1495     309
  1498.1     310 1525.21     313    1556     316 1566.89   315.8    1572  315.64
 1592.35  315.67  1594.5  315.94 1666.26  315.94 1702.33  317.55  1739.4   321.5
  1911.6   321.9    1927   321.9 1969.73     315    2023  315.34 2029.11  315.07
 2036.77  314.66 2039.32  314.61  2046.8  314.62 2049.53   314.7 2052.08  314.59
 2057.38  314.64 2062.29  314.84  2067.4  314.74  2072.5  314.96 2075.06  314.95
 2080.16  315.16 2082.71  315.13 2085.27  314.82 2087.82  314.06 2092.92  312.23
 2098.03   311.8 2103.14  311.22 2105.69  311.06 2108.24   311.1 2113.35  313.08
  2115.9  313.67    2121  315.62 2126.11  316.67 2128.66  317.04 2133.77  317.22
 2136.32  317.54 2138.87   318.2 2141.43  319.32 2143.98  319.82 2146.26  320.56
 2149.08  321.65 2151.64  323.02 2154.19  324.02 2156.74  325.89  2164.4  326.49
  2169.5  326.66 2179.72  326.74 2182.27  326.66  2188.2  326.66 2200.14  326.66
 2220.56  325.88 2233.32   325.5 2248.64  325.38 2253.74  325.26 2258.85  325.57
  2261.4  325.23 2263.95  324.48 2269.06   323.4 2274.16  322.81 2281.82  323.38
 2289.48  323.65 2292.03  323.63 2294.59  323.78  2304.8  323.88 2312.45  323.89
 2322.66  323.59 2330.32  323.06 2332.88  322.94 2343.09  323.56 2351.51  323.93
 2355.85  324.38 2359.98  324.33 2371.17  323.75 2378.82  323.75 2383.93  323.82
 2394.14  324.07  2401.8  324.55  2406.9  324.66 2414.56  324.71 2419.22  324.95
 2424.77  325.38 2431.92  325.79  2442.5  326.03 2457.96  326.02 2465.61  325.83
 2470.72  325.51 2473.27  324.65 2475.82  324.21 2480.93  323.73 2483.48  323.61
 2488.59  323.53  2498.8  323.64 2503.87  323.63 2514.11  323.79 2525.03  323.76
 2542.19  324.07  2547.3  324.54  2552.4  324.03 2557.51     324 2565.17  323.78
 2575.38  323.86 2580.48  323.81 2585.59  323.85 2588.14  323.74 2592.74  323.78
 2599.09  323.97 2603.46  324.01 2607.55  324.18 2616.02  324.39 2618.77  324.58
 2623.88  325.09 2626.43  325.04 2628.71  325.18  2639.2  325.47 2643.52  325.68
 2654.51  325.86 2657.06  325.94 2664.72  325.53 2667.27  325.61 2672.38   325.5
 2677.49  325.56 2682.59  325.44 2692.19  325.58 2697.91  325.59 2700.46  325.68
 2709.12  325.54 2717.58  325.62 2732.54  326.12
```

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.06	847.7	.035	1188.68	.03	1739.4	.15	1927	.03
1969.73	.035	2188.2	.045						

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
847.7	2188.2	260	431	405	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Permanent
0	847	323	F
1725.2	2732.54	321.5	F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 315

INPUT
Description: New Xsection- left ineffective area per FEMA effective study
Station Elevation Data num= 372

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	326.37	4.8	326.34	10.25	325.97	18.78	326.48	24.07	325.99
29.36	326.09	33.27	325.91	36.26	326.09	40.19	325.99	42.58	326.17
50.51	327.44	58.4	328.05	60.99	328.38	63.58	328.43	66.17	328.86
72.23	329	76.53	328.8	81.71	328.87	84.29	328.5	89.47	328.36
94.67	328.06	96.71	328.06	111.18	327.7	118.46	327.35	123.62	327.53
126.27	327.46	131.56	327.67	136.85	327.44	147.43	327.27	152.72	327.38
158.01	327.29	160.66	327.38	169.56	327.36	176.53	327.45	179.18	327.38
193.24	327.36	199.19	327.24	202.86	327.28	208.12	327.19	221.26	327.09
229.15	326.97	238.18	326.93	246.87	326.81	250.12	326.89	255.36	326.78
260.59	326.92	265.83	326.8	271.06	326.85	276.29	326.7	284.14	326.8
297.23	326.9	299.85	327.1	312.82	327.04	318.17	327.21	326.02	327.19
331.25	327.4	333.87	327.36	344.37	327.56	357.51	327.73	362.77	327.99
378.47	328.15	381.17	328.06	389.05	328.38	396.94	328.35	402.2	327.89
412.2	326.25	417.97	325.61	425.85	325.37	428.08	325.17	438.99	325.28
444.25	325.41	457.39	325.86	460.02	325.88	465.78	326.16	475.79	326.53
478.42	326.71	488.93	326.25	507.82	325.83	517.84	325.65	537.22	325.21
544.13	325.24	547.14	325.01	552.01	324.42	555.08	324.23	565	322.89
570.41	322.24	578.3	321.47	580.93	321.53	586.18	321.96	588.81	322.97
591.44	324.28	596.6	325.5	599.32	326.03	601.95	326.13	604.68	325.49
609.84	323.29	612.47	322.34	615.09	321.85	620.35	321.4	626.51	321.35
638.42	321.12	641.38	321	649.26	320.41	652.31	319.94	654.29	319.38
657.15	318.28	662.41	316.69	665.03	316.24	668.18	315.36	670.17	314.59
672.15	314.25	675.55	313.97	683.43	313.74	693.98	313.53	702.17	313.63
707.09	313.88	712.35	313.57	717.6	313.67	722.86	313.41	730.74	313.47
736	313.83	742.66	313.42	745.57	313.57	750.76	313.25	754.4	313.25
759.66	313.96	762.28	313.92	767.54	313.27	771.37	313.4	773.35	313.69
775.43	314.33	778.05	314.44	780.68	313.86	785.94	313.33	791.25	313.12
797.16	313.23	801.71	313.54	807.08	313.34	809.6	313.37	814.85	313.07
820.11	312.95	827.99	312.92	833.25	313.19	838.51	312.56	841.14	312.66
843.76	313.1	846.39	312.78	848.76	313.01	851.65	314.27	854.71	315.29
856.91	315.79	862.16	316.46	864.79	316.36	867.42	315.93	877.93	316.18
880.5	316	888.45	315.06	893.7	314.63	896.33	315	898.96	314.85
901.59	313.95	904.32	312.53	906.85	310.87	909.47	309.59	914.73	307.71
917.36	307.42	919.99	307.69	922.62	308.49	926	309.161	927.87	309.36
933.13	310.41	937.01	310.47	951.53	311.12	956.79	310.59	962.04	310.61
967.3	312.27	972.56	313.48	975.18	313.79	980.44	313.81	985.67	313.53
988.33	313.89	991.63	313.82	993.58	314.06	996.21	313.6	1001.47	313.6
1004.1	313.84	1006.72	313.74	1011.98	313.23	1017.24	312.48	1021.39	310.39
1025.12	308.71	1030.38	307.53	1035.64	307.86	1038.27	308.3	1042.29	309.33
1047.19	310.83	1055.13	312.98	1059.29	314.37	1064.55	316	1098.72	316
1117	316	1140.77	309	1348	309	1351.3	310	1361	311
1372.7	312	1391.3	313	1400.4	313.72	1414.13	314.06	1500.86	314.72
1503.49	314.82	1511.38	315.74	1514	315.87	1516.63	316.33	1519.26	316.22

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 1521.89  315.49  1532.4  314.76 1537.32  314.63 1543.27  314.62 1553.19   314.5
 1561.13  314.16 1668.13  315.14  1677.2     315  1697.3     320  1702.4   322.2
 1792.31   322.2  1812.8     321    1907     322  2028.2   322.2  2036.7     320
    2060   312.5 2062.81  312.32    2066  312.68 2070.68  312.52 2075.95   312.1
 2078.55  312.28  2083.8  312.98 2085.89  312.93 2089.05  312.56  2094.3  312.54
 2102.17  311.45 2104.79  311.33 2112.66  311.47 2115.29  311.45 2120.54  312.25
 2125.39  312.12 2131.03  312.33 2136.28   311.9 2144.15  311.61 2146.78  311.65
 2154.65  312.57  2159.9  311.97 2162.52  311.81 2173.44  311.95 2175.64  311.85
  2181.4  312.49 2186.13  312.36 2199.47  312.96  2204.5  312.58 2207.27  312.53
 2213.23  313.25    2215  313.37 2222.87  312.72 2231.14  312.34 2233.13   312.4
 2243.86  312.18 2246.49  312.43    2259  312.31 2262.23  312.21 2267.48  312.46
 2285.84  312.92 2288.47  313.18 2293.72  313.32 2301.59  313.09 2306.84  313.26
 2312.08  313.67 2322.58  313.75 2332.62  314.53  2334.6  314.59  2339.4     315
 2359.32  316.43 2364.56  316.73  2375.4 317.043 2382.93  317.06 2388.79  317.31
 2393.43  317.38  2401.3  317.32 2403.92  317.08 2409.17  316.88 2417.04  316.86
 2424.14  317.12 2427.54  317.33 2435.41  318.26 2438.07  318.44 2440.66  319.22
 2443.28   321.2 2445.91  321.69 2451.15  321.81 2462.87  321.81 2472.15  321.75
 2474.77  321.61 2480.02  321.72 2482.64  322.07 2485.27  323.31 2487.89  323.95
 2493.78  323.92 2498.38  322.93 2501.74  323.04 2503.73  322.84 2506.26  323.23
 2511.69  322.95 2516.75  322.91 2521.64  322.48  2532.5  322.41 2537.74  322.46
 2550.86   322.4 2553.49  322.22 2556.11  321.83 2558.74  321.71  2567.4  321.58
 2571.86  321.45  2577.1  321.46 2584.98  321.33  2587.6  321.71 2592.85  321.51
 2598.09  321.08 2600.72  321.19 2611.21  321.84 2619.09  322.09 2629.58  322.28
 2632.21   322.5 2634.83  322.49 2637.45  322.14 2645.33     322  2653.2  321.75
 2661.07  321.38 2671.57  321.09 2676.89  321.57 2694.74  322.28  2697.8  322.79
 2703.05  322.35  2708.3  322.22 2716.17  322.34 2726.67  322.59 2734.54  322.59
 2737.16  322.66 2750.45  322.66  2763.4  322.81 2768.36  323.31 2774.33  323.04
 2784.27  323.31 2794.89  323.53 2812.13  323.76 2826.38  324.07 2831.63  324.36
 2834.25  324.62  2839.5   324.8 2842.12  324.62 2849.99  324.47 2860.49  324.58
  2875.8  324.54 2879.78  324.38 2891.72  324.62 2897.23  324.54  2905.1  324.55
 2910.34  324.06 2915.59  323.69 2918.22  323.64 2923.55  323.31 2928.71  323.19
 2936.58  322.65 2941.83  322.76

Manning's n Values        num=       7
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
       0     .06     926    .035 1561.13     .03  1702.4     .15  2028.2     .03
 2062.81    .035  2375.4    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          926  2375.4              380     280     255             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0  648.46     323       F
 1699.64 2941.83   322.2       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 310

INPUT
Description: Resort West
Station Elevation Data    num=     373
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   329.1    5.08  329.21   15.37  329.76   23.08   329.9   28.78  330.25
   38.52  330.96   43.66  331.42   53.95  332.24   56.52  332.32    59.1  332.04
   61.67  331.54   66.81  330.01   71.83  328.21   79.67  325.55   82.18  324.97
   84.82  323.91   87.39  323.12   90.46  322.95   92.53  323.03  102.89  323.69
  107.03   323.7  113.24   323.5  118.26  323.06   123.6  323.06  149.12  323.56
  159.41  323.73  161.98  323.93  164.56  324.45  167.13  324.66  172.27  324.31
  185.13   323.9  187.71  323.63  195.43  323.43  210.55  323.16  223.73  323.02
  236.59  322.93   247.8  322.25  249.46  322.06  254.01  320.94  257.18  320.38
  259.75   320.2  264.35  320.27  270.04  320.24   274.7  320.53  277.76  320.96
  290.63  320.73   296.4  320.75  300.92  320.95  303.49   320.9  305.74   320.4
  311.21  319.67  313.79  319.06  318.93  319.01  324.36  319.13  334.37  319.07
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336.94	318.95	339.52	318.45	344.66	316.25	347.13	315.7	352.38	313.34
355.4	312.92	360.1	312.78	363.68	312.92	371.96	312.91	378.11	313.06
385.83	312.62	390.98	312.84	396.12	312.66	401.27	312.71	403.84	312.51
411.56	312.7	423.69	312.42	434.03	312.75	442.31	312.71	445.01	312.49
447.58	312.74	450.16	312.54	455.3	312.6	460.45	312.29	465.59	312.35
470.74	312.59	475.89	312.38	481.03	312.82	483.6	313.44	488.75	313.36
493.9	312.55	496.47	312.46	504.19	312.47	506.76	312.61	514.48	312.49
519.63	312.15	522.2	312.16	527.15	312.58	529.22	312.36	532.49	312.34
535.06	312.16	540.21	312.02	545.36	312	550.5	312.23	555.65	312.35
558.22	312.63	560.79	312.64	563.37	312.33	566.47	312.25	571.09	311.96
576.23	311.97	580.95	312.2	586.53	311.83	596.82	311.96	601.64	311.84
605.8	312.133	612.26	313.36	614.83	313.96	622.55	315.03	632.84	314.96
635.41	314.5	640.56	314.33	649.24	312.49	653.42	311.09	656	310.45
658.57	309.42	661.14	308.05	663.72	307.66	697.16	305.65	699.74	305.31
707.46	305.25	709.24	305.45	712.6	306.81	715.18	308.38	719.59	310.28
722.9	311.42	725.8	311.73	728.04	312.61	733.19	316	761.49	316
767.18	315.55	774.36	312.98	776.93	312.27	779.6	311.77	782.07	311.57
787.22	311.41	789.95	311.49	802.66	311.37	807.8	311.42	820.67	311.33
829.26	311.58	836.7	307	935	306	986.14	306	1041.08	307
1089.8	308	1129.6	317	1144.39	317	1152.6	315	1163.68	314
1219.2	314	1261.4	315	1277.2	322.5	1519.7	322.5	1589.3	321.7
1592.5	320	1605.44	315.06	1608.01	315.28	1610.59	315.26	1613.16	314.94
1615.73	314.88	1620.88	315.48	1623.46	315.45	1626.24	314.56	1627.97	313.6
1631.18	312.77	1633.76	311.78	1636.33	311.88	1638.91	312.51	1644.06	312.97
1649.21	313.01	1654.82	312.95	1656.93	313.05	1659.51	312.39	1667.23	311.06
1669.81	311.12	1672.38	310.92	1685.8	310.84	1687.83	310.61	1690.41	311.09
1692.98	311.78	1695.56	312.14	1703.28	311.12	1705.86	311.12	1713.58	312.34
1716.16	312.53	1723.88	312.17	1726.46	312.23	1731.24	312.72	1734.18	312.88
1741.91	311.83	1747.06	312.28	1753.96	311.96	1759.93	311.9	1762.22	311.79
1765.08	311.35	1770.23	312.52	1772.55	312.42	1780.53	311.82	1783.1	311.53
1790.83	312.01	1793.4	312.02	1803.53	311.82	1808.85	311.27	1811.43	311.21
1814	311.34	1819.15	311.38	1821.73	311.3	1826.88	311.78	1829.45	311.73
1832.03	311.28	1834.51	311.31	1837.18	310.96	1839.75	311.22	1844.9	311.34
1855.2	311.75	1857.78	311.96	1861.36	312.89	1863.43	313.23	1870.65	313.95
1873.23	314.34	1878.38	315.39	1880.95	315.15	1886.1	313.94	1888.68	313.53
1896.4	313.35	1898.98	313.49	1904.13	314.2	1910.93	313.56	1914.43	313.41
1917.13	313.49	1919.58	313.35	1924.73	312.54	1927.3	312.28	1929.52	312.75
1935.03	313.18	1942.75	313.54	1945.33	313.85	1947.9	313.85	1953.05	314.31
1955.63	313.78	1958.44	313.45	1965.93	313.34	1971.08	313.66	1976.23	313.63
1981.38	313.05	1986.53	313.35	1989.42	313.28	1991.68	313.05	1996.83	312.93
1999.4	313.07	2007.13	312.97	2012.28	313.32	2017.43	313.29	2022.58	312.78
2025.15	312.77	2030.3	313.67	2032.88	313.89	2034.86	313.74	2040.6	313.71
2045.18	313.52	2048.33	313.61	2053.31	314.27	2056.05	314.4	2058.63	313.72
2061.2	313.35	2063.78	313.44	2066.35	313.34	2076.65	313.69	2084.38	312.79
2089.53	313.12	2097.25	313.01	2105.08	313.61	2110.13	313.67	2112.7	313.87
2115.28	314.66	2116.9	314.934	2123	316.05	2125.58	316.86	2128.15	318.04
2130.73	318.7	2138.45	318.8	2141.02	318.77	2143.6	319.05	2151.32	320.24
2161.62	321.3	2166.77	322.4	2169.35	322.3	2171.92	322.43	2177.37	322.38
2179.65	322.17	2182.22	322.19	2192.52	322.68	2200.25	322.69	2202.82	322.44
2220.3	322.29	2236.3	322.11	2244.02	322.08	2251.72	322.53	2264.62	322.01
2272.38	321.97	2277.5	322.14	2282.65	322.12	2287.8	321.95	2292.95	322.12
2300.67	322.15	2305.82	322.36	2308.4	322.15	2315.75	322.19	2324.67	322.12
2334.15	322.43	2336.72	322.25	2341.87	322.33	2352.17	322.21	2362.47	321.25
2367.62	321.06	2375.35	320.59	2377.92	320.34	2385.97	320.79	2394.23	321.01
2406.25	321.06	2411.4	321.33	2413.97	321.29	2419.12	320.91	2424.27	320.88
2437.15	320.25	2439.72	320.38	2442.3	320.71	2447.45	320.88	2450.02	320.84
2460.32	320.94	2466.52	320.85	2474.78	320.19	2478.35	319.99	2488.65	319.59
2493.37	319.57	2499.57	319.36	2506.67	319.35	2511.82	319.19	2519.54	319.19
2522.29	319.28	2529.84	319.14	2537.57	319.29	2545.29	319.02	2550.44	319
2560.74	318.75	2568.47	318.36	2581.34	318.29	2586.49	317.64	2591.64	315.46
2594.22	315.65	2596.79	316.37	2598.71	317.38	2601.94	318.79	2604.52	319.05
2609.67	320.17	2612.24	320.33	2621.43	320.13	2630.27	320.07	2640.57	320.23
2658.59	320.31	2668.89	320.28	2681.77	320.31	2689.49	320.25	2704.94	320.3
2712.67	320.44	2717.82	320.24	2720.24	320.31				

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.06	605.8	.035	1261.4	.03	1277.2	.15	1589.3	.03
1633.76	.035	2116.9	.045						

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
605.8	2116.9	610	640	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Permanent
0	154.1	324.5	F
1277.2	2720.24	322.5	F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 300

INPUT
Description:
Station Elevation Data num= 231

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	363.62	3.76	364.84	6.33	365.19	12.17	365.6	20.43	366.25
26.94	366.72	32.09	367.16	34.66	367.3	39.81	367.77	42.39	367.38
44.96	364.93	47.54	363.01	50.11	362	55.53	359.5	60.42	356.51
65.57	352.38	68.14	350.81	72.05	348.73	75.87	346.52	80.31	343.61
83.59	341.76	86.17	339.91	88.74	338.43	91.32	337.12	93.89	335.58
99.05	332.11	101.62	330.56	106.77	327.26	109.21	325.76	111.92	323.95
114.5	322.72	117.07	321.83	119.65	321.5	124.8	321.55	135.1	321.78
138.12	321.9	147.98	322.08	155.7	322.12	158.28	322.25	160.85	322.06
166	320.39	168.58	319.77	171.15	319.37	176.31	319.45	181.47	319.31
184.03	319.33	189.18	319.17	195.93	318.67	200.06	318.45	204.19	318.46
207.21	318.71	214.93	318.96	217.51	318.94	220.09	318.77	225.24	318.77
227.81	318.61	235.54	318.54	245.48	318.5	248.41	318.58	256.14	318.49
275.26	318.38	279.32	318.42	287.04	318.18	292.97	318.17	299.92	318.06
302.5	317.97	305.07	318.04	307.65	317.92	315.37	317.92	320.52	318.23
323.1	318.31	328.25	318.71	330.13	318.36	335.98	317.51	341.13	316.98
346.28	316.88	348.85	316.63	354	315.94	356.58	315.74	359.15	315.88
363.17	315.29	366.88	314.59	369.36	314.38	374.61	314.2	377.62	313.77
382.33	313.67	384.91	313.92	387.48	314.64	389.8	315.46	392.63	316.03
397.78	315.67	400.21	315.24	404.46	313.99	408.08	313.32	413.24	313.4
415.81	313.3	418.39	312.84	420.96	312.63	426.11	312.48	428.69	312.23
431.3	311.32	436.41	311.42	438.99	311.65	441.86	311.75	446.9	311.71
449.29	311.66	457.02	312.95	462.17	312.74	464.74	312.87	472.47	312.76
474.66	312.02	477.62	311.19	480.19	310.81	482.77	310.71	485.34	310.74
487.92	310.25	490.5	309.47	493.07	308.37	497.37	306.9	498.22	306.71
503.56	306.78	507.69	306.68	511.1	306.43	515.95	305.62	518.02	305.57
523.97	306.06	526.55	306.1	529.13	306.76	532.47	307.96	534.53	308.52
539.43	308.82	544.58	308.81	547.15	308.94	549.73	308.86	552.3	308.93
554.88	309.25	560.03	309.64	570.33	311.01	572.91	311.66	578.06	312.75
583.21	314	614.11	314	682.01	310	702.35	308	774.1	308
800.65	310	937.04	310	1055	308	1260.72	308	1267.47	306
1434.35	306	1469.9	308	1503	309	1520.6	309	1554.5	309
1584.37	312	1616.02	317	1624.75	317	1652.4	314	1688.06	314
1710.25	318	1724.8	320	1737.6	327.17	1773.76	327.17	1784.38	314
1791.04	314.37	1796.05	314.74	1798.76	314.86	1803.91	314.91	1809.07	314.62
1812.56	313.82	1814.63	313.23	1816.69	312.92	1818.76	312.06	1821.94	310.94
1827.09	310.43	1832.24	310.14	1837.39	310.09	1847.66	310.19	1852.85	310.53
1860.57	310.79	1868.3	310.56	1876.02	310.65	1878.6	310.85	1883.75	311.93
1888.9	311.87	1896.63	312.01	1901.78	312.82	1904.35	313.81	1909.5	315.61
1913.73	316.89	1917.8	318.441	1922.38	319.25	1931.25	320	1943.75	326
1948.28	328.2	2020.44	328.2	2038.9	326.2	2063	327.8	2295.2	328.3
2318.9	325.5	2337.04	327.2	2407.6	327.2	2409.12	324.87	2409.51	325.25
2421.99	325.53	2424.57	325.38	2432.3	325.32	2434.87	325.43	2442.29	325.29
2447.75	325.29	2454.68	325.44	2460.87	325.47	2468.35	325.44	2473.5	325.53
2483.8	325.03	2489.78	325.09	2493.91	325.34	2500.1	324.98	2509.56	324.93
2514.55	325.21	2517.28	325.18	2519.86	325.37	2522.81	325.93	2525.01	326.07

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 2527.58  325.84 2529.01  325.56 2532.73  324.57 2535.31  324.28 2543.03  323.89
 2549.37  324.09

Manning's n Values        num=       4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
       0     .05   446.9     .06  1917.8     .05 1948.28     .15

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         446.9  1917.8             790     654     605             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev  Permanent
  1520.7 2549.37   321.5       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 290

INPUT
Description:
Station Elevation Data    num=     162
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  334.95    2.48  334.94    5.04  335.09   10.15  335.25   20.39  335.69
   25.51  335.81   35.74   335.7    41.9 335.452   43.42  335.38   45.98  335.47
   51.09   335.9   56.33  336.67   60.43  336.96   63.89  337.26   66.45  337.41
   71.56  337.81   74.12  337.94   81.44   338.2   89.48  338.53   92.03  338.56
   97.15  338.81  102.27  339.01  107.39  339.11  109.95  339.21  117.15  339.36
  122.74  339.56  128.18  339.82  140.65  340.22  145.77  340.31  150.89   340.5
     156  340.81  158.56  340.56  161.12  339.73  163.68  338.65   168.8   336.4
  171.36  335.41  176.47  333.21  184.15  330.13  188.57  328.73  194.39  326.74
  199.07   325.3  202.06  324.25  204.62  323.54  207.18  323.31   212.3  323.54
  217.41   323.5  224.28  323.38  230.21  323.22  235.33  323.36  236.17  322.59
  236.88  322.23  237.88  321.09  240.44  315.58     243  310.28  244.02  310.18
  248.12  310.78  250.68   310.8   255.8  310.47  258.35   310.5  260.91  310.35
  263.47  310.32  266.29  310.62  271.15  310.77  276.27  311.11  281.38  311.08
  291.62  310.71  296.74  310.61   299.3  310.74  306.97  310.61  309.53  310.42
  312.09  310.32  314.65  310.34  317.21  310.49  319.77  310.51  324.88  309.98
     330  310.01  333.51  310.26  335.12  310.45  342.79  310.23  347.91  310.25
  353.03  310.44  360.71  310.94  365.02  311.73  368.38  311.91  370.94  311.83
   373.5  311.49  378.62  311.09  381.18   310.6  383.92  310.27  386.29  310.17
  388.85  308.91  391.41  306.63  393.97  303.15  396.53     302  399.09  301.71
  401.65  301.92  404.21   302.6  407.03  303.05  409.32  302.93  414.44  303.16
  415.43  303.38  419.56  304.71  422.12  305.17  427.23   306.6  429.79  307.01
  440.03  308.25  445.15  308.69   447.7  308.69  450.26  308.52  452.82  308.62
  455.38  309.64  457.94  311.68   460.5     312  483.53     312  486.09  311.97
  488.64  311.01   491.2  310.39  493.76  309.98  496.32  309.72  499.45  309.55
   508.8     310   517.5     310   529.33     311  575.68     311  589.11     310
  634.91     310  816.29  308.06  821.49     308    1100     308    1145     306
 1268.05     306    1279     307 1290.11     307  1296.1     306  1318.8     306
  1332.1     307  1379.9     308 1409.83     310 1417.94     312 1429.88     314
 1485.42     314  1492.5     311  1525.3     309 1799.69     309 1817.13  313.47
 1822.25  314.57 1824.81  314.68 1829.93  315.06 1838.09  316.02 1848.88     320
 1861.13     326 1864.16   327.2  1896.4   327.2  1935.4   327.2  1977.6  326.68
  2139.7   329.3 2149.62     338 2294.09   337.2 2332.03     337  2368.4   338.7
    2444   342.3  2607.9  348.59

Manning's n Values        num=       4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
       0     .05    41.9     .06  488.64     .05  1896.4     .15

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          41.9  1896.4             695     653     645             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev  Permanent
  1725.3  2607.9   321.5       F
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CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 285

INPUT
Description:
Station Elevation Data num= 272

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	328.08	5.36	327.9	13.04	327.81	20.42	327.63	23.27	327.6
28.38	327.65	30.94	327.84	33.5	327.9	38.61	327.34	41.17	327.22
46.29	327.12	48.84	327.33	51.4	328.1	53.96	329.12	59.07	331.78
61.63	332.78	64.19	333.33	66.75	333	69.31	332.31	71.86	331.37
77.21	329.64	82.09	329.24	87.21	328.96	89.77	328.87	92.32	328.68
102.55	328.29	106.66	328.39	115.77	328.51	120.46	328.52	123.48	328.64
128.13	328.69	138.36	328.65	143.48	328.56	148.59	328.31	151.15	328.11
153.71	327.31	157.14	326	161.38	324.5	163.94	323.95	166.5	323.71
171.61	324.68	173.96	324.96	176.73	325.48	179.28	326.21	182.38	326.23
189.52	325.81	194.63	326.06	199.75	326.21	202.3	326.22	207.42	326.35
212.53	326.41	217.65	326.53	220.21	326.53	222.76	326.65	233	326.81
238.11	326.66	245.48	325.93	250.9	325.66	256.01	325.19	261.13	325.05
263.69	325.11	271.36	325.71	284.15	326.54	289.26	326.57	298.06	326.29
307.17	326.12	312.28	326.1	314.84	326.03	325.07	326.01	330.19	325.92
337.86	325.69	342.97	325.48	348.09	325.74	350.65	325.97	353.21	326.01
355.76	325.58	358.32	324.9	360.88	323.82	365.99	322.04	368.55	321.48
371.11	321.19	373.67	321.59	381.34	323.66	383.9	323.9	391.57	324.11
399.24	324	406.92	323.76	411.64	323.5	414.59	323.41	417.15	323.71
419.7	324.46	422.26	323.7	427.38	320.83	430.57	318.08	432.49	316.55
434.78	315.33	436.88	314.48	440.17	313.71	442.72	313.87	445.28	313.59
447.84	313.45	452.95	313.58	457.91	313.02	460.63	312.89	463.18	312.49
468.1	311.01	469.1	310.844	470.53	310.72	473.42	310.8	475.97	310.41
483.65	310.22	486.2	309.87	489.46	309.7	491.57	309.43	493.67	308.78
496.43	308.55	498.99	308.62	502.08	308.43	503.99	307.97	506.29	308.27
509.22	308.09	511.78	308.15	516.9	308.5	519.45	308.45	522.01	308.5
525.22	308.8	527.13	308.87	530.08	308.71	532.24	308.38	534.8	307.73
537.36	307.41	539.91	307.41	542.05	307.53	545.03	307.98	547.59	307.95
552.7	308.11	555.26	308.47	557.82	308.67	560.38	308.5	565.18	308.07
573.16	307.98	575.7	307.69	578.28	307.77	580.84	307.97	583.39	307.93
585.95	307.73	588.51	307.69	591.07	307.99	593.62	307.77	596.18	307.13
601.3	306.27	606.41	304.69	611.64	303.64	614.09	303.34	619.2	303.17
624.08	303.84	626.87	304.04	629.43	303.83	631.99	303.51	637.11	302.44
639.66	301.75	642.22	301.64	644.78	302.31	655.01	305.34	657.73	306.12
660.12	306.62	662.68	306.75	666.14	306.69	668.25	306.75	670.35	306.66
672.91	306.76	678.03	308.2	680.59	308.98	683.14	310	712.42	310
722.26	308	785	308	791.9	310	819.57	310	846.1	308
867.14	307	874.55	306	887	305.5	900.36	306	913.09	308
922	308.5	931.14	308	941.58	307	970.67	306	1030.4	305
1080.4	304.5	1127.55	305	1191.99	306	1203.67	307	1204.9	307.22
1216.37	308	1236.87	310	1271.36	312	1285	312.5	1303.5	312
1321.1	310	1379.39	308	1449.095	307	1463.37	307	1475.37	308
1492.97	310	1502	312	1508.04	312.5	1516.28	312	1521.11	310
1530	308	1663	308	1693.8	308	1700.9	307	1709.09	305
1713.308	303	1726.85	303	1742.01	305	1761.77	307	1768.82	308
1777.9	309	1829.21	310	1835.09	311	1844.41	312	1852.81	312
1866.37	311	1874.73	310	1914.03	310	1939.58	310.5	1959.11	320
1964.2	322.144	1966.47	323.1	2040	323.1	2054.18	321.3	2084.2	321
2089.85	321.9	2092.41	321.95	2094.97	322.12	2100.61	322.79	2105.2	323.15
2112.87	323.18	2117.99	323.38	2120.55	323.57	2123.1	323.96	2125.66	324.53
2133.33	325.92	2138.45	327.09	2143.56	328.19	2148.99	329.64	2151.46	330.19
2153.8	331.02	2156.35	331.36	2158.91	331.42	2161.47	331.36	2164.03	331.55
2166.58	331.93	2169.14	333.45	2171.7	334.81	2174.26	335.88	2176.33	335.45
2179.37	335.18	2181.93	335.48	2184.49	336.22	2189.6	337.38	2193.16	338.43
2197.28	339.52	2202.39	340.36	2204.95	340.7	2207.51	340.84	2210.06	341.09
2215.18	341.092	218.221	341.02						

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Manning's n Values        num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
       0     .05   469.1     .06  712.42     .05  1964.2     .15 2054.18     .05

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         469.1  1964.2              640     688     660              .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev  Permanent
  2084.22218.221   321.5       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 280

INPUT
Description:
Station Elevation Data    num=     355
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  332.56    5.17  332.57   10.16  332.16   12.86  332.01   20.99  331.83
   35.91  331.55   38.48  331.47   41.04  331.15    43.6  330.94   46.16  330.97
   53.84  330.75   74.34  330.07   79.46  329.97   89.71  329.56   94.83   329.5
  117.88  328.95  120.45  328.85  123.01     329  125.57  328.75  130.69  328.39
  135.82  328.16   143.5  327.95  146.06  327.97  151.18  327.79  156.31  327.76
  158.87  327.66  161.43  327.77  163.99  327.59  166.55   327.2   169.3  327.11
  171.68  326.93  179.36  326.75  184.49  326.95  187.05  326.99  189.61  326.78
  194.73  326.12  199.85  325.92   202.8  326.07  204.98  326.06  212.66  325.48
  217.79  325.03  220.35  324.91  228.03     325  235.72   325.2   238.4   325.2
  246.77  325.49  251.09  325.69  261.43  325.34  269.02  325.19   271.9  325.06
   276.7  324.98  281.83  324.77  286.95  324.68  294.63  324.34  302.32  324.72
     310  325.01  315.13  325.01  320.06  325.21  325.37  325.22  327.93  325.16
  333.06   324.7  338.18  324.78  340.74  324.75   343.1  324.63  358.67  324.11
   363.8  323.91  368.92  323.64  381.73  323.08  389.41  322.81  391.97  322.66
   397.1  322.53  402.22  322.28  407.34  321.79  412.47  321.53  417.59  321.17
  420.57  320.88  427.84  320.29   430.4  320.23  438.08  320.28  440.64  320.39
  448.33  320.11  450.89  320.16  456.01  320.04  461.14   319.8   463.7  319.73
  476.51  319.25  491.87  318.59     497  318.44  509.81  317.88  512.37  317.69
   516.9  317.48  520.05  317.42  525.18  317.19  527.74  317.29  532.86   318.2
  535.42  318.74  537.98  319.74  543.11  322.47  545.67  323.72   548.2 324.155
  550.79  323.83  553.35  322.81  555.91  321.69  560.87  318.53   563.6  318.13
  566.16  316.66  567.15  314.97  569.24  311.77  571.28  308.37  573.43  308.88
  578.97  309.83  584.39  309.08     586  309.09  589.21  308.61  594.34  308.44
   596.9  308.52  600.65  309.01  604.58   309.2  606.94  309.44  612.27   309.8
  615.31  309.95  622.52  309.69  625.08   308.6  627.64   308.3  629.97  308.27
  635.32  307.81  637.88   307.7  640.45  307.69  645.57  307.47  648.13  307.46
  650.69  307.67  653.25  307.51  658.38  307.36  661.38  307.18  671.19  306.97
  673.75  307.01  678.87  307.46  684.41  307.34  686.51  307.37  689.12  307.55
  699.36  307.77  701.92  307.76  704.49   307.5  707.05  307.06  709.54   307.4
  711.63  307.53  714.73  307.89  717.92  307.67  719.86   307.3  724.98  306.78
  727.54  306.82   730.1  307.01  732.66   307.3  734.67  307.27  737.79  307.09
  740.35  307.07  745.14  306.62  750.59  306.69  755.72  306.66   757.7  306.82
  761.89  306.76  766.08  306.58  773.65  307.14  776.21  307.19  778.77  306.94
  781.33   306.5  783.89  306.23  786.46   306.3  789.11  306.11  794.14  306.18
  799.58  306.15  801.83  306.37  809.51  306.39  812.07  306.34  814.63  306.44
   817.2  306.32  822.32   306.4  824.88  306.11  830.99  306.06  835.13  306.22
  837.69  306.26  840.25  306.48  845.37  307.05  847.93  307.18   850.5  306.88
  853.06  306.83  858.18  306.85  865.87  306.44  868.43  306.52  870.99  306.42
  877.06  306.55  878.67  306.53  881.29  306.34  886.36  306.34  891.11  306.48
   896.6   306.9  900.09  306.82  904.29  306.53  906.85  306.71  909.41  306.64
  912.66  306.75  924.78  306.93  932.47  306.64  935.03  306.86  937.78  306.99
  942.71  307.02  945.27  306.98   950.4  307.09  952.96  307.23  958.08  307.71
     965  307.32  968.33   307.2  975.47  306.81  978.57  306.72  981.14  306.77
   983.7  306.97  988.04   306.9  991.38  307.09  993.94  306.93  996.51  306.34
  999.07  305.99  1000.6  306.05 1006.54  306.07 1009.31  305.92 1011.88  305.68
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1014.44	304.2	1015.26	303.54	1017.35	302.17	1019.56	301.18	1021.54	300.63
1024.68	299.55	1027.24	298.96	1029.63	298.83	1032.37	298.84	1034.93	299.11
1037.49	299.54	1040.05	299.42	1042.61	299.04	1046.67	299.04	1050.3	298.92
1052.86	299.72	1055.04	300.96	1057.98	302.77	1060.55	304.24	1063.11	305.17
1065.67	305.93	1132.52	305.83	1134.83	305.75	1142.02	305	1218.35	305
1251.87	306	1259.72	307	1272.87	307	1288.32	306	1367.86	305
1505.52	306	1508.82	306.05	1513.94	305.92	1519.07	306.09	1521.63	306.12
1524.19	306	1526.75	305.66	1533.71	308	1555.17	308	1581.9	307
1687.22	308	1703.58	312	1715.73	316	1727.06	316	1738.61	312
1764.4	306	1780.91	305	1803.51	304	1825.15	304	1835.04	305
1845.02	305	1852.07	302.47	1854.94	302.68	1857.03	302.98	1859.76	303.01
1864.88	302.81	1867.5	302.42	1869.6	302.74	1872.57	302.92	1877.69	304.58
1880.25	305.14	1882.81	305.6	1887.93	305.86	1890.5	305.94	1896.95	305
1903.3	305.98	1908.43	306.18	1910.99	306.16	1917.76	306.24	1921.24	306.2
1925.13	306.38	1931.48	306.74	1936.6	306.94	1949.17	307	1951.97	307.2
1957.1	307.33	1959.69	307.28	1963.83	307.36	1972.2	307.61	1977.59	307.64
1984.77	307.83	1999	309	2001	310	2014.21	310	2021.6	310
2023.7	310	2026.26	310.27	2028.82	311.83	2036.5	315.19	2039.05	316.03
2041.38	316.48	2043.49	317.28	2046.71	318.01	2049.27	318.07	2054.37	318.42
2056.93	318.84	2059.48	318.77	2064.59	318.78	2067.14	318.88	2069.69	319.14
2072.25	319.82	2074.8	319.32	2077.35	319.03	2085.02	318.99	2094.22	319.12
2100.34	319.25	2102.67	319.25	2105.44	319.41	2113.1	319.41	2118.21	319.69
2120.77	319.5	2128.43	319.62	2133.53	319.65	2143.75	319.79	2148.85	319.82
2156.52	319.94	2166.73	319.8	2169.28	319.94	2176.94	320.09	2184.6	319.9
2189.33	319.63	2192.27	319.57	2194.82	319.4	2199.93	319.62	2202.48	319.8
2210.14	320.04	2217.8	320.1	2222.91	320.05	2228.02	319.84	2228.86	319.94

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.05	548.2	.06	1259.72	.05	1972.2	.05

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
548.2	2021.6	1135	1021	1060	.1	.3

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 270

INPUT
Description:
Station Elevation Data num= 418

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	311.5	4.03	311.65	16.61	311.94	19.12	311.97	21.64	312.03
24.15	312.03	29.18	312.16	31.7	312.19	36.73	312.32	41.76	312.25
46.79	311.94	49.3	311.84	51.82	311.69	54.33	311.61	56.85	311.5
59.36	311.42	60.08	311.37	64.39	311.01	66.91	310.91	69.42	310.97
74.45	311.42	79.48	311.69	82	311.77	89.54	311.94	92.06	312.07
94.57	312.16	97.09	312.19	99.6	312.14	102.12	312.06	104.63	312.03
107.15	311.97	109.66	311.88	112.18	311.81	117.21	311.75	122.24	311.61
127.27	311.53	129.78	311.47	132.3	311.38	134.81	311.25	137.33	311.15
139.84	311.18	142.36	311.53	144.87	312.01	147.39	312.7	149.9	313.69
152.42	314.88	154.93	315.98	157.45	317.13	159.96	318.05	162.48	318.62
164.99	318.75	167.51	318.29	170.02	317.3	175.05	314.66	177.57	313.56
179.95	312.91	182.6	312.1	185.11	311.55	187.63	311.23	190.14	311.18
191.52	311.33	192.66	311.41	195.17	311.51	196.06	311.51	197.69	311.56
200.2	311.37	202.72	311.24	205.23	311.32	207.75	311.48	210.26	311.59
212.78	311.62	215.29	311.7	217.81	311.74	220.99	311.75	222.84	311.74
225.35	311.87	230.38	311.95	232.9	312.02	235.41	312.02	237.93	311.98
245.92	312.1	248.18	312.15	250.5	312.12	253.02	312.18	255.53	312.27
258.05	312.32	260.56	312.34	264.05	312.28	265.59	312.23	270.62	312.45
273.14	312.47	276	312.44	280.68	312.47	283.2	312.43	285.71	312.47
288.23	312.56	290.74	312.78	293.51	313.12	295.77	313.37	298.29	313.79
300.31	314.03	303.32	314.27	305.83	314.64	308.35	314.52	310.86	314.22
313.38	313.85	315.89	313.36	318.37	313.13	320.92	312.84	323.44	312.68

325.24	312.46	326.85	312.3	327.5	312.19	329.77	311.98	330.98	311.89
333.5	311.35	334.3	311.14	335.32	310.81	336.01	310.63	336.57	310.57
338.53	310.25	341.04	310.03	343	309.18	346.07	307.77	347.9	307.02
348.59	306.76	349.45	306.68	350.17	306.56	351.1	306.49	356.13	306.26
358.65	306.62	361.16	307.17	361.5	307.22	363.57	307.83	364.53	307.86
366.4	307.82	368.3	307.63	369.22	307.6	370.56	307.44	371.22	307.43
372.05	307.32	372.83	307.29	373.74	307.14	376.25	307.23	378.77	306.35
379.63	305.86	380.52	305.46	381.28	305.05	381.89	304.89	384.16	304.39
386.43	304.04	388.69	303.57	391.34	303.06	391.82	302.94	393.23	302.76
394.65	302.31	395.49	301.98	396.37	301.71	397.47	301.86	397.76	301.86
398.89	302.06	400.02	302.49	401.4	303.07	402.29	303.13	403.12	303.04
403.92	303.07	406.43	303.47	406.82	303.47	408.77	303.14	408.95	303.13
411.46	302.35	413.98	302.35	419.01	302.5	420.42	302.42	424.04	302.26
426.55	301.75	427.22	301.74	429.07	301.65	431.58	301.9	434.1	302.29
436.29	302.2	436.61	302.16	439.13	301.98	439.85	302.13	440.82	302.4
441.64	302.57	444.16	303.14	446.67	303.42	449.19	303.32	451.7	302.62
453.97	301.69	456.73	300.53	459.25	299.76	461.76	299.35	463.48	299.2
466.79	298.87	469.31	298.5	471.82	297.98	472.55	297.86	474.81	297.57
476.85	297.34	479.37	297.19	481.88	297.12	484.4	297.09	489.43	297.09
491.94	298.11	494.46	299.66	496.97	300.43	499.49	300.96	502.01	301.63
504.52	302.39	507.03	303.35	509.55	304.95	539.73	305.61	540.54	305.27
541.55	304.77	542.24	304.48	544.76	303.76	547.27	303.25	549.79	302.53
552.3	302.08	554.82	301.81	559.85	301.45	561.7	301	575.22	303
579.77	304	582.78	305	604.98	305	617.73	306	624.68	308
639.49	308	647.38	306	658.82	305	773.22	305	776.14	299.81
778.85	300.07	780.76	300.32	783.69	300.5	786.2	300.56	788.72	300.72
791.23	300.96	794.36	301.36	796.26	301.63	801.16	302.46	803.81	303.02
806.32	303.44	808.84	303.71	810.22	303.74	812.49	303.67	813.87	303.57
816.38	303.34	818.9	303.15	821.41	302.91	823.93	302.39	831.47	300.23
836.5	298.74	839.02	298.74	841.53	298.89	844.05	299.36	846.56	299.95
849.08	300.36	851.02	300.47	854.11	300.54	856.62	300.5	859.14	300.37
862.35	300.29	864.62	300.28	866.68	300.39	869.2	300.26	871.71	300.09
874.23	300.16	874.9	300.23	875.95	300.41	876.74	300.48	879.26	300.32
881.77	300.46	885.01	300.81	886.2	301.09	886.8	301.16	887.28	301.15
889.32	301.2	889.55	301.23	891.85	301.35	894.35	301.52	896.86	301.85
899.38	302.54	901.3	303.229	901.89	303.44	904.41	304.47	906.92	305.85
909.44	307.53	909.94	307.79	911.95	308.72	914.47	309.28	916.98	309.24
919.5	309.16	921.27	309.15	923.54	309.11	927.04	309.01	929.56	309.06
932.07	309.18	937.1	309.31	939.62	309.45	944.65	309.79	949.68	310.22
952.19	310.41	954.71	310.56	957.53	310.69	959.74	310.83	962.07	310.9
964.33	310.84	966.6	310.75	968.87	310.63	972.31	310.38	973.4	310.32
977.34	310.14	979.86	310.08	982.37	310.12	984.73	310.19	987	310.22
992.43	310.35	994.95	310.44	998.33	310.65	999.98	310.73	1002.49	310.95
1005.01	311.09	1012.55	311.78	1016.46	312.03	1020.1	312.23	1022.61	312.42
1025.13	312.67	1030.16	312.9	1032.67	312.96	1035.19	313	1036.86	313.09
1040.22	313.2	1045.25	313.34	1053.57	313.51	1055.01	313.52	1060.32	313.77
1062.83	313.92	1065.34	314.19	1067.85	314.57	1072.87	315.46	1075.38	315.88
1077.89	316.24	1080.4	316.5	1082.91	316.73	1085.42	316.89	1089.91	318
1093.173	320	1106.39	319.75	1119.34	320	1123.66	318	1128.08	316
1128.09	315.17	1130.6	315.16	1133.11	315.18	1135.62	315.34	1137.97	315.68
1140.28	316.07	1143.15	316.62	1144.89	316.9	1148.17	317.29	1150.68	317.64
1153.19	318.16	1161.02	319.73	1163.23	320.12	1165.74	320.67	1168.25	321.25
1170.76	321.86	1173.27	322.52	1175.78	323.04	1178.29	322.95	1180.8	322.81
1184.06	322.87	1190.84	322.88	1193.28	322.94	1195.86	322.97	1200.88	323.11
1203.39	323.08	1205.9	323.1	1211.72	323.25	1215.94	323.38	1218.45	323.41
1220.96	323.38	1223.47	323.46	1228.49	323.46	1231	323.44	1233.51	323.44
1243.55	323.47	1248.59	323.41	1250.89	323.4	1253.59	323.37	1256.1	323.37
1261.12	323.39	1263.63	323.53	1266.14	323.4	1268.65	323.19	1271.16	322.96
1273.94	322.73	1276.18	322.38	1278.68	322.19	1280.85	322.18	1283.7	322.07
1285.46	321.83	1286.21	321.69	1288.72	320.97	1291.23	320.78	1293.74	320.73
1294.68	320.68	1295.38	320.59	1296.98	320.49	1298.14	320.52	1298.76	320.49
1301.27	320.62	1303.9	320.66	1306.14	320.74				

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.05	343	.06	575.22	.05	901.3	.05	1082.91	.15

 1119.34   .05

Bank Sta: Left   Right   Lengths: Left Channel   Right   Coeff Contr.   Expan.
           343   901.3   1000   951   815   .1   .3
Ineffective Flow   num=   2
   Sta L   Sta R   Elev Permanent
       0   278.7 314.64   F
  1201.7 1306.14   333.8   F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1   RS: 260

INPUT
Description:
Station Elevation Data   num=   446

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	314.92	3.45	315.01	6.04	315.17	7.03	315.37	8.63	315.64
9.07	315.63	11.1	315.49	13.14	315.27	13.81	315.22	15.18	315.17
16.4	315.16	19.25	314.89	21.29	314.76	23.33	314.69	29.35	314.53
37.12	314.41	39.71	314.41	42.3	314.34	47.48	314.28	50.07	314.28
51.85	314.55	52.67	314.69	55.26	315.25	57.85	315.78	60.44	316.08
63.03	316.68	65.62	317.52	68.21	318.28	73.39	319.57	76.31	320.2
78.57	320.6	81.16	320.96	83.75	321.1	86.34	321.04	88.53	320.94
91.52	320.77	94.11	320.67	96.6	320.51	100.76	320.28	104.47	320.05
107.06	319.93	109.65	319.74	112.24	319.59	119.09	319.12	123.17	318.89
127.79	318.56	130.38	318.4	132.97	318.17	135.56	317.9	138.15	317.65
141.51	317.29	151.1	316.35	151.69	316.3	153.69	316.19	155.77	316.1
157.81	316.04	158.87	315.98	164.05	315.03	166.64	314.89	169.23	314.79
171.82	314.81	174.11	314.87	177.01	314.89	179.6	314.98	182.26	315
184.78	314.95	187.37	314.84	189.96	314.7	195.14	314.49	197.73	314.46
200.32	314.26	202.63	314.16	210.78	313.72	213.27	313.55	215.86	313.42
220.7	313.11	223.01	312.98	226.22	312.76	228.81	312.67	231.16	312.75
231.4	312.77	233.19	313.06	233.99	313.2	236.58	313.83	237.27	313.89
239.2	313.926	241.34	313.16	242.5	312.57	243.38	312.16	244.36	311.61
245.42	310.84	247.46	309.41	249.54	308	252.13	306.73	253.57	306.16
254.72	305.66	257.31	304.26	259.9	303.04	261.72	302.43	262.49	302.21
263.76	302.23	265.08	302.27	267.67	302.52	268.43	302.69	269.87	302.98
271.91	303.26	272.85	303.33	273.94	303.35	274.5	303.44	275.44	303.52
275.98	303.53	277.97	303.62	280.06	303.54	280.62	303.53	283.21	303.44
288.39	303.36	290.98	303.2	293.57	303.21	296.16	303.19	298.75	303.05
300.43	303.01	303.94	303	306.54	302.97	311.71	302.85	314.3	302.84
316.73	303.11	319.48	303.24	322.07	303.18	324.88	302.73	325.7	302.62
326.92	302.4	327.82	302.16	328.96	301.76	329.84	301.6	330.99	301.46
333.03	301.3	335.02	301.09	337.11	301.15	340.2	301.33	341.18	301.44
342.04	301.43	342.79	301.48	343.22	301.43	344.82	301.34	347.97	301.22
350.56	300.82	351.38	300.62	353.15	300.23	354.4	299.81	355.45	299.42
357.49	298.58	358.33	298.25	363.51	297.13	363.98	297.06	365.65	296.87
366.88	296.75	367.69	296.7	368.69	296.55	371.28	296.28	373.87	296.22
375.84	296.01	376.46	295.92	379.05	295.65	379.92	295.61	381.64	295.59
384.23	295.73	384.63	295.83	386.03	296.09	386.82	296.3	389.41	297.47
390.11	297.72	391.99	298.29	394.19	299.03	394.58	299.12	397.17	299.64
399.76	300.36	400.3	300.45	402.3	300.74	404.94	301.01	407.53	301.51
408.46	301.64	409.47	301.86	411.88	302	438.61	302	441.2	301.53
443.12	301.07	443.79	300.93	446.38	300.71	448.97	300.74	454.15	300.98
456.74	301.04	459.33	301.25	461.92	301.57	464.51	301.84	467.1	301.98
474.87	302.04	477.46	302.08	482.64	302.14	485.23	302.21	490.4	302.29
492.99	302.38	495.58	302.51	498.16	302.75	500.76	303.05	506.31	303.46
508.53	303.59	511.12	303.67	513.71	303.54	516.3	303.08	518.89	302.54
521.48	301.94	524.07	301.55	526.66	301.25	529.25	301.12	534.43	300.81
537.02	300.69	539.61	300.75	542.2	300.72	545.05	300.63	549.12	300.56
552.56	300.48	555.15	300.56	560.33	300.81	563.4	301.08	568.1	301.52
570.69	301.84	573.28	302.12	578.46	302.76	583.78	303.33	586.22	303.56
588.81	303.77	591.4	303.95	593.99	304.06	599.17	304.17	601.76	304.26

604.35	304.28	606.94	304.35	612.12	304.38	614.71	304.33	617.3	304.24
619.89	304.11	620.48	304.07	625.07	303.69	627.66	303.45	638.02	302.62
640.86	302.36	643.2	302.18	650.97	301.44	653.56	301.27	658.74	301.05
663.92	300.88	666.51	300.89	669.4	300.84	671.69	300.74	674.28	300.67
679.46	300.44	682.05	300.42	687.22	300.48	689.81	300.41	692.4	300.29
694.99	300.09	697.58	299.85	700.17	299.56	702.02	299.38	702.76	299.32
705.35	299.2	731.25	299.16	759.14	299.26	759.74	299.12	761.14	299.45
762.33	299.69	763.18	299.67	764.4	299.58	765.22	299.56	766.32	299.63
767.51	299.74	770.1	300.46	771.33	300.71	772.69	301.01	775.28	301.97
775.86	302.06	777.44	302.25	777.87	302.24	780.46	302.11	783.05	302.11
788.23	302.27	790.82	302.42	793.74	302.83	795.78	303.03	797.82	303.19
798.59	303.24	801.18	303.44	802	303.488	803.77	303.62	805.97	303.65
806.36	303.67	808	303.83	808.96	303.94	811.55	304.35	814.14	304.81
816.73	305.39	819.32	305.9	821.91	306.32	824.3	306.53	827.09	306.61
830.42	306.55	832.27	306.56	834.86	306.46	836.53	306.37	840.04	306.21
842.63	306.12	845.22	306.16	847.81	306.22	850.4	306.33	852.99	306.53
855.58	306.84	858.17	307.24	860.76	307.69	863.35	308.2	865.94	308.79
868.54	309.32	871.13	309.6	873.2	309.9	875.24	310.16	879.32	310.65
881.49	310.89	885.43	310.74	886.67	310.72	891.54	310.57	893.58	310.55
895.62	310.5	897.65	310.42	899.62	310.32	902.21	310.25	903.77	310.33
904.8	310.36	905.8	310.5	906.61	310.53	907.39	310.61	907.84	310.69
909.5	310.79	910.16	310.86	911.92	311.12	912.57	311.17	915.16	311.27
915.99	311.19	917.27	311.25	918.03	311.25	919.05	311.34	920.34	311.5
922.93	311.75	928.22	312.1	930.71	312.4	932.29	312.53	933.3	312.59
935.89	312.72	938.6	312.79	940.44	312.85	943.66	312.86	944.52	312.87
946.25	312.93	948.84	313.06	952.67	313.18	958.78	313.34	961.79	313.39
964.38	313.47	969.56	313.52	972.15	313.5	974.74	313.58	977.33	313.57
979.15	313.62	982.51	313.69	985.86	313.72	990.28	313.79	995.47	314.25
998.06	314.32	1000.65	314.49	1001.57	314.56	1004.9	316	1030.09	316.09
1031.04	316.44	1032.13	316.8	1034.17	317.55	1034.59	317.75	1036.2	318.64
1036.91	319.01	1039.5	319.94	1042.09	321.26	1044.68	323.16	1045.26	323.43
1046.39	324.01	1049.86	325.43	1050.47	325.56	1052.46	325.9	1056.58	326.15
1057.64	326.2	1060.65	326.2	1065.41	326.3	1070.59	326.34	1073.18	326.42
1074.92	326.44	1081.03	326.47	1083.54	326.46	1086.13	326.48	1088.72	326.55
1091.31	326.56	1096.49	326.67	1099.08	326.68	1101.4	326.66	1104.26	326.67
1106.85	326.65	1109.44	326.65	1111.59	326.63	1117.7	326.62	1119.74	326.59
1122.4	326.53	1124.99	326.5	1129.93	326.48	1135.35	326.4	1137.94	326.38
1140.12	326.28	1143.12	326.13	1146.23	325.93	1148.3	325.84	1153.48	325.68
1158.45	325.35	1166.14	324.68	1169.02	324.48	1174.2	323.92	1174.75	323.89
1179.39	323.43	1181.98	323.25	1184.57	323.42	1184.94	323.42	1187.16	323.31
1189.75	323.36	1194.93	323.44	1197.17	323.49	1200.11	323.49	1202.7	323.53
1205.29	323.53	1207.88	323.5	1209.39	323.46	1211.43	323.38	1213.46	323.28
1216.09	323.2								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.05	239.2	.06	775.28	.05

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
239.2	802	1050	1031	1000	.1	.3

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 250

INPUT
Description:
Station Elevation Data num= 310

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	318.93	4.62	319.04	12.59	319.12	15.7	319.22	18.32	319.25
20.94	319.34	23.56	319.33	27.68	319.28	31.43	319.3	39.29	319.28
44.54	319.19	47.16	319.19	50.46	319.11	52.4	319.12	55.02	319.05
62.42	318.93	65.51	318.8	70.75	318.71	73.37	318.7	75.99	318.39
78.61	317.55	81.23	316.81	83.86	316.56	85.87	316.43	89.1	316.27

91.72	315.97	94.34	315.71	99.58	315.05	102.27	314.73	106.26	314.35
110.07	314.03	112.69	313.93	115.31	313.88	120.55	313.65	125.8	313.32
130.17	313.01	133.66	312.81	144.15	312.28	152.01	311.76	154.63	311.64
159.88	311.35	166.05	311.05	170.36	310.79	172.98	310.67	175.6	310.61
183.47	310.35	188.71	310.22	193.95	310.06	199.2	309.86	204.44	309.77
207.06	309.75	212.3	309.66	214.92	309.59	222.79	309.49	225.83	309.4
228.03	309.37	233.27	309.2	239.78	308.97	243.77	308.87	249	308.69
252.12	308.54	256.87	308.38	262.11	308.25	267.35	308.04	269.97	307.99
272.59	308.02	277.05	307.81	280.46	307.78	285.7	307.48	287.61	307.43
293.56	307.16	296.19	307.07	303.56	306.76	309.29	306.62	311.91	306.53
317.16	306.41	321.49	306.27	325.02	306.08	327.64	305.97	335.51	305.53
339.41	305.06	343.39	304.62	347.36	304.05	349.35	303.69	351.26	303.3
353.89	302.88	359.79	302.39	363.27	302.18	367.01	301.85	368	301.88
369.24	302.01	372.26	302.2	374.89	302.22	376.2	302.19	380.14	302.17
385.15	302.1	388.01	301.74	395.88	301.09	398.51	301.04	403.05	300.77
405.03	300.68	407.03	300.5	409	300.22	411.03	300.15	413.03	300.02
416.84	299.88	419.04	299.75	427.04	299.35	433	299.092	450.83	298.33
453.44	298.38	455.07	298.49	459.08	298.62	461.68	298.65	463.08	298.76
463.9	298.69	468.94	296.96	471.74	296.12	474.36	295.41	476.97	295.75
479.1	296.28	479.59	296.35	481.1	296.24	482.2	296.23	486.03	295.85
487.43	295.66	489.1	295.33	491.11	295.06	495.27	294.73	497.89	294.72
503.14	294.78	505.12	295.09	505.73	295.27	508.34	296.43	509.13	296.68
511.69	297.17	513.57	297.35	516.19	297.87	517.14	298	518.8	298.33
521.41	298.56	523.14	298.41	525.15	298.18	526.64	298.09	529.26	298.1
534.48	298.08	539.71	298.09	545.17	297.99	550.17	297.95	555.4	297.95
561.19	298.1	563.24	298.19	565.85	298.24	571.2	298.24	573.7	298.19
575.2	298.34	578.92	298.51	581.54	298.58	584.15	298.5	587.22	298.79
589.69	299.08	591.22	299.31	591.99	299.36	597.24	299.16	599.23	299.1
602.45	299.27	605.07	299.44	607.24	299.41	609.24	299.24	612.91	298.86
615.25	298.77	618.14	298.73	621.25	298.61	622.91	298.44	625.26	298.28
625.98	298.19	628.59	298.04	633.27	297.9	636.43	298.08	639.28	298.03
643.28	298.28	646.89	298.37	649.51	298.16	652.12	298.06	657.3	297.94
659.96	298.02	663.3	298.24	665.19	298.34	667.8	298.58	671.31	298.71
675.32	298.89	678.26	298.85	680.87	299.01	683.49	299.09	686.1	298.97
688.72	298.9	691.33	298.91	693.95	298.92	695.34	298.97	696.56	298.98
720.09	298.98	721.369	298.98	730.543	298.924	735.77	298.78	743.61	298.59
769.02	296.5	841.63	296.5	854	298.5	866.67	298	890	295.19
893.56	295.29	895.23	295.31	897.85	295.24	900.46	295.28	903.58	295.63
905.22	295.73	910.92	295.94	913.59	296.41	916.14	297.12	917.59	297.44
919.59	297.75	921.6	297.9	923.99	297.99	925.6	298.01	927.6	297.97
929.21	297.87	931.83	297.78	938.6	300	951.75	300	960.67	298
1002.48	298	1013.9	299.754	1015.5	300	1042.19	300	1062.53	300
1066.5	300	1066.5	306	1068.5	306	1073.81	310	1077.8	312
1081.81	314	1085.28	315.5	1156.32	315.5	1174.31	313.9	1229.4	315.3
1314.98	315.3	1340.67	314	1360.7	315.6	1437.02	316	1438.65	315
1440.5	315	1440.5	313	1441.58	313.18	1442.19	313.32	1444.19	313.97
1446.81	315.54	1449.42	316.75	1450.2	317.15	1452.04	318.28	1454.2	319.78
1456.21	320.92	1457.27	321.44	1458.21	321.98	1459.26	322.81	1460.21	323.42
1461.29	324.41	1462.21	325.51	1462.49	325.67	1464.21	328.1	1465.11	329.25
1466.22	330.23	1466.79	330.34	1467.72	330.86	1472.95	330.98	1478.18	331
1480.79	331.06	1484.24	330.97	1486.96	330.94	1491.25	331	1496.48	331.12
1499.09	331.05	1504.26	331.03	1506.26	331	1509.55	331	1517.39	330.94
1520.28	330.84	1527.85	330.78	1533.07	330.72	1540.92	330.69	1546.14	330.72
1550.31	330.69	1552.31	330.73	1553.99	330.71	1556.32	330.6	1559.22	330.53
1561.83	330.37	1564.44	330.28	1569.67	330.19	1574.9	329.93	1580.13	329.81
1588.36	329.23	1590.36	329.13	1594.36	328.79	1595.81	328.72	1598.43	328.47
1601.04	327.93	1603.66	327.44	1606.27	327.22	1608.38	327.22	1611.64	327.26

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.05	696.56	.06	1002.48	.03	1085.28	.15	1441.58	.05

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
433	1013.9	700	701	615	.1	.3

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 245

INPUT
Description: Begin Grading - West Site
Station Elevation Data num= 428

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	332	2.84	332.19	5.61	331.73	8.38	331.47	11.15	331.35
13.91	331.34	16.68	331.19	22.22	331.11	27.76	330.97	36.57	330.92
47.13	330.62	52.67	330.54	55.44	330.59	58.21	330.86	60.98	331.66
63.74	332.05	66.51	331.88	72.05	331.1	74.82	331.13	78.38	331.34
80.35	331.62	83.47	331.43	85.89	330.53	88.66	328.99	91.43	328.22
94.2	326.76	96.6	325.29	98.48	324.29	102.5	322.5	105.27	322.02
110.81	321.97	122.87	321.76	138.49	321.39	146.79	321.17	157.87	320.93
160.64	320.84	180.01	320.7	182.9	320.72	193.86	320.68	204.93	320.51
218.77	320.18	224.18	320.09	232.61	319.89	246.45	319.6	263.06	319.16
267.33	319.1	274.14	318.93	279.67	319.02	282.44	318.94	287.98	319.34
290.75	319.66	296.28	319.88	299.05	320.09	304.59	320.63	310.13	320.93
315.66	321.01	317.04	320.71	323.97	318.15	327.36	317.19	329.5	317.06
332.27	317.08	357.38	317	368.26	316.94	382.1	316.9	386.89	316.81
393.17	316.75	398.65	316.84	407.02	316.8	415.32	316.63	427.63	316.42
431.93	316.38	458.69	315.94	462.56	315.75	467.92	315.56	470.69	315.66
476.22	315.73	484.53	315.91	487.3	315.91	491.66	316.05	496.21	316.07
509.44	316.44	514.98	316.44	520.52	316.71	523.29	316.79	526.05	316.64
528.1	316.82	537.13	316.66	539.36	316.75	542.66	316.7	556.51	316.75
567.58	316.72	570.35	316.78	578.65	316.84	581.42	316.78	586.96	316.96
590.62	316.81	591.89	316.86	595.26	317.4	602.26	317.7	603.57	317.54
608.08	316.74	617.41	316.59	622.95	316.31	628.48	316.16	629.41	315.13
631.37	310.13	633.16	306.96	634.02	305.95	636.79	305.58	639.56	304.94
645.09	304.22	647.86	304.06	653.4	304.17	655.7	304.089	659.43	303.85
661.7	303.59	666.93	303.22	670.01	302.56	672.56	302.12	676.31	301.19
681.08	299.79	686.62	298.64	693.2	297.84	695.4	297.65	698.83	297.15
701.22	296.89	704.46	296.87	706.33	296.77	711.53	296.66	717.07	296.31
719.84	296.21	722.61	296.46	725.09	296.35	728.84	296.63	730.91	296.98
736.45	296.78	740.1	296.9	747.61	296.93	749.48	297	751.36	296.92
755.11	296.59	758.59	296.54	761.36	296.61	766.37	296.48	769.67	296.55
771.99	296.2	773.87	295.68	775.75	295.39	777.97	295.44	780.74	295.95
783.51	296.63	785.13	296.61	788.88	296.38	791.81	296.51	794.51	296.75
797.35	297.11	800.12	297.15	802.01	296.98	803.89	297.03	805.99	297.36
808.42	297.47	811.82	297.32	818.9	296.76	825.03	296.92	827.8	296.77
830.57	295.86	835.1	295.52	843.29	295.61	847.04	295.56	849.95	295.74
858.25	296.46	863.92	297.64	866.56	298.01	871.43	298.2	880.4	298.09
882.68	298.15	885.94	297.99	888.7	297.4	891.47	296.65	894.24	294.91
897.01	292.78	899.78	291.77	901.44	291.49	904.95	291.1	908.95	291.11
910.85	291.03	919.16	291.38	924.69	291.73	927.46	292.07	930.23	292.55
933	292.91	938.53	293.22	941.3	293.57	944.6	293.75	949.61	294.29
952.1	294.81	955.14	295.33	960.68	296.05	966.22	296.28	968.99	296.5
971.75	296.56	980.06	296.47	982.83	296.5	985.87	296.35	991.13	296.54
993.9	296.58	1002.21	296.24	1007.74	295.79	1012.13	296.12	1015.89	296.33
1021.37	296.38	1027.19	296.13	1032.66	296.1	1035.43	296.16	1040.28	295.83
1043.73	295.98	1049.27	295.7	1054.8	295.28	1060.34	295.51	1065.88	295.65
1068.65	295.89	1074.18	296.73	1076.95	296.71	1085.26	296.34	1088.02	296.28
1101.87	296.43	1107.4	296.07	1110.17	296	1115.32	296.16	1118.48	296.02
1121.24	296.25	1124.01	296.36	1126.78	296.28	1129.55	296.33	1137.85	296.69
1143.39	297.12	1146.16	297.68	1160.35	297.39	1165.54	297.2	1167.85	297.25
1173.84	297.03	1177.23	297.12	1184.92	297.09	1190.45	297.31	1195.99	297.19
1201.53	296.88	1209.12	296.24	1212.6	296.01	1220.9	295.67	1226.44	295.56
1234.75	294.97	1243.05	294.53	1248.59	294.5	1254.21	294.22	1259.66	294.29
1261.65	294.84	1263.53	295.06	1267.96	295.29	1271.03	295.35	1273.5	295.72
1276.66	295.67	1279.04	295.4	1281.81	295.43	1287.7	295.836	1292.88	295.97
1295.42	295.86	1298.42	295.89	1301.18	296.15	1304.8	295.61	1306.72	295.44
1309.49	295.37	1312.26	295.62	1314.18	296.05	1317.79	296.63	1320.56	297.38
1325.44	297.46	1328.87	297.78	1331.64	297.63	1337.17	297.01	1339.94	297.08
1342.71	297.44	1346.08	297.33	1348.25	297.45	1351.01	298.15	1356.55	300.77

1359.32	301.34	1362.09	301.39	1364.86	301.25	1368.59	300.94	1373.16	300.46
1381.47	299.84	1387	299.65	1392.54	299.72	1399.37	300	1407.53	304
1411.59	306	1419.73	310	1423.82	312	1508.82	312	1526.87	312.1
1555.9	313.1	1593.3	313.1	1636.57	312.8	1640.47	314.6	1700.95	314.6
1728.04	314.2	1771.31	314.2	1843.95	313.8	1845.34	315.71	1853.75	317.19
1858.25	318.37	1860.39	319.21	1863.16	320.56	1865.4	322.04	1871.22	326.19
1873.26	327.09	1874.23	327.69	1877.01	329.75	1879.77	331.55	1882.64	333.1
1885.3	334.05	1888.07	334.39	1893.61	334.27	1895.77	334.34	1901.91	334.27
1907.03	334.3	1912.99	334.09	1918.52	334.13	1924.06	333.97	1929.6	333.97
1937.9	333.91	1955.81	333.89	1960.05	333.76	1964.35	333.72	1968.35	333.47
1973.89	332.63	1979.43	331.73	1985.82	331.12	1987.73	331	1993.45	330.46
1996.04	330.33	2004.34	330.65	2009.88	330.75	2018.18	330.91	2025.22	330.99
2034.79	331	2040.33	330.93	2045.87	330.91	2048.63	330.8	2051.66	330.78
2057.11	330.57	2059.71	330.69	2066.49	331.27	2070.78	331.72	2079.09	332.37
2087.39	333.11	2092.76	333.34	2098.23	333.4	2101.23	333.5	2109.54	333.38
2115.27	333.52	2124.65	333.5	2127.33	333.59	2135.91	333.6	2139.99	333.73
2145.29	333.81	2148.29	334.13	2151.06	334	2156.6	334.06	2170.44	334.65
2173.21	335.34	2175.98	337.02	2178.75	338.58	2181.51	339.28	2192.59	339.58
2200.89	339.16	2206.43	338.83	2211.97	338.69	2217.5	338.73	2220.46	338.62
2228.58	338.57	2234.11	338.33	2239.09	338.3	2245.19	338	2250.35	337.65
2253.49	337.36	2257.85	336.81	2261.8	336.21	2267.03	335.65	2270.1	335.38
2272.87	334.97	2281.17	335.14	2283.94	335.09	2286.71	335.16	2290.31	335.15
2306.09	334.97	2308.86	334.88	2314.39	334.84	2319.93	334.69	2325.47	334.66
2331	334.5	2333.77	334.48	2342.08	334.25	2347.61	334.06	2350.38	334.05
2355.92	333.9	2361.04	333.71	2364.22	333.68	2369.76	333.72	2375.3	333.94
2383.45	334.18	2389.14	334.31	2400.21	334.27	2414.05	333.97	2416.82	334.07
2422.36	334.84	2424.83	335.33	2427.9	335.55	2432.33	335.68	2434.21	335.89
2441.74	336.53	2444.51	336.81	2450.04	337.19	2455.58	337.39	2462.35	337.43
2469.85	337.65	2474.96	337.45	2498.59	337.08				

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.045005	655.7	.1	1173.84	.06	1325.44	.03	1423.82	.15
1888.07	.05								

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
655.7	1287.7	140.2	147.4	160	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Permanent
0	642	313.25	F
1371.7	2498.59	313.25	F

CROSS SECTION

RIVER: San Diego River
REACH: Reach 1 RS: 244

INPUT
Description:
Station Elevation Data num= 41

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	312.5	104.5	308.1	201.3	303.9	207.8	307.1	216.5	307.1
237.5	311.6	319.8	312.8	335.5	307.7	367.8	307.6	459.7	307.8
508.9	294.9	585.6	293.1	617.1	292.2	638.9	293.1	772.1	293.3
888.2	294.6	935.1	293.5	960.1	296	1085.7	298.3	1164.72	304
1176.96	310	1185	314	1189.2	316	1198.08	316	1221.2	316
1240.81	313	1324.4	313.4	1364.6	313.8	1401.66	314.2	1444.79	314.2
1501.32	316	1579.2	316	1641.1	327.9	1787.9	328.1	1896	326.7
1953.2	313.1	2022.1	315.9	2161	318.3	2292.6	325.1	2385.9	332.9
2498.4	333.7								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.1	459.7	.065	960.1	.045	1221.2	.15

```
Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         459.7   960.1            104.8   124.6     145             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0   459.7   311.5       F
   960.1  2498.4   311.5       F

BRIDGE


RIVER: San Diego River
REACH: Reach 1            RS: 243

INPUT
Description:
Distance from Upstream XS =      35
Deck/Roadway Width        =      55
Weir Coefficient          =     2.6
Upstream  Deck/Roadway Coordinates
    num=       2
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
   459.7     315   311.5   960.1     315   311.5

Upstream Bridge Cross Section Data
Station Elevation Data    num=      41
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   312.5   104.5   308.1   201.3   303.9   207.8   307.1   216.5   307.1
   237.5   311.6   319.8   312.8   335.5   307.7   367.8   307.6   459.7   307.8
   508.9   294.9   585.6   293.1   617.1   292.2   638.9   293.1   772.1   293.3
   888.2   294.6   935.1   293.5   960.1     296  1085.7   298.3 1164.72     304
 1176.96     310    1185     314  1189.2     316 1198.08     316  1221.2     316
 1240.81     313  1324.4   313.4  1364.6   313.8 1401.66   314.2 1444.79   314.2
 1501.32     316  1579.2     316  1641.1   327.9  1787.9   328.1    1896   326.7
  1953.2   313.1  2022.1   315.9    2161   318.3  2292.6   325.1  2385.9   332.9
  2498.4   333.7

Manning's n Values        num=       4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1   459.7    .065   960.1    .045  1221.2     .15

Bank Sta: Left   Right    Coeff Contr.   Expan.
         459.7   960.1             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0   459.7   311.5       F
   960.1  2498.4   311.5       F

Downstream  Deck/Roadway Coordinates
    num=       2
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     401     315   311.5   900.5     315   311.5

Downstream Bridge Cross Section Data
Station Elevation Data    num=      35
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   316.8     112     313   208.4   309.6   275.7   312.9     401   311.6
   456.4   294.1     515   292.1   549.1   291.7   573.4     293   615.3   292.5
   683.3     294     754   293.8   833.8   293.1   848.7   292.9   881.7   298.9
   900.5   309.6   933.7   309.6   993.7   311.6  1109.5   310.6  1250.9   313.9
  1354.6   317.3  1496.3   321.3  1588.4   321.9  1606.6   328.4    1621   329.1
  1637.1   321.6    1734   320.7  1900.1   316.2  2003.5   313.7  2112.3   317.6
  2154.7   320.9  2210.3     328  2252.9   327.8  2328.2   325.6  2378.2   322.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1     401    .065   900.5    .045
```

```
Bank Sta: Left   Right    Coeff Contr.   Expan.
           401   900.5             .3       .5
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0     401  313.25       F
   900.5  2378.2  313.25       F

Upstream Embankment side slope              =       0 horiz. to 1.0 vertical
Downstream Embankment side slope            =       0 horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .98
Elevation at which weir flow begins         =     315
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  5

Pier Data
Pier Station     Upstream=   543.2    Downstream=   484.3
Upstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5
Downstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5

Pier Data
Pier Station     Upstream=   626.6    Downstream=   567.7
Upstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5
Downstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5

Pier Data
Pier Station     Upstream=   709.9    Downstream=     651
Upstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5
Downstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5

Pier Data
Pier Station     Upstream=   793.2    Downstream=   734.3
Upstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5
Downstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5

Pier Data
Pier Station     Upstream=   876.6    Downstream=   817.7
Upstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5
Downstream     num=       2
    Width   Elev    Width   Elev
       7       0       7   311.5

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
```

```
       Energy
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Do not add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 242

INPUT
Description:
Station Elevation Data    num=      35
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   316.8     112     313   208.4   309.6   275.7   312.9     401   311.6
   456.4   294.1     515   292.1   549.1   291.7   573.4     293   615.3   292.5
   683.3     294     754   293.8   833.8   293.1   848.7   292.9   881.7   298.9
   900.5   309.6   933.7   309.6   993.7   311.6  1109.5   310.6  1250.9   313.9
  1354.6   317.3  1496.3   321.3  1588.4   321.9  1606.6   328.4    1621   329.1
  1637.1   321.6    1734   320.7  1900.1   316.2  2003.5   313.7  2112.3   317.6
  2154.7   320.9  2210.3     328  2252.9   327.8  2328.2   325.6  2378.2   322.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1     401    .065   900.5    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           401   900.5              165     224     270             .3       .5
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0     401  313.25       F
   900.5  2378.2  313.25       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 239

INPUT
Description:
Station Elevation Data    num=      34
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0     314    87.1   311.2   151.3   308.5   183.2   306.4   215.4   304.6
   241.3     303   280.1   296.8   314.7   293.9     339   292.9   379.6   294.4
   403.2   292.6   425.4   293.1   463.7   294.4   483.9   291.8   506.5   290.7
   551.3   292.7   620.7   293.2   628.9   295.7     642   299.6   662.4   296.3
   712.8   296.7   745.9   295.3     808   296.4   955.9   298.3  1077.2   298.6
  1096.1   296.4  1143.4   295.9  1251.8   296.4  1289.9   298.8  1360.3   299.6
  1377.5   302.7  1402.9   313.3  1426.5   325.9  1436.2   326.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1   241.3    .065     642    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         241.3     642              385     413     515             .1       .3
```

```
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0   201.8  313.25       F
   906.2  1436.2  313.25       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 230

INPUT
Description:
Station Elevation Data    num=      39
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0     312    65.6   310.4   137.8   306.5   207.5   304.8   265.4   303.7
   291.2   300.1   331.4   299.8   351.6   295.4     389   294.6   407.4   291.3
   454.2   291.8   462.3   290.4   477.6   289.8   534.6   290.2   554.3   293.8
   641.2   293.6   754.1   293.5   854.5   294.1     957   293.2   982.8   292.3
   997.6   294.6  1024.6   297.5  1044.3   298.8  1136.2   298.2  1228.8     298
  1299.8     296  1370.7     296    1433   296.9  1442.5   299.6  1459.2   298.3
  1470.3   296.6  1517.5     295  1523.6   297.2  1550.3   301.8  1578.7   304.4
    1682   307.7  1783.3   310.7  1933.2   315.6  2031.8   320.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1   331.4    .065   854.5    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         331.4   854.5              460     487     430             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0    61.8  313.25       F
  1233.8  2031.8  313.25       F

CROSS SECTION


RIVER: San Diego River
REACH: Reach 1            RS: 220

INPUT
Description:
Station Elevation Data    num=      43
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0     324    93.8   319.7   217.1   314.8   297.3     308   374.5   304.6
   393.2   301.5   420.3   299.8   439.7   295.9   465.5   296.2   484.2   299.8
   534.9   296.3   649.9   293.8   675.5   292.1   713.9   292.3   756.2     290
   798.1   288.8   821.5   289.8   922.4   289.9   957.7   292.4    1018   292.8
  1064.1   291.5  1181.5   291.6  1265.8   291.3  1290.2   294.1  1314.9     297
  1364.7   297.1  1483.6     297  1523.5     296  1602.5     296  1626.8   297.7
  1646.9   298.6  1670.2   296.6  1761.1   297.9  1817.3   299.2  1831.2   296.4
  1867.1   295.6  1937.3   298.2  2007.5   300.4  2031.6   304.8  2049.2   303.8
  2077.8   303.4  2093.8   308.1  2142.9   309.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0      .1   484.2    .065   957.7    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         484.2   957.7                0       0       0             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
       0      56  313.25       F
  1681.8  2142.9  313.25       F
```

SUMMARY OF MANNING'S N VALUES

River:San Diego River

Reach	River Sta.	n1	n2	n3	n4	n5	n6	n7
Reach 1	355	.06	.05	.06				
Reach 1	345	.06	.05	.06				
Reach 1	340	.06	.05	.06				
Reach 1	330	.06	.035	.045				
Reach 1	322	Lat Struct						
Reach 1	320	.06	.035	.03	.15	.03	.035	.045
Reach 1	315	.06	.035	.03	.15	.03	.035	.045
Reach 1	310	.06	.035	.03	.15	.03	.035	.045
Reach 1	300	.05	.06	.05	.15			
Reach 1	290	.05	.06	.05	.15			
Reach 1	285	.05	.06	.05	.15	.05		
Reach 1	280	.05	.06	.05	.05			
Reach 1	270	.05	.06	.05	.05	.15	.05	
Reach 1	260	.05	.06	.05				
Reach 1	250	.05	.06	.03	.15	.05		
Reach 1	245	.045005	.1	.06	.03	.15	.05	
Reach 1	244	.1	.065	.045	.15			
Reach 1	243	Bridge						
Reach 1	242	.1	.065	.045				
Reach 1	239	.1	.065	.045				
Reach 1	230	.1	.065	.045				
Reach 1	220	.1	.065	.045				

SUMMARY OF REACH LENGTHS

River: San Diego River

Reach	River Sta.	Left	Channel	Right
Reach 1	355	360	310	350
Reach 1	345	400	335	125
Reach 1	340	575	454	575
Reach 1	330	620	588	620
Reach 1	322	Lat Struct		
Reach 1	320	260	431	405
Reach 1	315	380	280	255
Reach 1	310	610	610	640
Reach 1	300	790	654	605
Reach 1	290	695	653	645
Reach 1	285	640	688	660
Reach 1	280	1135	1021	1060
Reach 1	270	1000	951	815
Reach 1	260	1050	1031	1000
Reach 1	250	700	701	615
Reach 1	245	140.2	147.4	160
Reach 1	244	104.8	124.6	145
Reach 1	243	Bridge		
Reach 1	242	165	224	270
Reach 1	239	385	413	515
Reach 1	230	460	487	430
Reach 1	220	0	0	0

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS
River: San Diego River

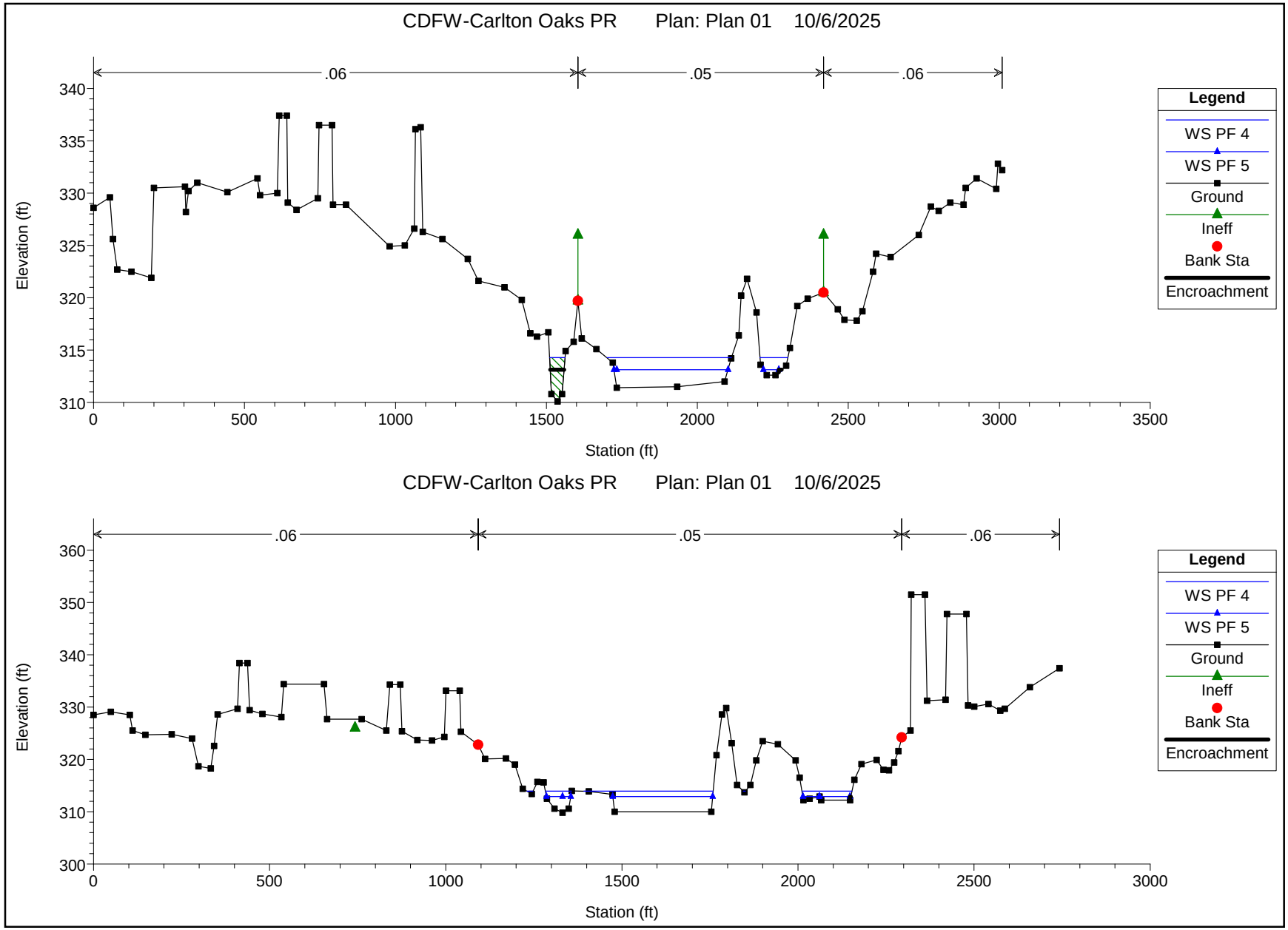
Reach	River Sta.	Contr.	Expan.
Reach 1	355	.1	.3
Reach 1	345	.1	.3
Reach 1	340	.1	.3
Reach 1	330	.1	.3
Reach 1	322	Lat Struct	
Reach 1	320	.1	.3
Reach 1	315	.1	.3
Reach 1	310	.1	.3
Reach 1	300	.1	.3
Reach 1	290	.1	.3
Reach 1	285	.1	.3
Reach 1	280	.1	.3
Reach 1	270	.1	.3
Reach 1	260	.1	.3
Reach 1	250	.1	.3
Reach 1	245	.1	.3
Reach 1	244	.1	.3
Reach 1	243	Bridge	
Reach 1	242	.3	.5
Reach 1	239	.1	.3
Reach 1	230	.1	.3
Reach 1	220	.1	.3

HEC-RAS Plan: Plan 01 River: San Diego River Reach: Reach 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach 1	220	PF 4	3120.00	288.80	293.58	291.96	293.65	0.002002	2.12	1472.29	632.34	0.22
Reach 1	220	PF 5	1420.00	288.80	292.60	290.96	292.65	0.002003	1.70	872.86	572.75	0.20
Reach 1	230	PF 4	3120.00	289.80	294.91	293.77	295.01	0.004550	2.52	1213.17	625.88	0.31
Reach 1	230	PF 5	1420.00	289.80	294.07	292.18	294.13	0.005448	2.05	702.09	593.75	0.31
Reach 1	239	PF 4	3120.00	290.70	296.42	294.40	296.54	0.002927	2.71	1179.81	609.63	0.26
Reach 1	239	PF 5	1420.00	290.70	295.39	293.65	295.45	0.002031	1.82	780.12	338.57	0.21
Reach 1	242	PF 4	3120.00	291.70	296.93	294.39	296.99	0.001410	2.03	1539.34	423.40	0.19
Reach 1	242	PF 5	1420.00	291.70	295.74	293.80	295.77	0.001034	1.36	1042.92	413.12	0.15
Reach 1	243		Bridge									
Reach 1	244	PF 4	3120.00	292.20	297.15	294.74	297.21	0.001394	1.96	1595.63	522.77	0.19
Reach 1	244	PF 5	1420.00	292.20	295.91	294.16	295.94	0.001228	1.38	1028.56	454.20	0.16
Reach 1	245	PF 4	3120.00	291.03	297.58	296.62	297.73	0.015330	3.02	1018.98	617.75	0.41
Reach 1	245	PF 5	1420.00	291.03	296.29	295.18	296.51	0.034363	3.82	372.81	280.14	0.58
Reach 1	250	PF 4	3120.00	294.72	300.34		300.40	0.001700	2.08	1519.41	658.32	0.23
Reach 1	250	PF 5	1420.00	294.72	299.40		299.43	0.001511	1.49	951.30	564.91	0.20
Reach 1	260	PF 4	3120.00	295.59	303.09		303.24	0.005102	3.11	1003.95	438.19	0.36
Reach 1	260	PF 5	1420.00	295.59	301.87		301.98	0.004648	2.60	547.01	284.53	0.33
Reach 1	270	PF 4	2645.00	297.09	305.56	302.15	305.62	0.001349	1.98	1340.32	483.16	0.21
Reach 1	270	PF 5	1230.00	297.09	303.86	301.04	303.90	0.001039	1.64	748.47	284.34	0.18
Reach 1	280	PF 4	2645.00	298.83	307.18		307.22	0.001840	1.61	1645.56	1020.61	0.22
Reach 1	280	PF 5	1230.00	298.83	305.72		305.79	0.004120	2.18	564.89	443.41	0.34
Reach 1	285	PF 4	2645.00	301.64	308.33	306.05	308.37	0.001519	1.62	1634.81	938.68	0.22
Reach 1	285	PF 5	1230.00	301.64	307.12	305.34	307.15	0.001144	1.44	853.01	470.90	0.19
Reach 1	290	PF 4	2645.00	301.71	309.35	307.37	309.39	0.001624	1.67	1587.23	1052.68	0.23
Reach 1	290	PF 5	1230.00	301.71	308.18	306.65	308.23	0.002605	1.77	695.95	627.44	0.30
Reach 1	300	PF 4	2645.00	305.57	310.23	307.75	310.26	0.001080	1.35	1962.48	982.72	0.16

HEC-RAS Plan: Plan 01 River: San Diego River Reach: Reach 1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach 1	300	PF 5	1230.00	305.57	309.19	307.08	309.20	0.000956	1.07	1152.21	698.46	0.15
Reach 1	310	PF 4	2645.00	305.25	310.59	307.87	310.65	0.000410	2.08	1272.85	335.38	0.19
Reach 1	310	PF 5	1230.00	305.25	309.46	307.26	309.49	0.000265	1.36	901.77	322.74	0.14
Reach 1	315	PF 4	2645.00	307.53	310.53	310.44	311.17	0.014182	6.50	417.45	276.76	0.95
Reach 1	315	PF 5	1230.00	307.53	309.82	309.82	310.27	0.020527	5.46	229.30	255.06	1.04
Reach 1	320	PF 4	2645.00	307.20	311.75	309.20	311.83	0.000503	2.22	1190.85	425.67	0.22
Reach 1	320	PF 5	1230.00	307.20	310.69	308.34	310.72	0.000307	1.49	827.66	320.82	0.16
Reach 1	322		Lat Struct									
Reach 1	330	PF 4	2470.00	308.50	312.23	311.54	312.56	0.004981	4.65	531.35	303.66	0.59
Reach 1	330	PF 5	1060.00	308.50	310.95	310.83	311.30	0.012569	4.79	221.50	218.57	0.84
Reach 1	340	PF 4	2470.00	309.90	313.58	311.90	313.63	0.001309	1.83	1347.22	634.85	0.22
Reach 1	340	PF 5	1060.00	309.90	312.63	311.33	312.66	0.001263	1.33	796.20	560.60	0.20
Reach 1	345	PF 4	2470.00	309.80	313.93	311.26	313.97	0.000798	1.57	1569.56	607.50	0.17
Reach 1	345	PF 5	1060.00	309.80	312.88	310.73	312.90	0.000454	1.04	1022.45	484.94	0.13
Reach 1	355	PF 4	2470.00	311.40	314.27	312.75	314.34	0.001859	2.19	1128.31	555.93	0.26
Reach 1	355	PF 5	1060.00	311.40	313.13	312.23	313.18	0.002374	1.79	591.19	428.51	0.27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.05
.06
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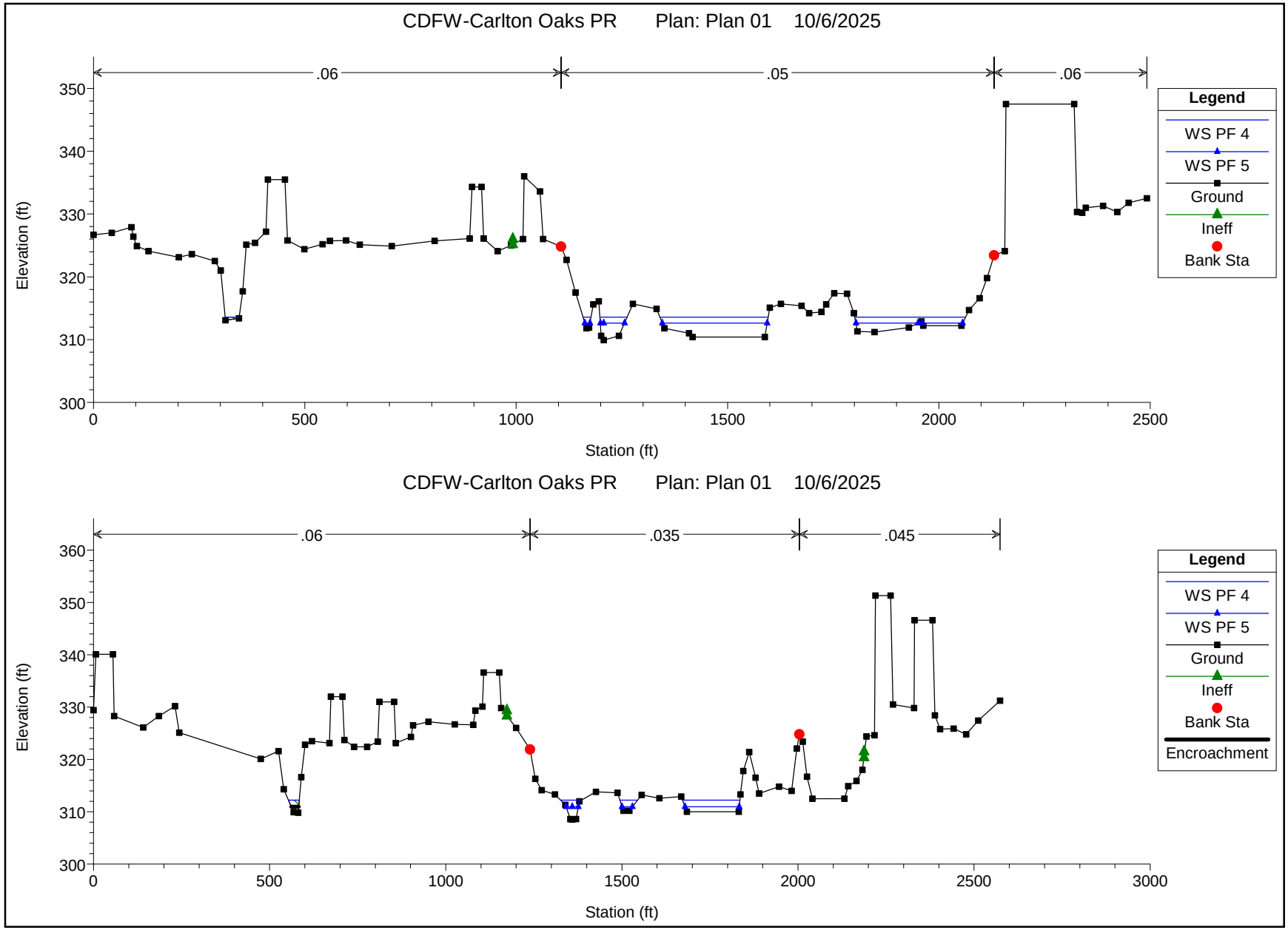
335
330
325
320
315
310
0
500
1000
1500
2000
2500
3000
3500
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
Encroachment
CDFW-Carlton Oaks PR Plan: Plan 01 10/6/2025
.06
.05
.06
Elevation (ft)
360
350
340
330
320
310
300
0
500
1000
1500
2000
2500
3000
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
Encroachment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310
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1000
1500
2000
2500
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
CDFW-Carlton Oaks PR Plan: Plan 01 10/6/2025
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.045
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360
350
340
330
320
310
300
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1500
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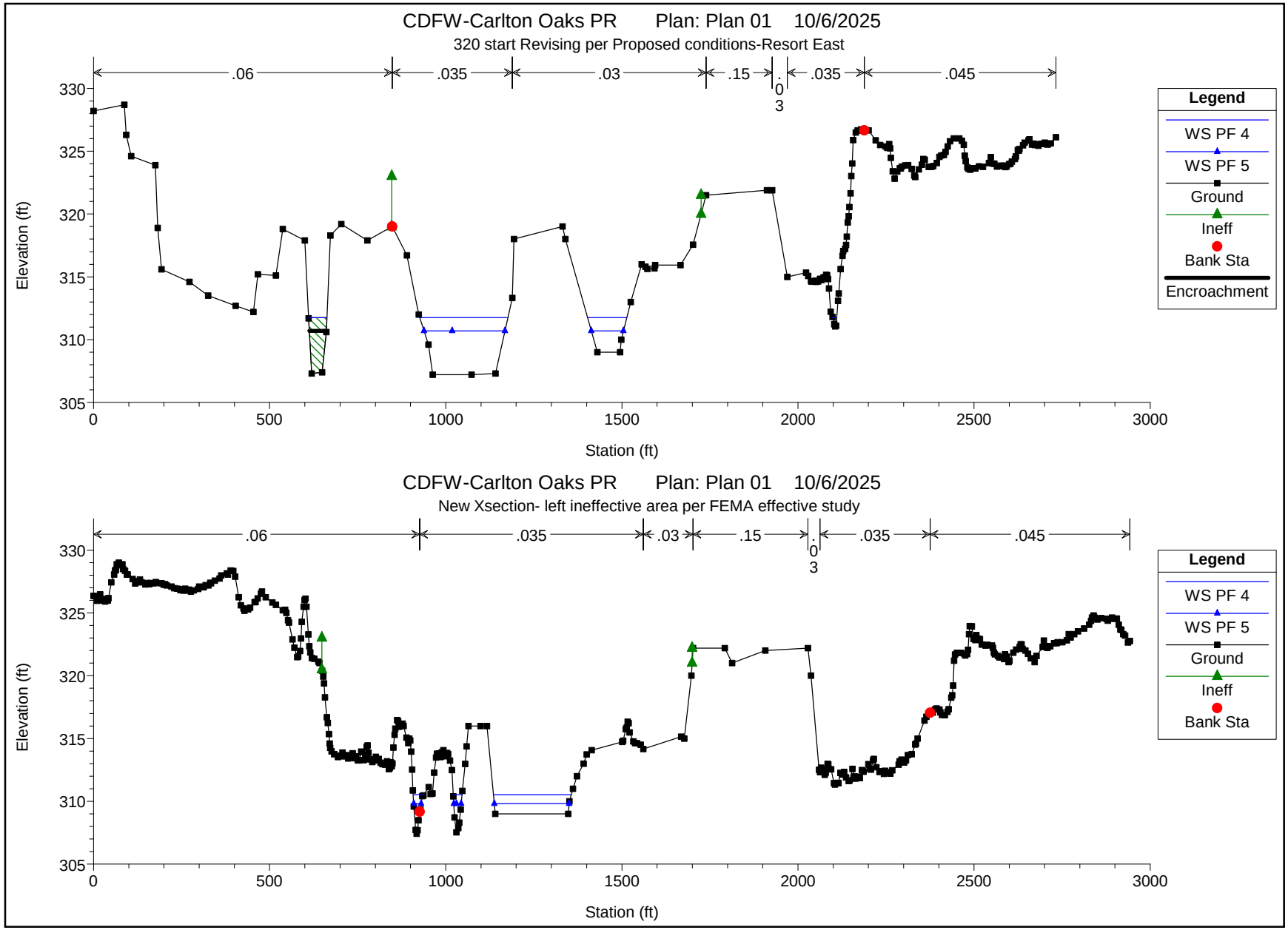
2500
3000
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
Encroachment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320 start Revising per Proposed conditions-Resort East
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.035
.03
.15
.03
.035
.045
Elevation (ft)
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325
320
315
310
305
0
500
1000
1500
2000
2500
3000
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
Encroachment
CDFW-Carlton Oaks PR Plan: Plan 01 10/6/2025
New Xsection- left ineffective area per FEMA effective study
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.035
.03
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.03
.035
.045
Elevation (ft)
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325
320
315
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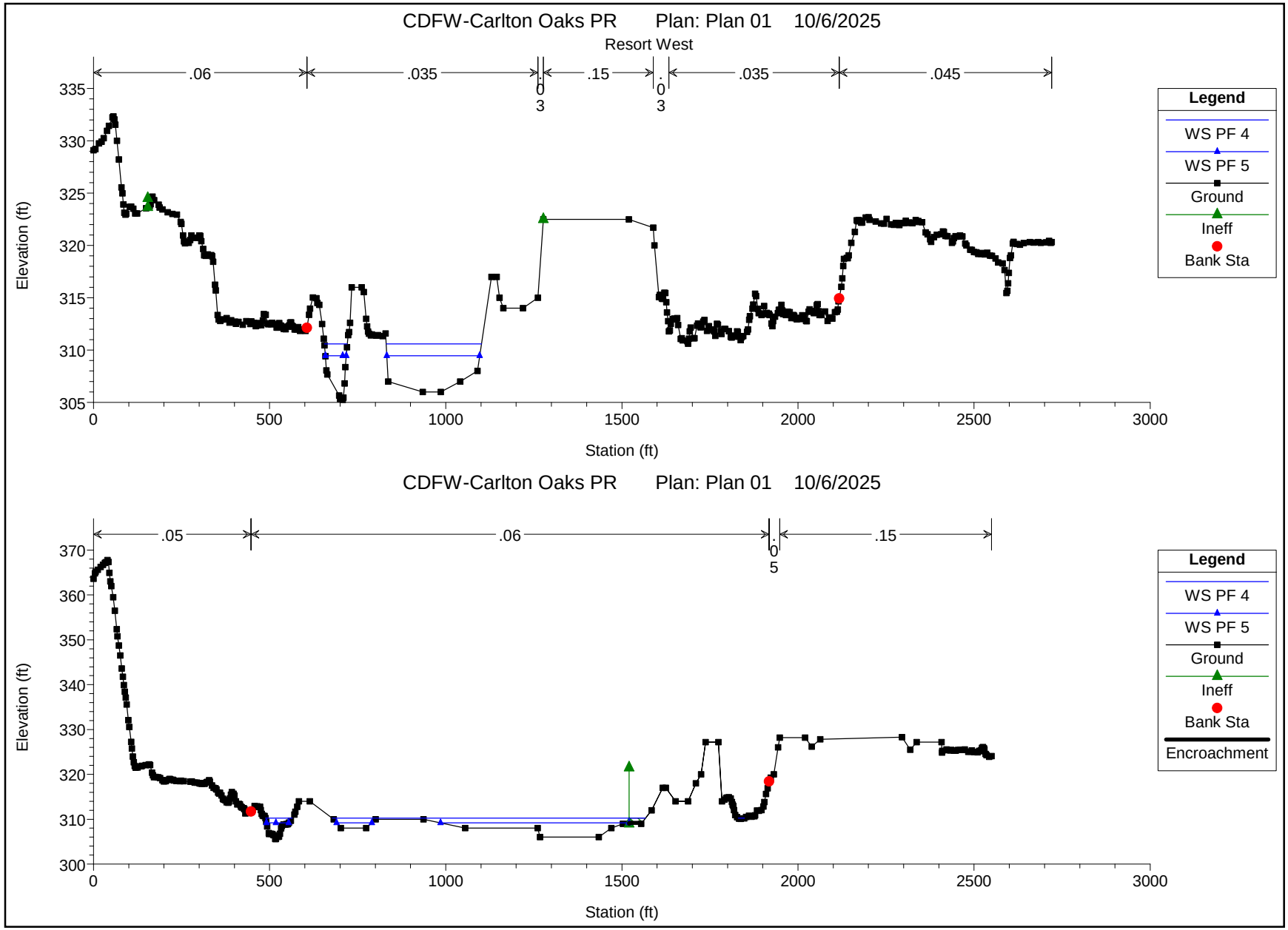
2500
3000
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta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.035
.045
Elevation (ft)
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325
320
315
310
305
0
500
1000
1500
2000
2500
3000
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
CDFW-Carlton Oaks PR Plan: Plan 01 10/6/2025
.05
.06
.05
.15
Elevation (ft)
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360
350
340
330
320
310
300
0
500
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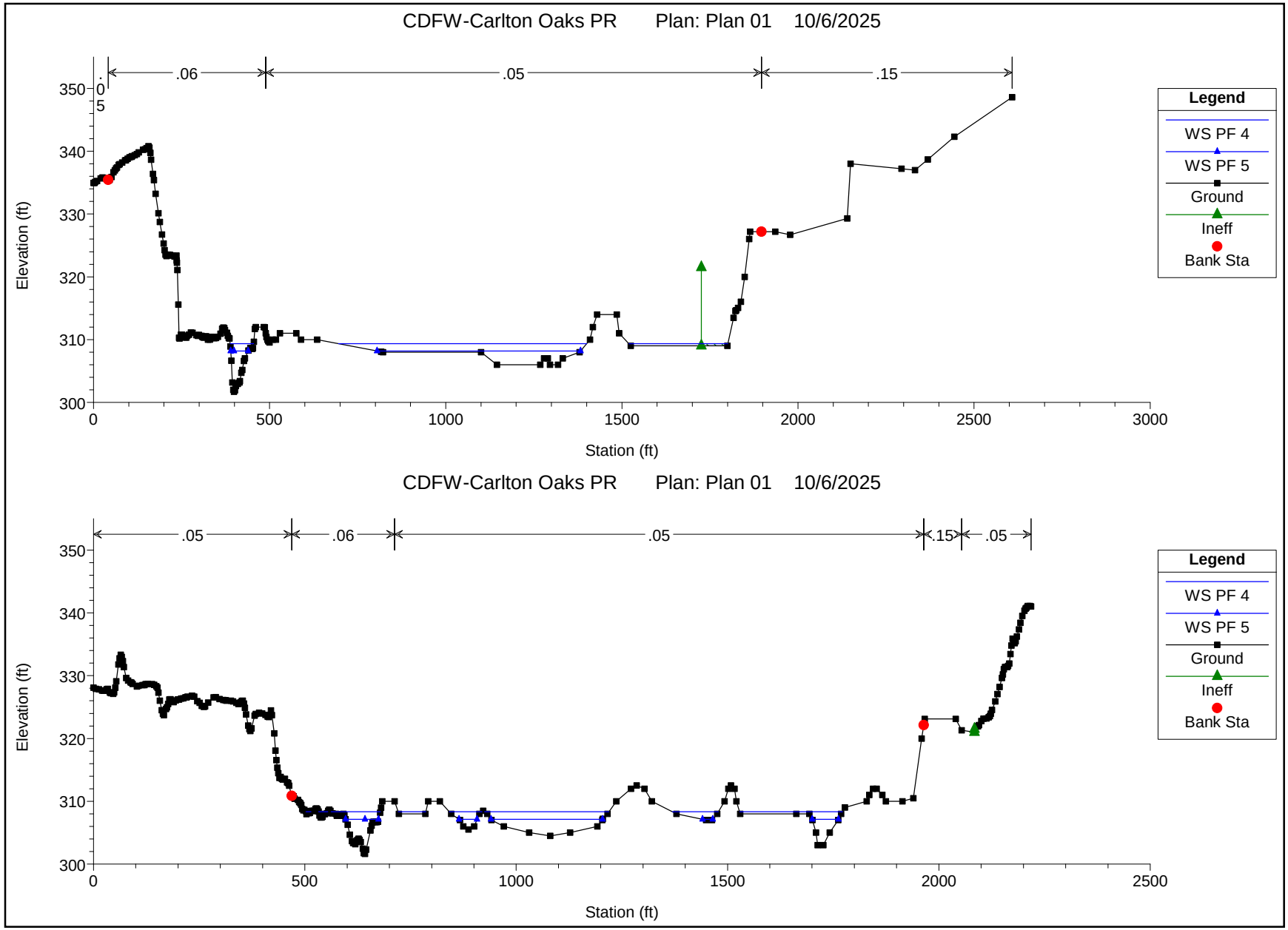
1500
2000
2500
3000
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
Encroachment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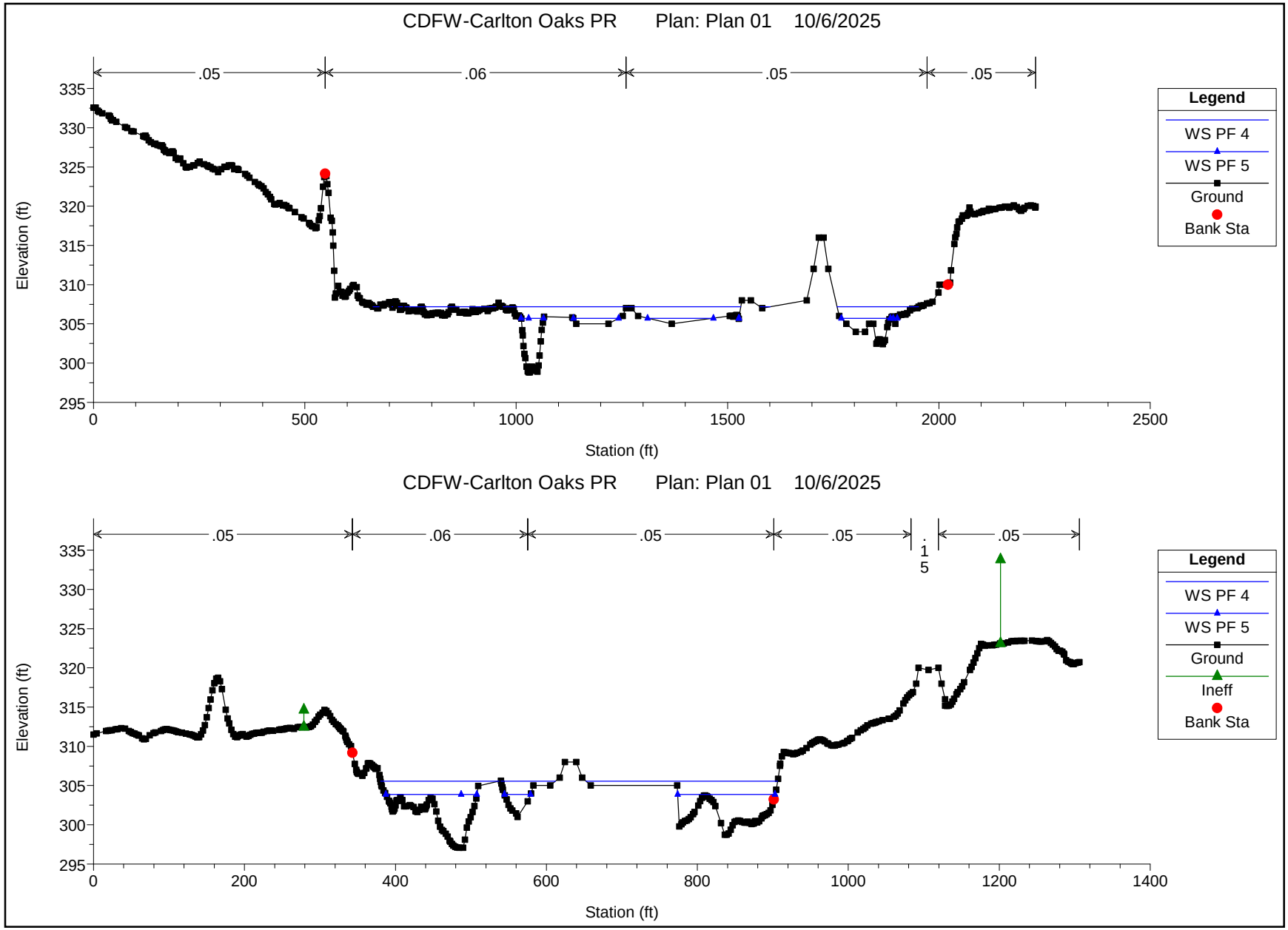
.05
.06
.05
.15
Elevation (ft)
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
CDFW-Carlton Oaks PR Plan: Plan 01 10/6/2025
.05
.06
.05
.15
.05
Elevation (ft)
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta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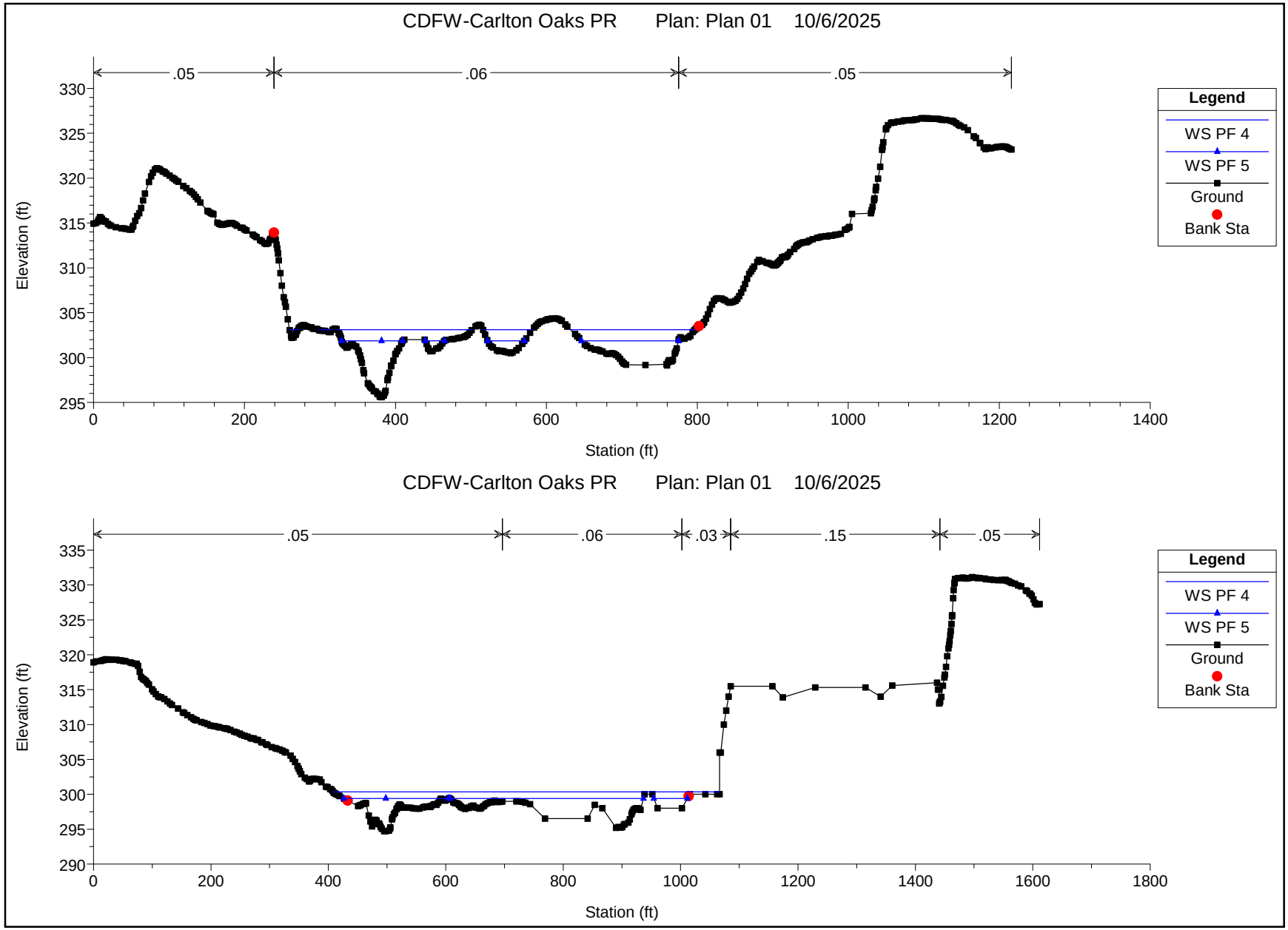
.05
.05
Elevation (ft)
335
330
325
320
315
310
305
300
295
0
500
1000
1500
2000
2500
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Bank Sta
CDFW-Carlton Oaks PR Plan: Plan 01 10/6/2025
.05
.06
.05
.05
.15
.05
Elevation (ft)
335
330
325
320
315
310
305
300
295
0
200
400
600
800
1000
1200
1400
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta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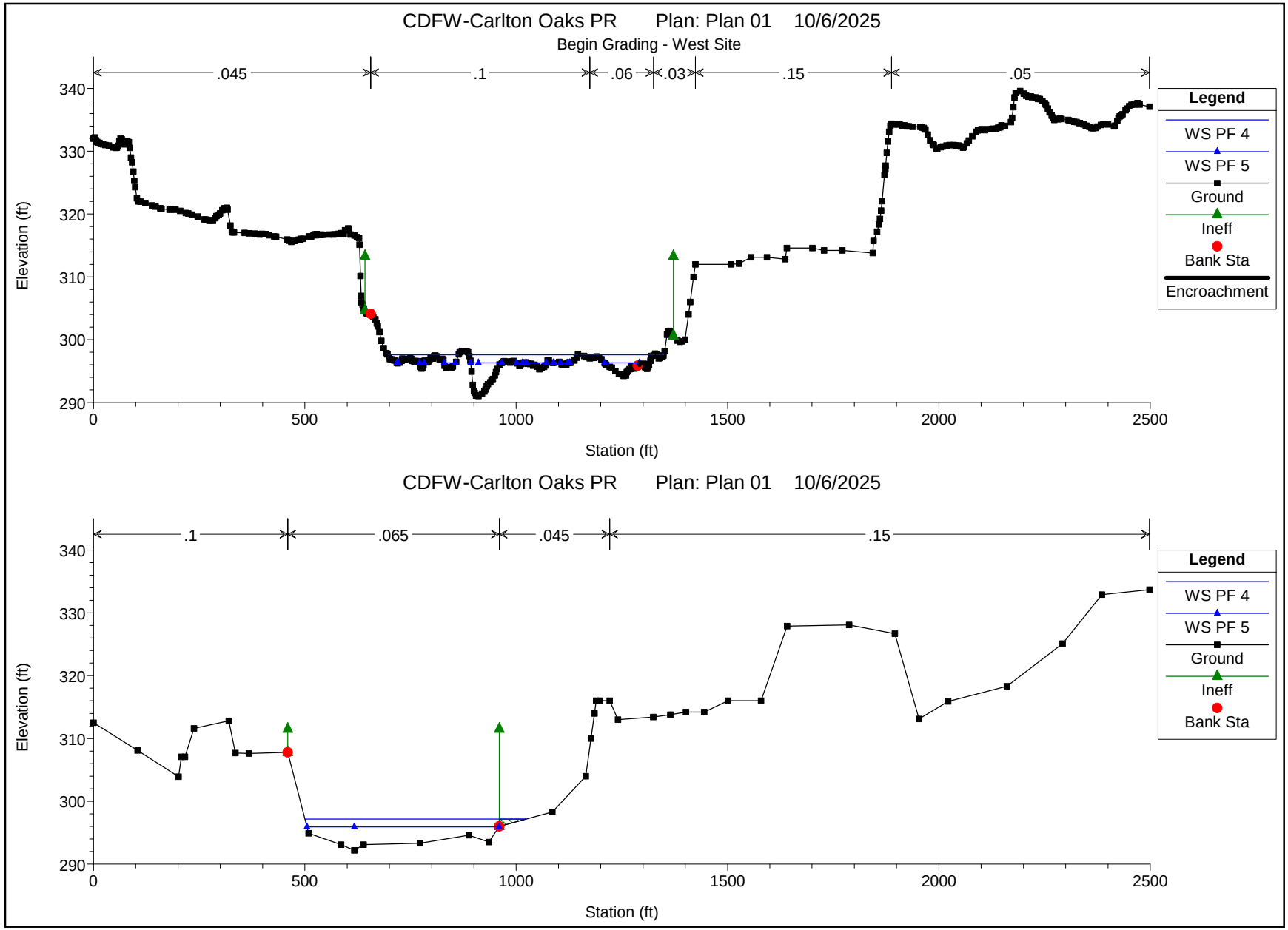
.05
.06
.05
Elevation (ft)
330
325
320
315
310
305
300
295
0
200
400
600
800
1000
1200
1400
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Bank Sta
CDFW-Carlton Oaks PR Plan: Plan 01 10/6/2025
.05
.06
.03
.15
.05
Elevation (ft)
335
330
325
320
315
310
305
300
295
290
0
200
400
600
800
1000
1200
1400
1600
1800
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Bank Sta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Begin Grading - West Site
.045
.1
.06
.03
.15
.05
Elevation (ft)
340
330
320
310
300
290
0
500
1000
1500
2000
2500
Station (ft)
Legend
WS PF 4
WS PF 5
Ground
Ineff
Bank Sta
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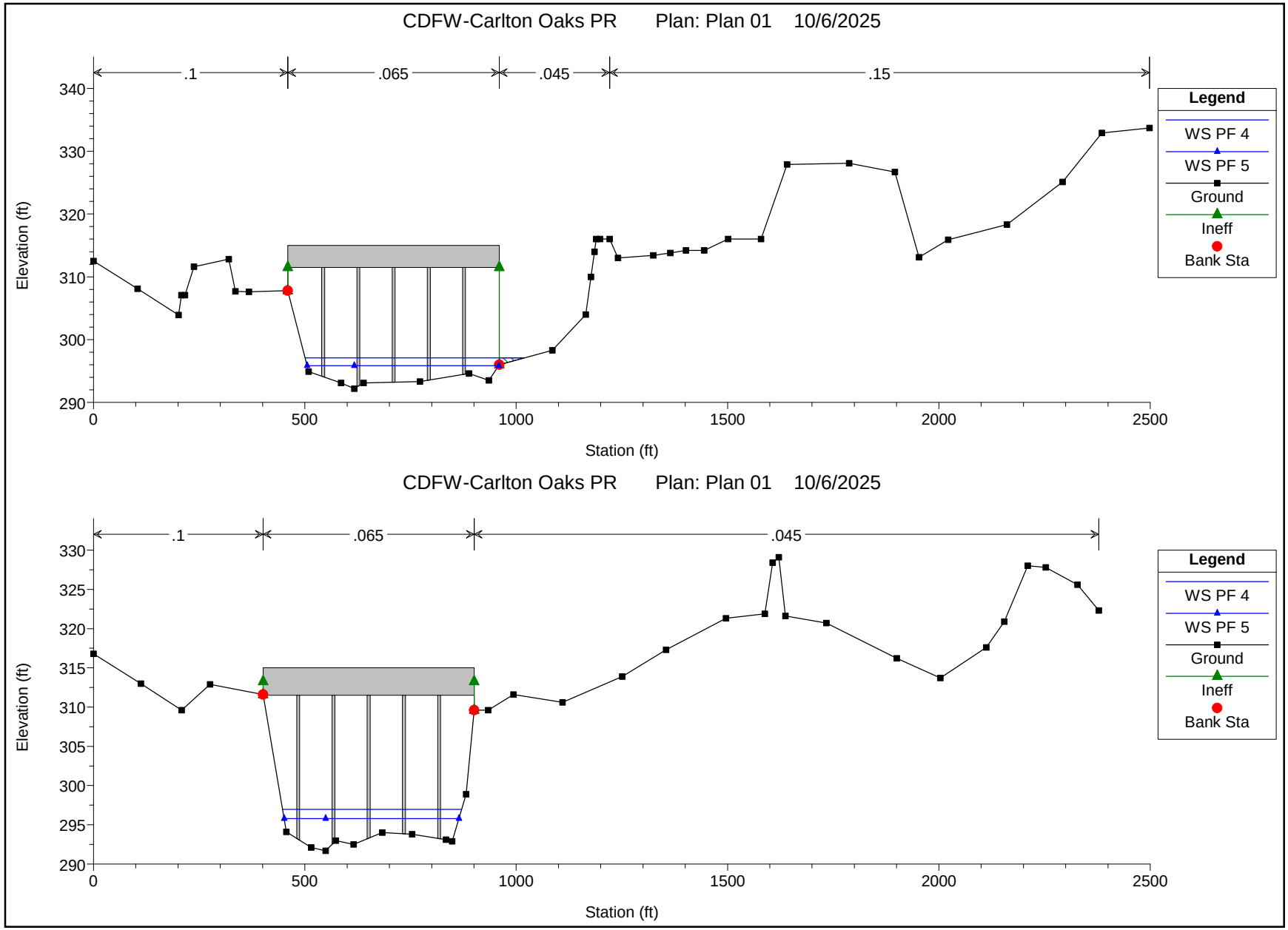
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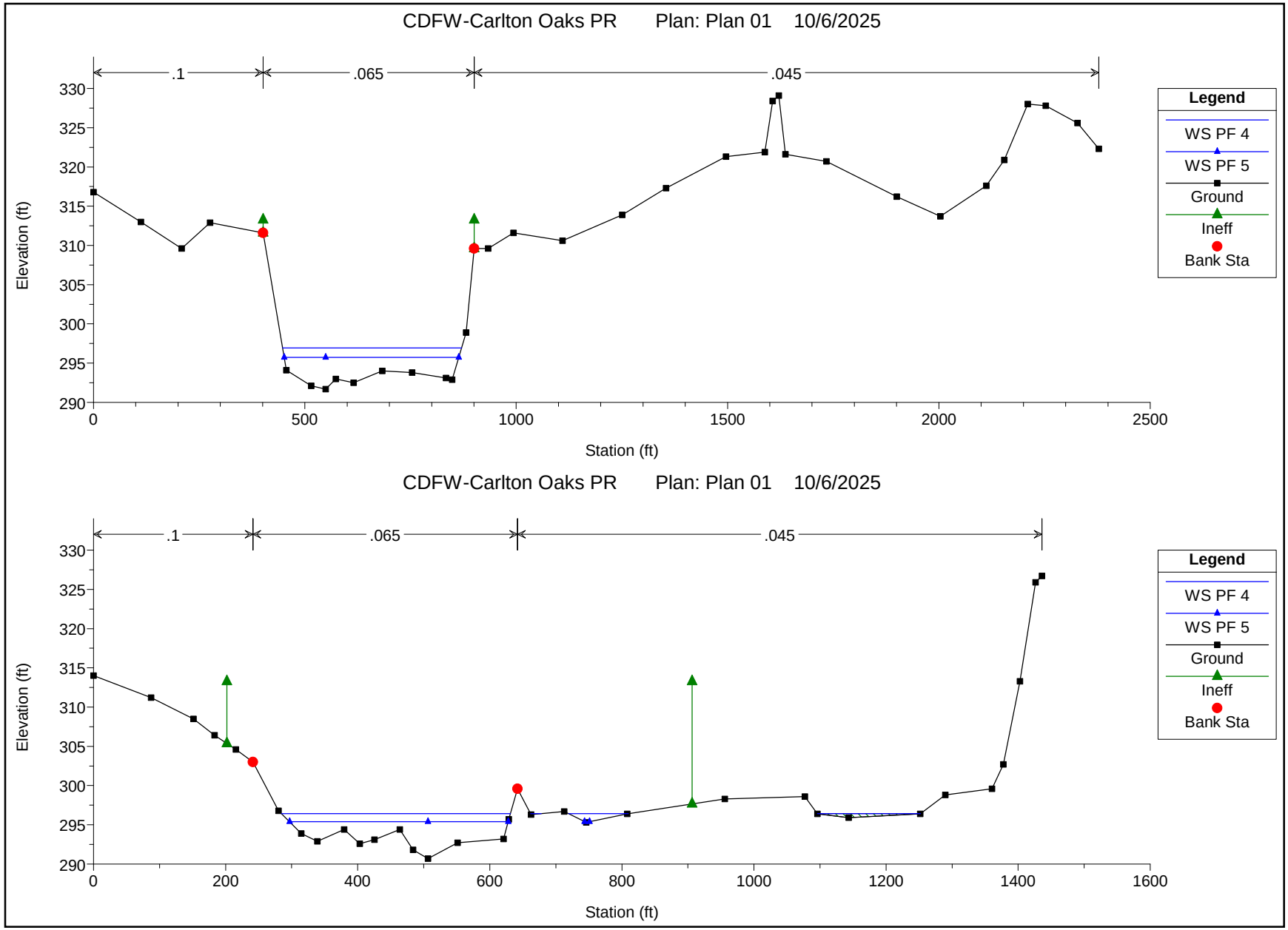
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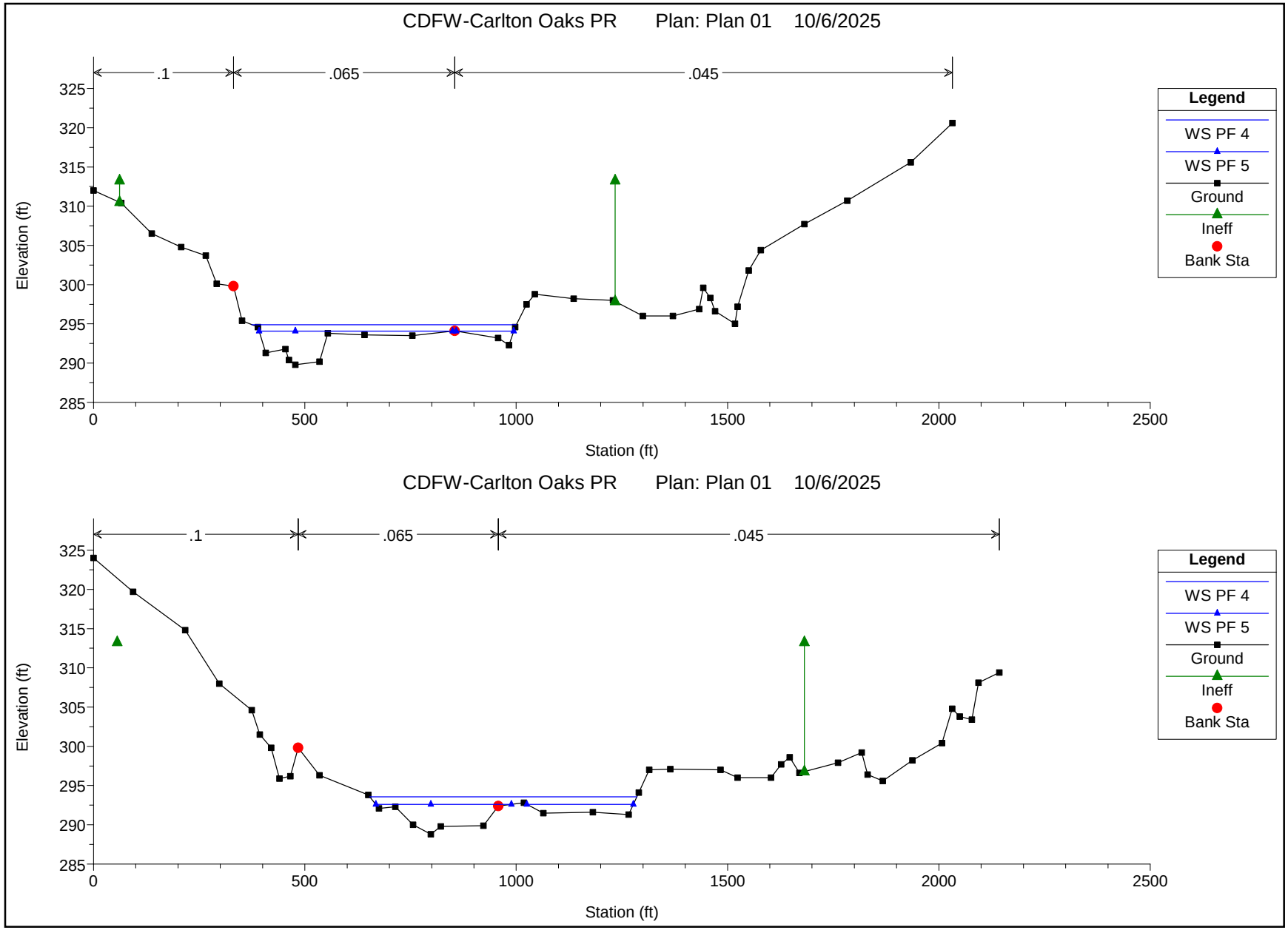
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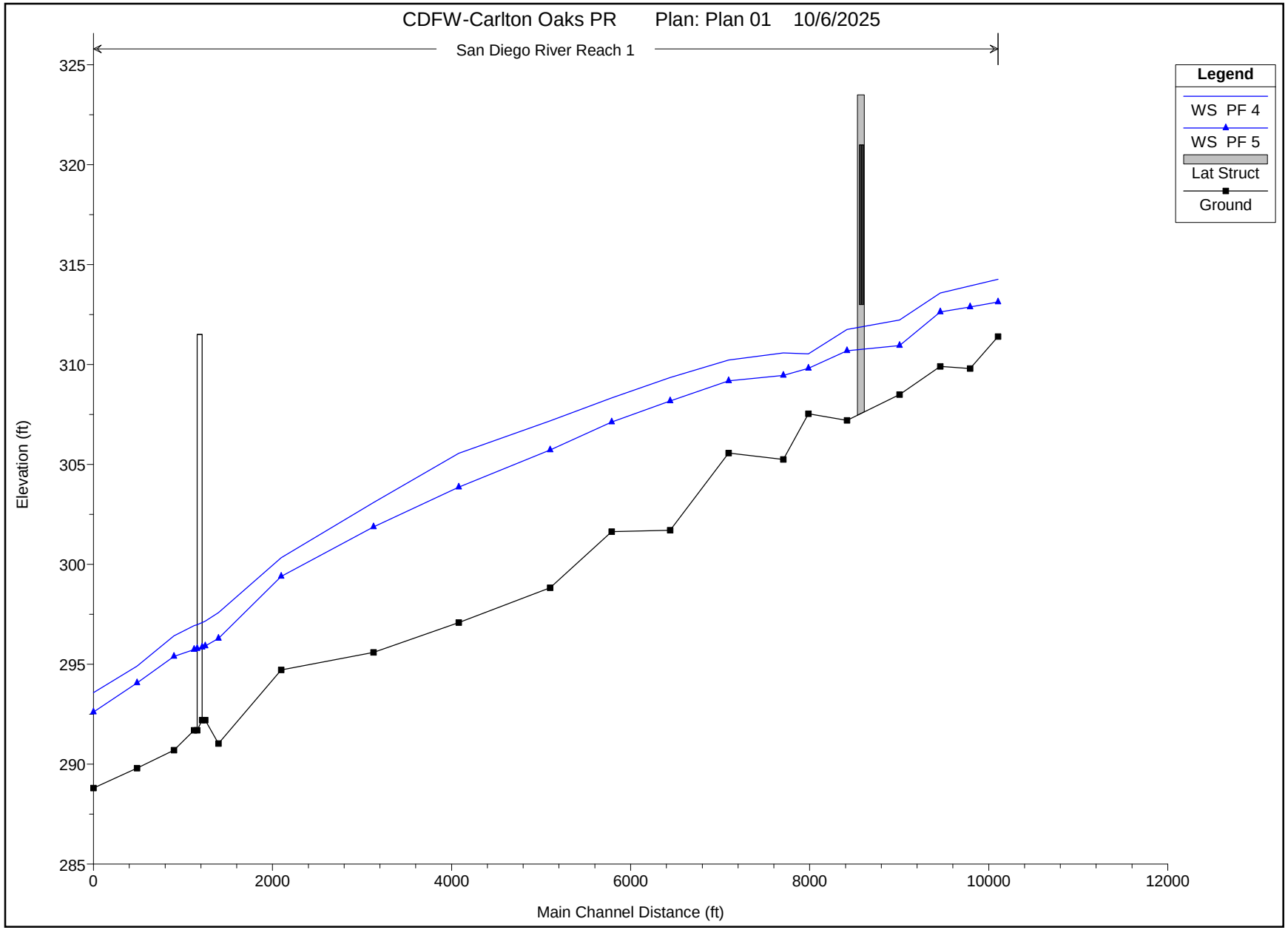
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Legend
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315
310
305
300
295
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4000
6000
8000
10000
12000
Main Channel Distance (ft)

Appendix F

Cultural Resources Inventory and Evaluation Report

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix G1

Geotechnical Investigation – Residential North and Residential West Sites

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix G2

Geotechnical Investigation – Country Club and Resort Site

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Appendix H1

Phase I Environmental Site Assessment

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix H2

Phase II Environmental Site Assessment

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Appendix I

FAA Clearance Form and Letter

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Appendix J1
Drainage Report

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix J2

Driving Range Berm Drainage and Flood Assessment

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix K

Storm Water Quality Management Plan

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix L
Flood Study (CLOMR)

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix M
Noise Assessment

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix N

Public Services Will Serve Letters

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix O1
Transportation Impact Study

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix O2

Santee Roadway Operations Memo

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix O3

Driving Range Berm Transportation Assessment

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Appendix P1
Water Study

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Appendix P2

Supplemental Water Study

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix P3
Sewer Study

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Appendix P4

Supplemental Sewer Study

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Appendix Q1

Water Availability Letter

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix Q2

Sewer Availability Letter

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https://www.cityofsanteeca.gov/active-projects-map/carlton-oaks-country-club

Appendix R1
Fire Protection Plan

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix R2
Fire Evacuation Study

Note: This appendix has not been revised from the version included in the Carlton Oaks Country Club and Resort Project Draft Environmental Impact Report (EIR), which was circulated for public review in June 2025. Therefore, this appendix is not being recirculated as part of this Partially Recirculated Draft EIR. This appendix may be accessed online at the following link:

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Appendix S

Revised Planned Development District Standards

CARLTON OAKS COUNTRY CLUB AND RESORT REVISED

PLANNED DEVELOPMENT DISTRICT STANDARDS

1.1 Allowable Uses and Development Standards

Pursuant to Section 13.19.030 A of the Santee Municipal code, allowable uses and development standards in each planned development district shall be as established through a development review permit. These allowable uses and development standards are based on the projects general plan designation of planned development and zoning of planned development district and established through development permit DR-2019-5. Uses listed below shall be allowable. This section shall not be construed to supersede more restrictive use regulations contained in the conditions, covenants, and restrictions of any property or dwelling units. However, in no case shall uses be permitted beyond those allowable in this section.

A. Condominium Lots - Permitted Uses

Residential Uses
Multifamily dwellings (Detached Condominiums)
Accessory dwelling unit and junior accessory dwelling unit[1]
Home Occupations[2]
Family Home Day Care[3]
Residential Care Facility: Accessory - 6 or less (Permitted) Non-accessory – 7 or more (Conditional Use Permit)
Accessory Uses
Animal keeping[4]
Private swimming pool or spa[5]
Accessory Structures[7]
Shade Structures such as patio covers and gazebos
Fireplace/firepit
Barbecue
Prohibited Uses
Enclosed and Covered Storage Including but not Limited to Storage, Barns and Outbuildings
RV and Trailer Storage
Ground Mounted Solar Panels
Roof Mounted Antennas

1. Accessory dwelling units and junior accessory dwelling unit standards per SMC Section 13.10.045 shall apply.

2. Home Occupation standards per SMC Section 13.06.060 shall apply.
3. Family day care standards per SMC Section 13.30.020 (H) shall apply.
4. Households pets allowed in Table 13.10.030 D. Dogs and cats over four months old (not exceeding four cats and/or dogs combined)

5. Private swimming pools and spas shall be located within private fenced yards and shall be located no closer than 4 feet from a fence to edge of water.
6. For the purposes of landscape storage and maintenance.
7. Accessory structures include but are not limited to Patio Covers, Fireplace, Gazebo, BBQ, and Shade Structures (See Figures 1 through 4). All structures shall only be located within private rear yards. A structure located within 3 feet from a fence shall not exceed 8 feet in height or more than 2.5 feet above adjacent fence height(s). A structure located within 5 feet from a fence shall not exceed 14 feet in height measured from finished grade. Total structure coverage shall not exceed 50% of the fenced rear yard area. Structures shall be unenclosed. Structure excludes additional living area, storage sheds, barns or outbuildings.

2.1. Condominium Unit Development Standards

1. Minimum Net Lot Area: None
2. Minimum Lot Width: 60 Feet
3. Maximum Lot Coverage: 60%
4. Minimum Setbacks [1]

4.1. Front: 5 Feet
4.2. Exterior Side: 5 Feet
4.3. Interior Side: 4 Feet
4.4. Rear: 5 Feet

5. Maximum Building Height: 35 Feet
6. Maximum Building Stories: 2 stories
7. Minimum Distance Between Primary Structures: 9 Feet
8. Minimum Distance Between Accessory Structures: 0 Feet
9. Private Condominium Open Space: Minimum 200 square feet per unit located within yards, patios or balconies
10. Common Condominium Open Space (sq ft. per unit): 100 Square Feet [2]

Notes:

1. As measured from the condominium residential unit boundary, see Figure 5.
2. A minimum of 50% of the required common open space must be consolidated in one area with a minimum dimension (width and length) of 20 feet; however, a minimum of 500 sq. ft. of common open space in on area with a minimum dimension (width and length) of 20 feet must be provided. Refer to Section 13.10.040 (f) for recreational amenities.

2.2 Development Standards Regulations

A. Projections into Yards and Projections Above Height Limits

Projections into yards allowed per SMC 13.10.050(B) and projections into height limits per 13.10.050(C) shall apply.

B. Fences, Walls and Hedges

Requirements regarding fences, walls and hedges per SMC13.10.050(E) shall apply.

C. Energy Conservation

Requirements regarding energy conservations per SMC 13.10.040(J) shall apply.

D. Equipment Screening

Requirements regarding equipment screening per SMC 13.10.040(L) shall apply.

E. Property Maintenance

Requirements regarding property maintenance per SMC 13.10.060(A) shall apply.

F. Vehicle and Equipment Repair and Storage

Requirements regarding vehicle and equipment repair and storage per SMC 13.10.060(B) shall apply.

G. Storage of Materials

Requirements regarding storage of materials per SMC 13.10.060(C) shall apply.

H. Parking Regulations

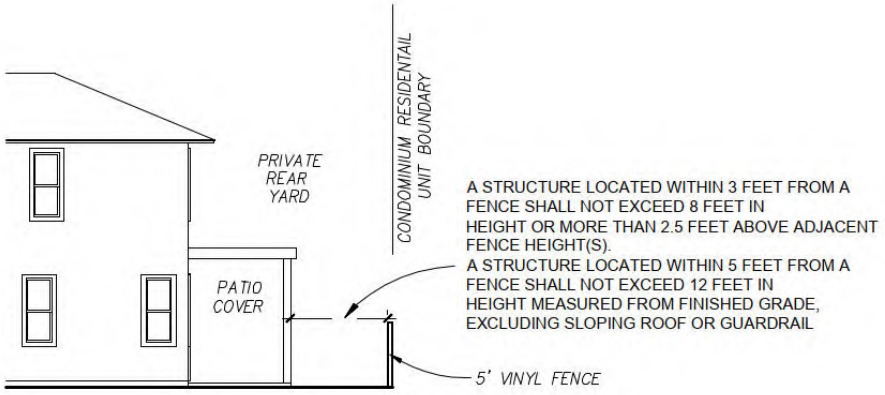
Requirements regarding parking regulations per SMC 13.24 shall apply except for SMC 13.24.030(B)(1)(d.) shall be revised to "two-car garages for single-family or multifamily dwellings shall have a minimum interior dimension of 18 feet in width and 19 feet in depth of unobstructed area provided for parking purposes, and except for SMC 13.24.030(B)(2) shall be revised to "Driveways providing access to garages shall be a minimum width of 16 feet", and except for 13.24.030(B)(4) shall be revised to "minimum length of 18 feet for garages fronting 20 foot wide private drives with 4 units or less within PA-2 50'x56' product".

I. Architecture

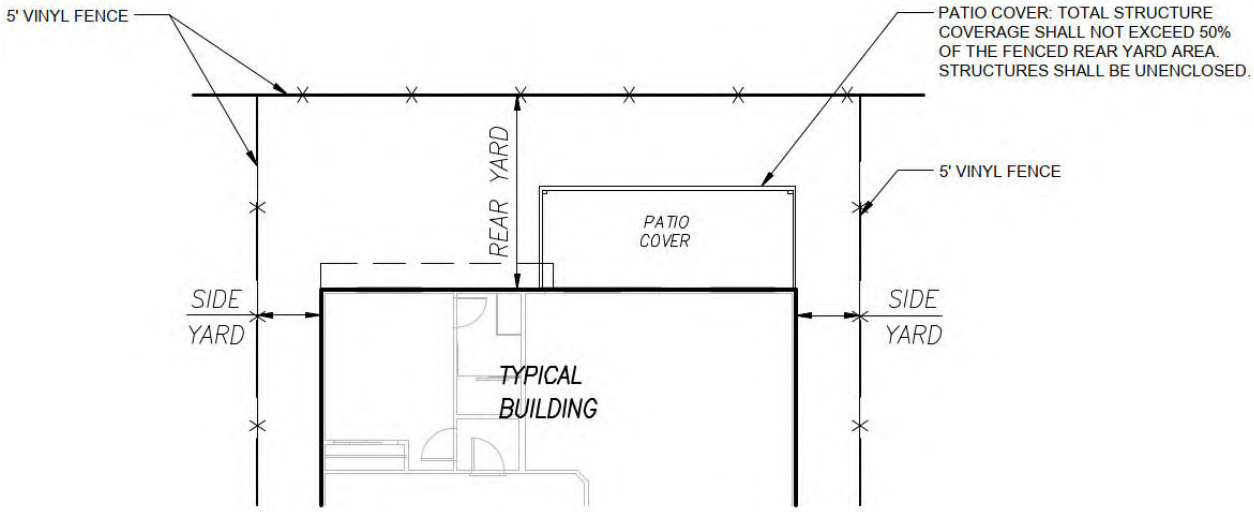
Architectural building design shall conform to the Master Development Plan Project Architectural styles and approved condominium lot and single family lot architecture.

J. Landscape

Landscape architecture shall conform to the approved landscape plan for wall and fence details, plant and tree schedule and signage.

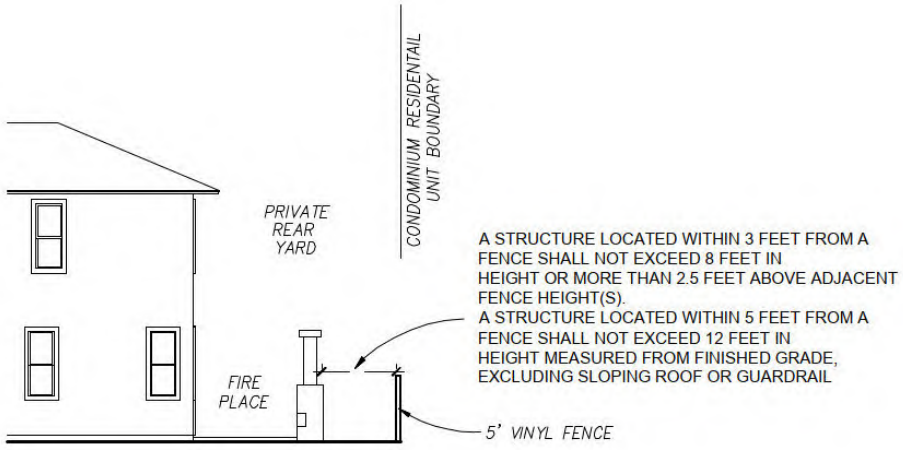


SECTION VIEW

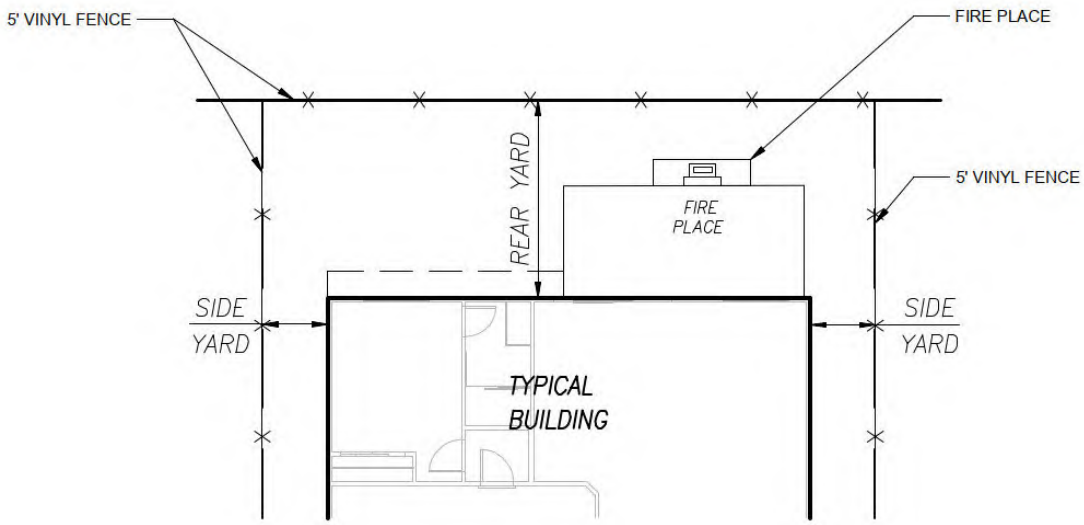


PLAN VIEW

Patio Cover
Figure 1

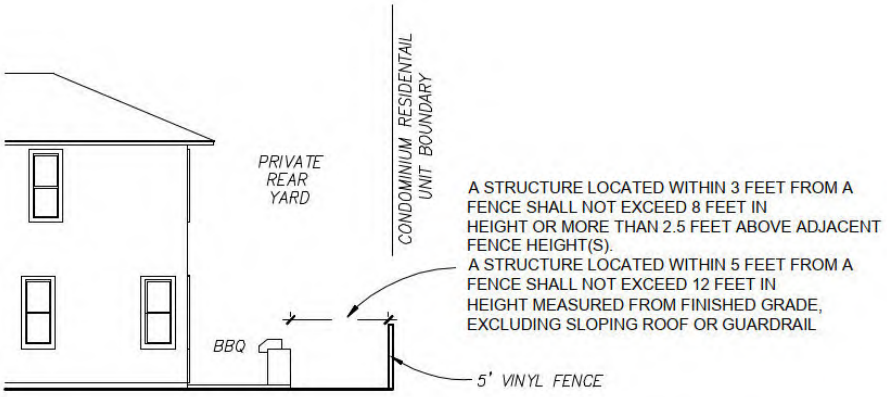


SECTION VIEW

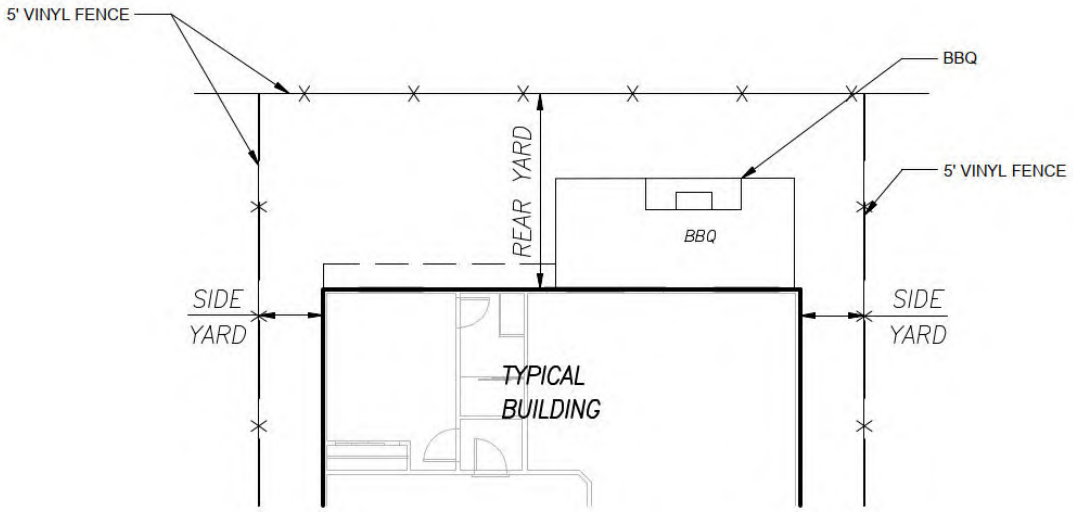


PLAN VIEW

Fire Place
Figure 2

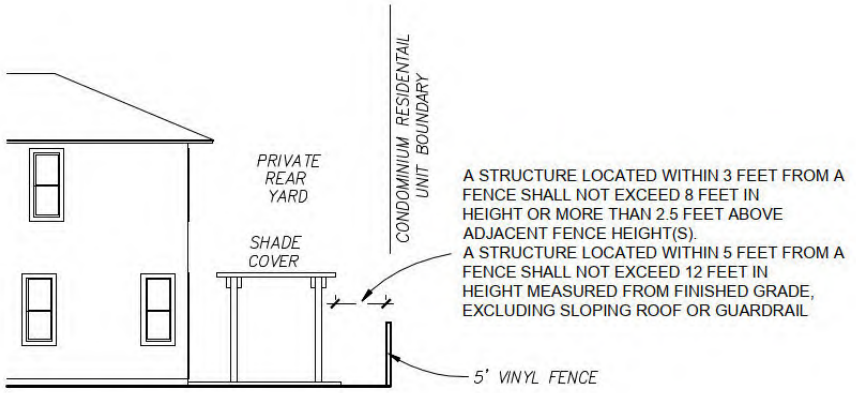


SECTION VIEW

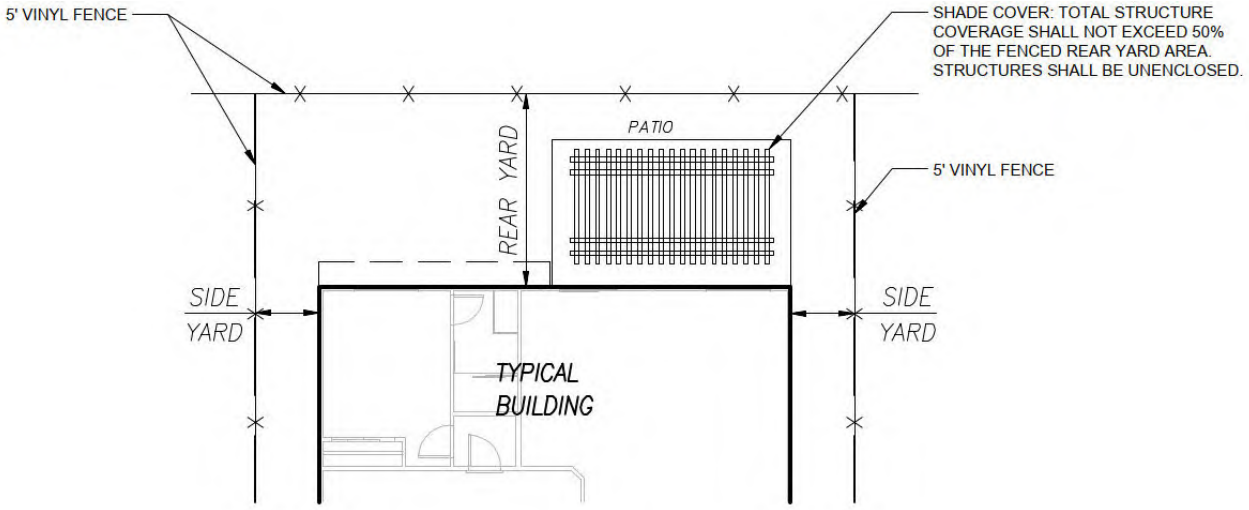


PLAN VIEW

BBQ
Figure 3



SECTION VIEW



PLAN VIEW

Shade Cover
Figure 4

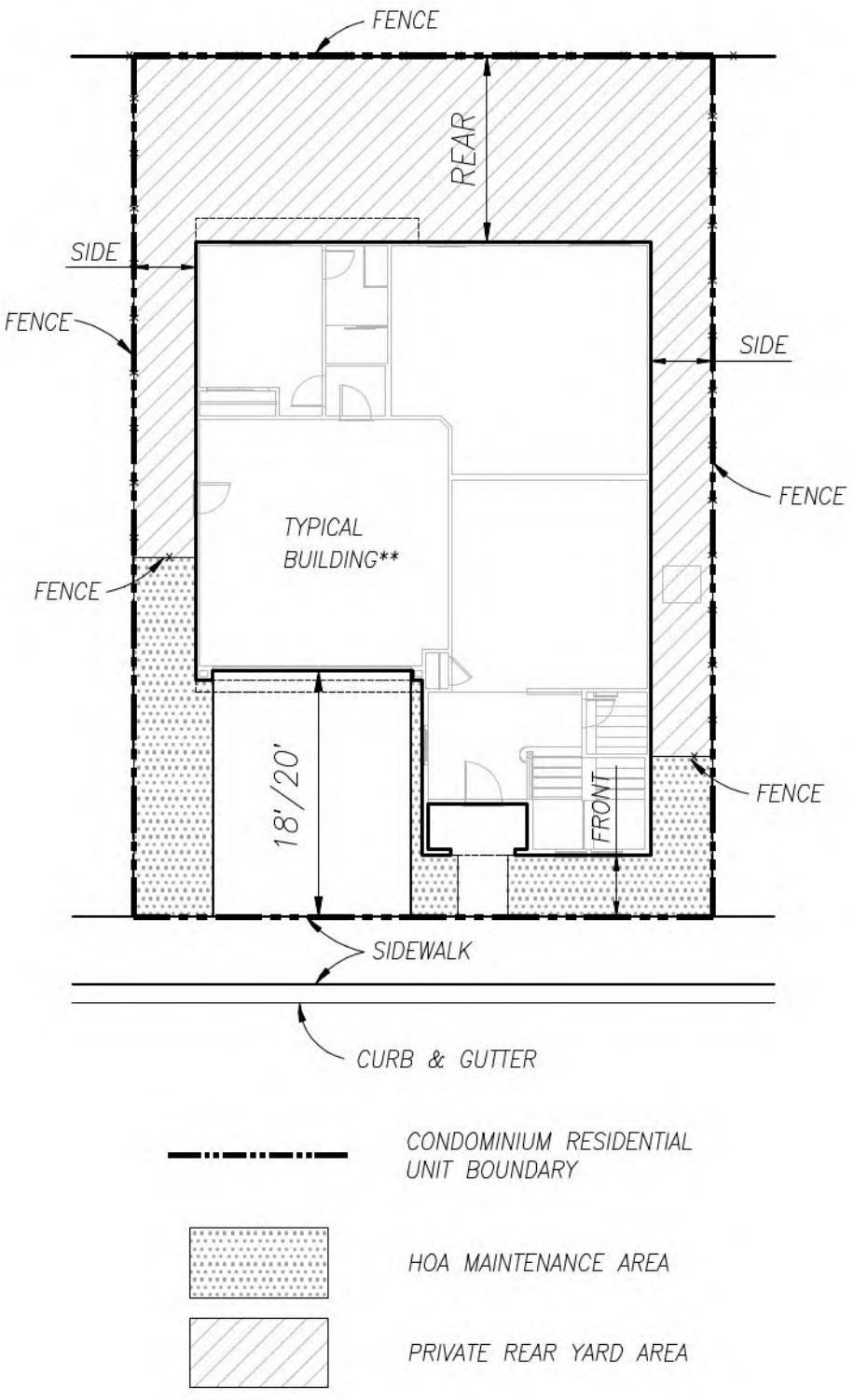
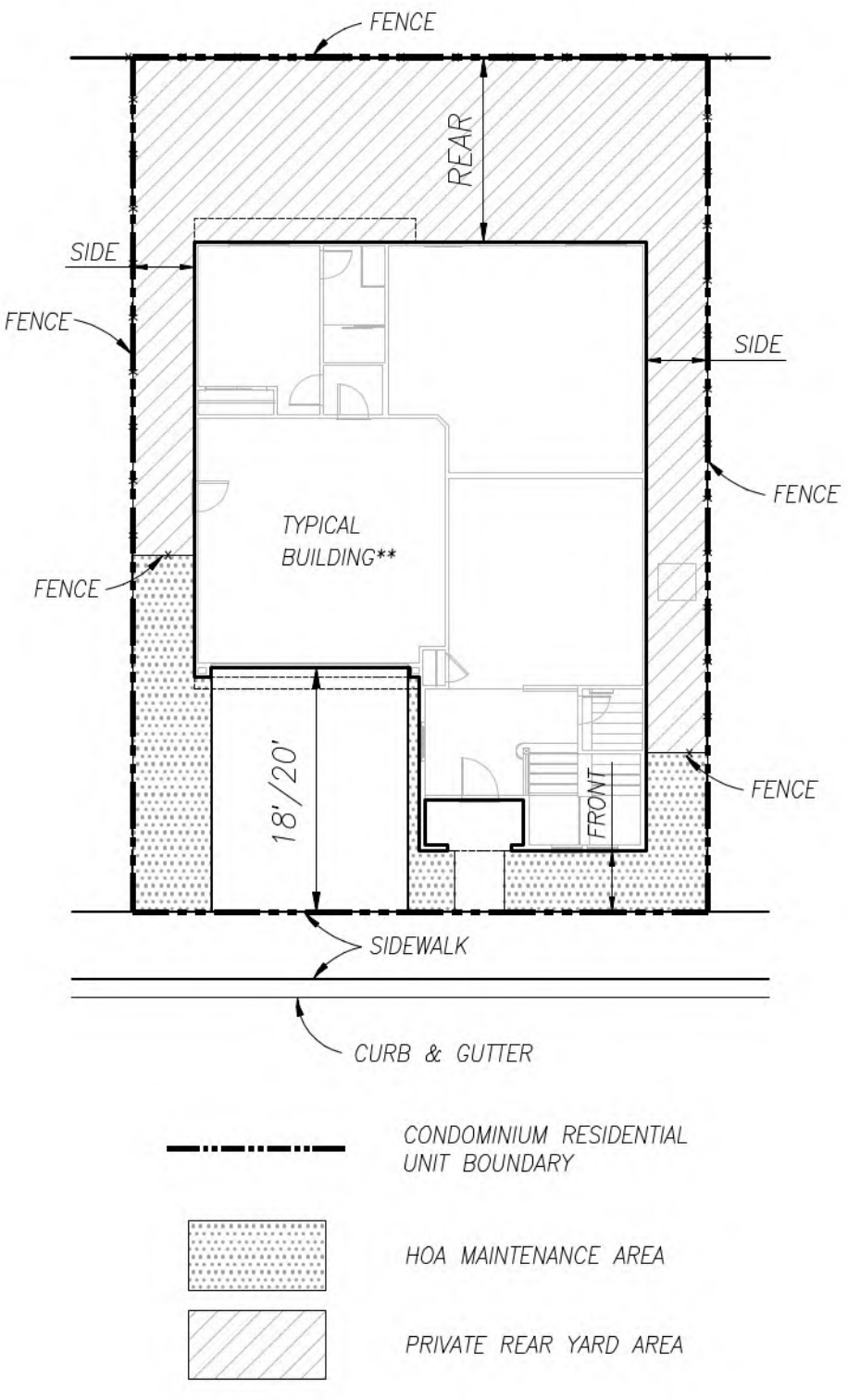


Figure 5


FENCE
REAR
SIDE
FENCE
SIDE
FENCE
TYPICAL
BUILDING**
FENCE
18'/20'
FRONT
FENCE
SIDEWALK
CURB & GUTTER
CONDOMINIUM RESIDENTIAL
UNIT BOUNDARY
HOA MAINTENANCE AREA
PRIVATE REAR YARD AREA

B. Single-Family Residential Lots - Permitted Uses

Residential Uses
Single-Family
Accessory dwelling unit and junior accessory dwelling unit[1]
Home Occupations[2]
Family Home Day Care[3]
Residential Care Facility: Accessory - 6 or less (Permitted) Nonaccessory – 7 or more (Conditional Use Permit)
Accessory Uses
Animal Keeping[4]
Private swimming pool or spa[5]
Accessory Structures[6]
Patio Covers
Fireplace
Gazebo
Shade Structure
BBQ
Prohibited Uses
Storage Sheds
Barns/Outbuildings
RV and Trailer Storage
Ground Mounted Solar Panels
Roof Mounted Antennas

1. Accessory dwelling units and junior accessory dwelling unit standards per SMC Section 13.10.045 shall apply.
2. Home Occupation standards per SMC Section 13.06.060 shall apply.
3. Family day care standards per SMC Section 13.30.020 (H) shall apply.
4. Household pet standards for the R-2 zone per SMC Section 13.10.030 shall apply.
5. Private swimming pools and spas shall be located within private fenced yards and shall be located no closer than 4 feet from a fence to edge of water.
6. Accessory Structure includes but are not limited to Patio Covers, Fireplace, Gazebo, BBQ and Shade Structures (See Figures 1 through 4). All structures shall only be located within private rear yards. A structure located within 3 feet from a fence shall not exceed 8 feet in height or more than 2.5 feet above adjacent fence height(s). A structure located within 5 feet from a fence shall not exceed 12 feet in height measured from finished grade, excluding sloping roof or guardrail. Total structure coverage shall not exceed 50% of the fenced rear yard area. Structures shall not be unenclosed. Structures excludes additional living area, storage sheds, barns or outbuildings.

2.1 Single-Family Development Standards

11. Minimum Net Lot Area: 6,000 Square Feet
12. Minimum Lot Width: 60 Feet
13. Maximum Lot Coverage: 60%
14. Minimum Setbacks [1]

14.1. Front: 5 Feet
14.2. Exterior Side: 5 Feet
14.3. Interior Side: 4 Feet
14.4. Rear: 5 Feet

15. Building Setbacks Mobility Element Streets: 20 Feet Carlton Oaks Drive
16. Maximum Building Height: 25 Feet-
17. Maximum Building Stories: 1 stories [2]
18. Minimum Distance Between Structures: 10 Feet

Notes:

1. As measured from lot line.
2. All buildings shall not exceed one story along Carlton Oaks Drive within the restrictive covenant.
3. Single Family lot 9 is not located within the PD zone and shall follow R2 zoning standards

2. 2.2 Development Standards Regulations

K. Projections into Yards and Projections Above Height Limits

Projections into yards allowed per SMC 13.10.050(B) and projections into height limits per 13.10.050(C) shall apply.

L. Fences, Walls and Hedges

Requirements regarding fences, walls and hedges per SMC13.10.050(E) shall apply.

M. Energy Conservation

Requirements regarding energy conservations per 13.10.040(J) shall apply.

N. Photovoltaic Access

Requirements regarding photovoltaic access per SMC 13.10.040(K) shall apply.

O. Equipment Screening

Requirements regarding equipment screening per SMC 13.10.040(L) shall apply.

P. Property Maintenance

Requirements regarding property maintenance per SMC 13.10.060(A) shall apply.

Q. Vehicle and Equipment Repair and Storage

Requirements regarding vehicle and equipment repair and storage per SMC 13.10.060(B) shall apply.

R. Storage of Materials

Requirements regarding storage of materials per SMC 13.10.060(C) shall apply.

S. Parking Regulations

Requirements regarding parking regulations per SMC 13.24 shall apply except for SMC 13.24.030(B)(1)(d.) shall be revised to "two-car garages for single-family or multifamily dwellings shall have a minimum interior dimension of 18 feet in width and 19 feet in depth of unobstructed area provided for parking purposes, and except for SMC 13.24.030(B)(2) shall be revised to "Driveways providing access to garages shall be a minimum width of 16 feet".

T. Architecture

Architectural building design shall conform to the Master Development Plan Project Architectural styles and approved condominium lot and single family lot architecture.

U. Landscape

Landscape architecture shall conform to the approved landscape plan for wall and fence details, plant and tree schedule and signage.

Appendix T

Comparison of Biological Impacts