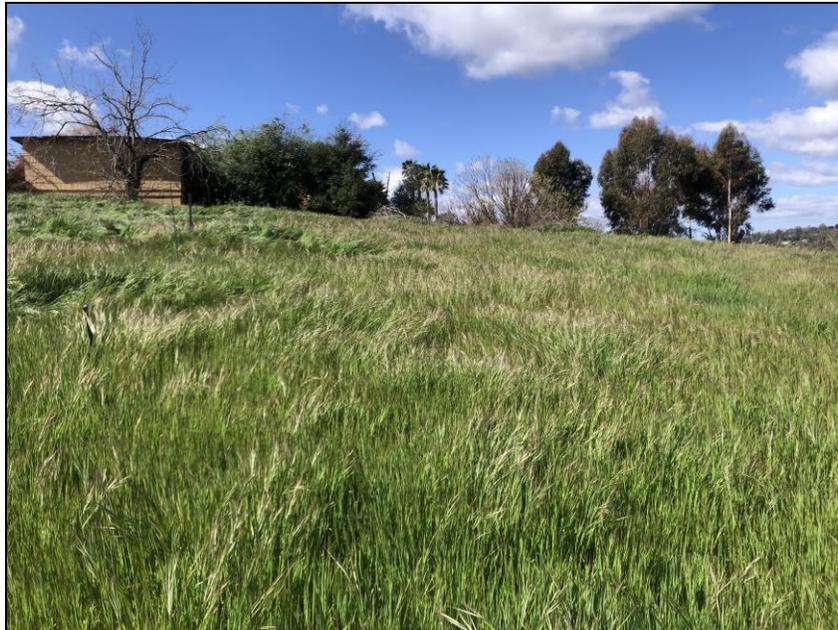


Biological Technical Report for the Tract F and H Project

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TABLE OF CONTENTS

1.0	Introduction.....	1
1.1	Purpose and Approach.....	1
1.2	Sources.....	1
1.3	Project Terms.....	1
1.4	Project Location	1
1.5	Existing Conditions.....	2
1.6	Scope of Study	2
2.0	Project Description.....	2
3.0	Regulatory Framework.....	5
3.1	Federal Sensitive Resource Protection and Classifications	5
3.1.1	Federal Endangered Species Act.....	5
3.1.2	Migratory Bird Treaty Act	5
3.1.3	Federal Clean Water Act, Section 401 and 404	6
3.1.4	Wetlands and Other Waters of the United States.....	6
3.2	State Sensitive Resource Protection	8
3.2.1	California Endangered Species Act.....	8
3.2.2	Protection of Birds	8
3.2.3	California Fish and Game Code.....	8
3.2.4	California Fully Protected Species	9
3.2.5	Native Plant Protection Act	9
3.2.6	California Native Plant Society.....	9
3.2.7	Sensitive Plant Communities	9
3.2.8	Porter-Cologne Water Quality Act.....	9
3.3	Local Sensitive Resource Protection and Classifications	10
3.3.1	City of Escondido Tree Survey	10
3.3.2	Multiple Habitat Conservation Program (MHCP) and Escondido’s Subarea Plan (Subarea Plan).....	10
4.0	Methods of Study	11
4.1	Approach	11
4.2	Literature Review.....	11
4.2.1	Plant Community Mapping	12
4.2.2	Sensitive Habitats.....	12
4.2.3	Sensitive Plant Species.....	14
4.2.4	Critical Habitat.....	14
4.2.5	Sensitive Wildlife Species.....	15
4.2.6	Regional Connectivity/Wildlife Movement Corridor	15

4.3	Field Investigations.....	15
4.3.1	General Plant Inventory	15
4.3.2	Tree Inventory and Survey.....	16
4.3.3	General Wildlife Inventory.....	16
4.4	MHCP	16
4.5	Jurisdictional Delineation.....	16
5.0	Results.....	19
5.1	Critical Habitat and CNDDDB Occurrences	19
5.2	Plant Communities	19
5.2.1	Coast Live Oak Woodland (71160)	19
5.2.2	Willow Stand (61320).....	20
5.2.3	Non-native Grasslands (42200).....	20
5.2.4	Eucalyptus Woodland (79100).....	20
5.2.5	Disturbed (11300).....	20
5.2.6	Urban / Developed (12000).....	20
5.2.7	Surrounding 500-foot Buffer.....	21
5.3	Tree Survey Results.....	21
5.4	General Wildlife Inventory.....	21
5.5	Sensitive Plant Communities	27
5.6	Sensitive Plant Species.....	27
5.6.1	Sensitive Plant Species with Potential to Occur	27
5.7	Sensitive Wildlife Species.....	28
5.7.1	Migratory Birds and Raptors	29
5.8	Wildlife Movement	29
5.8.1	Overview	29
5.8.2	Wildlife Movement Within the Project site	30
5.9	Jurisdictional Waters and Wetlands	30
5.10	Soils.....	31
6.0	Threshold of Significance	33
7.0	Significance Determination and Proposed Mitigation.....	34
7.1	Regulatory Setting	34
7.2	Project Related Impacts.....	34
7.3	Threshold BIO-A	41
7.3.1	Sensitive Plant Species.....	41
7.3.2	Sensitive Wildlife Species.....	41
7.4	Threshold BIO - B.....	44
7.4.1	Sensitive Plant Communities	44
7.4.2	CDFW Jurisdiction.....	45
7.5	Threshold BIO - C	45

7.6 Threshold BIO - D 45
7.6.1 Wildlife Movement 45
7.6.2 Migratory Birds and Raptors 45
7.7 Threshold BIO - E 46
7.8 Threshold BIO - F 47

8.0 Cumulative Impacts 48

9.0 Literature Cited 49

TABLES

Table 1. Plant Communities Observed on the Project site 19
Table 2. Protected and Mature Trees on the Project site 21
Table 3. Wildlife Species Observed during the Field Visit 22
Table 4. Impacts to Plant Communities Observed on the Project site 35
Table 5. Impacts to Protected and Mature Trees on the Project site 36

FIGURES

Figure 1: Regional Location Map 3
Figure 2: Project Vicinity Map 4
Figure 3: CNDDDB and Critical Habitat Results 13
Figure 4: Vegetation Map 23
Figure 5: Site Photographs 24
Figure 6: Photographs 25
Figure 7: Mature and Protected Trees 26
Figure 8: Soils Map 32
Figure 9: Site Plan Sheet 1 37
Figure 10: Site Plan Sheet 2 38
Figure 11: Vegetation Impact Map 39
Figure 12: Impacts to Mature and Protected Trees 40

APPENDICES

Appendix A Special Status Plant Species Potential Occurrence Determination

Appendix B Special Status Wildlife Species Potential Occurrence Determination

Appendix C Plant Species observed Onsite

Appendix D Protected and Mature Tree Inventory Data

1.0 Introduction

1.1 Purpose and Approach

On behalf of Escondido North LLC, Carlson Strategic Land Solutions (CSLS) prepared this Biological Technical Report for the total 13.79-acre Tract F & H Project site located within the City of Escondido. The Project sites consists of the following Assessor's Parcel Numbers (APN): 224-141-2300; 224-141-2500; 224-141-2400; 224-142-3300; 224-141-3200; 224-142-3100; and 224-142-3000. Collectively, these parcels are referred to as the Project site.

The purpose of this study is to satisfy the requirements of the California Environmental Quality Act (CEQA) and incorporate the findings from the field surveys and tree survey conducted March 16, 2021 and April 7, 2021.

1.2 Sources

This Biological Technical Report (BTR) is based on information compiled through field reconnaissance and appropriate reference materials. A general biological survey, vegetation mapping, jurisdictional waters and wetlands delineation, and tree survey was conducted by CSLS Biologists on the Project site and surrounding 500-feet. The information sources used in preparation of this Biological Resource Report are provided in Section 9.0, *References*.

1.3 Project Terms

The following terms will be used throughout this document and are defined as follows:

- Project site: the 13.79-acres composed of six parcels in the City of Escondido.
- Study Area: the area evaluated during the field survey, including the 13.79-acre Project site and the surrounding 500-feet (150-meters).
- Project Vicinity: intended to be a general term to describe the broader area surrounding the Study Area.

1.4 Project Location

The 13.79-acre Project site is located in the City of Escondido, San Diego County California on the U.S Geological Survey (USGS) Map *Valley Center* topographic map. The Project site is generally located east of Conway Drive, south of Rincon Avenue, and north of Lehner Avenue (**Figures 1 and 2**). The Project site is comprised of six different parcels. Although not approved or adopted, the Project site is located within the boundaries of the Draft Escondido Multiple Habitat Conservation Program Subarea Plan.

1.5 Existing Conditions

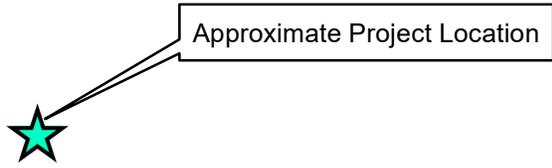
The 13.79-acre Project site consists primarily of disturbed/developed, non-native grasslands, and eucalyptus groves. Immediate surrounding land uses for the Project site include a rural residential home to the north; residential homes to the east and west; and Rincon Middle School located to the south.

1.6 Scope of Study

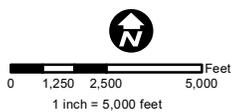
The scope of this BTR encompasses descriptions of the Project site, methods of study, and existing site conditions including tree survey, vegetation communities, and the potential for sensitive biological resources. Further, avoidance, minimization, and/or mitigation measures are included within this BTR to reduce any potentially significant impacts to sensitive species.

2.0 Project Description

The Project proposes to construct single family homes and associated infrastructure on the Project site.



GIS Prepared By:
Carlson SLS
Created: April 4, 2021



Data Sources: Bing Maps

Escondido North, LLC:
Escondido Parcels F & H Project
Regional Map

FIGURE 1

Legend

-  Project Boundary
-  500-foot Buffer

GIS Prepared By:
Carlson SLS

Created: September 29, 2022



0 50 100 200 300 Feet
1 inch = 300 feet

Data Sources: Bing Maps

Argus Partners - Escondido
Project Vicinity

FIGURE 2

3.0 Regulatory Framework

The following discussion describes the plant and wildlife species present, or potentially present, within the Project site that have been afforded special recognition by Federal, State, or local resource conservation agencies and organizations. These species have declining or limited population sizes, typically resulting from habitat loss. Also discussed are sensitive habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Protected sensitive species are classified by either Federal or State resource management agencies, or both, as threatened or endangered, under provisions of the Federal and State Endangered Species Acts (FESA and CESA, respectively).

3.1 Federal Sensitive Resource Protection and Classifications

3.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 defines an endangered species as “any species which is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.” Under provisions of Section 9(a)(1)(B) of the FESA, unless properly permitted, it is unlawful to “take” any listed species. “Take” is defined in Section 3(18) of FESA: “...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Further, the USFWS, through regulation, has interpreted the terms “harm” and “harass” to include certain types of habitat modification as forms of “take.” These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action which could affect a federally listed plant or animal species, the property owner and agency are required to consult with USFWS pursuant to Section 7 of the ESA if there is a federal nexus, or pursuant to Section 10 of the ESA. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. All references to federally-protected species in this BTR include the most current published status or candidate category to which each species has been assigned by USFWS.

3.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any part, nest, or eggs of any bird listed as migratory. In practice, MBTA protects against activities that potentially impact migratory birds and contains conditions that require pre-disturbance surveys for nesting birds during the breeding season. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. The size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is

based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS.

3.1.3 Federal Clean Water Act, Section 401 and 404

The Clean Water Act (CWA), Section 401 provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project operator to obtain a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The RWQCB administers the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the US Army Corps of Engineers (Corps) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The Corps implementing regulations are found at 33 CFR 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the United States Environmental Protection Agency in conjunction with Corps (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Under Section 401 of the CWA, the local RWQCB must certify that actions receiving authorization under Section 404 of the CWA also meet state water quality standards. The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. Compensatory mitigation for impacts to wetlands and/or waters of the state is required.

3.1.4 Wetlands and Other Waters of the United States

Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources and fall under the jurisdiction of several regulatory agencies. The US Army Corps of Engineers (Corps) exerts jurisdiction over waters of the United States, including all waters that are subject to the ebb and flow of the tide; wetlands and other waters such as lakes, rivers, streams, mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds; and tributaries of the above features. The extent of waters of the United States is generally defined as the portion that falls within the limits of the Ordinary High-Water Mark (OHWM). The OHWM is defined as the "line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

The definition of Navigable Waters has undergone several iterations, including a much more streamlined definition which was published and was formally adopted in April 2020. However, in August 2021, the April 2020 Navigable Waters definition was challenged in the case *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency*. In light of this case and subsequent order from US District Court for the District of Arizona, the U.S. Environmental Protection Agency (EPA) and Corps have halted implementation of the Navigable Waters Protection Rule from 2020 and are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime until further notice.

The pre-2015 definition of Navigable Waters includes (1) all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) All interstate waters including interstate wetlands; (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters; (4) All impoundments of waters otherwise defined as waters of the United States under this definition; (5) Tributaries of waters identified in paragraphs (s)(1) through (4) of this section; (6) The territorial sea; and (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section.

Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, are defined by Corps as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by Corps (USACE 1987).

It is important to note that the RWQCB definition of wetland was re-defined and the new definition went into effect May 28, 2020. The definition of a wetland is as follows: An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation. This RWQCB modified three-parameter definition is similar to the federal definition in that it identifies three wetland characteristics that determine the presence of a wetland: wetland hydrology, hydric soils, and hydrophytic vegetation. Unlike the federal definition, however, the RWQCB wetland definition allows for the presence of hydric substrates as a criterion for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland.

However, if any vegetation is present, then the Corps delineation procedures would apply to the vegetated component (i.e., hydrophytes must dominate). Examples of waters that would be considered wetlands by the RWQCB definition, but not by the federal wetland definition, are non-vegetated wetlands, or wetlands characterized by exposed bare substrates like mudflats and playas, as long as they meet the three-parameters as described in the RWQCB definition. It is important to note that while the Corps may not designate a feature as a wetland, that feature could be considered a special aquatic site or other water of the U.S. by the Corps and potentially subject to Corps' jurisdiction.

3.2 State Sensitive Resource Protection

3.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under the CESA. For projects that would affect a listed species under both the CESA and the FESA, compliance with the FESA would satisfy the CESA if CDFW determines that the federal incidental take authorization is "consistent" with the CESA under California Fish and Game Code Section 2080.1. For projects that would result in take of a species listed under the CESA only, the project operator would have to apply for a take permit under Section 2081(b).

3.2.2 Protection of Birds

Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3515 states that it is unlawful to take any non-game migratory bird protected under the MBTA.

3.2.3 California Fish and Game Code

Section 1602 of the California Fish and Game Code requires any entity (e.g., person, state or local government agency, or public utility) who proposes a project that will 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 to notify CDFW of the proposed project. CDFW reviews the proposed project to determine whether it affects streambed habitats within the project area. CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

3.2.4 California Fully Protected Species

California fully protected species are described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species.

3.2.5 Native Plant Protection Act

California's Native Plant Protection Act (NPPA) requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that would otherwise be destroyed. The project operator is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

3.2.6 California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California (CNPS 2012). The list serves as the candidate list for Threatened and Endangered by CDFW. CNPS has developed five categories of rarity, of which Ranks 1A, 1B, and 2 are particularly considered sensitive.

Sensitive species that occur or potentially could occur within the Project site are based on one or more of the following: (1) the direct observation of the species within the project site during any field surveys; (2) a record reported in the CNDDDB; and (3) the project site is within known distribution of a species and contains appropriate habitat.

3.2.7 Sensitive Plant Communities

Sensitive plant communities include those habitat types considered sensitive by resource agencies, namely CDFW, due to their scarcity and/or their ability to support State and Federally-listed Endangered, Threatened, and Rare vascular plants, as well as several sensitive bird and reptile species. CDFW maintains a natural plant community list, the List of California Terrestrial Natural Communities. Sensitive natural communities (also referred to by CDFW as 'rare', 'special-status', or 'special concern') are identified on the list by an asterisk and are considered high priority vegetation types (CDFW 2003; CDFW 2000).

3.2.8 Porter-Cologne Water Quality Act

The RWQCB also has jurisdiction over waters deemed "isolated" or not subject to Section 404 jurisdiction under the Solid Waste Agency of Northern Cook County v. Corps decision. Dredging, filling, or excavation of isolated waters constitutes a

discharge of waste to waters of the state and prospective dischargers are required to obtain authorization through an Order of Waste Discharge or waiver thereof from the RWQCB and comply with other requirements of Porter-Cologne Act.

3.3 Local Sensitive Resource Protection and Classifications

3.3.1 City of Escondido Tree Survey

The City establishes regulations and standards for the preservation, protection, and selected removal of mature and protected trees. A City issued vegetation removal permit is required prior to clearing, pruning, or destroying vegetation and prior to any encroachments by construction activities that disturb the root system within the dripline (e.g., the outer extent of a tree's canopy) of any mature and protected trees. Issuance of a vegetation removal permit requires the submittal of a tree survey and, as applicable, a tree protection and/or replacement mitigation plan. Tree protection, removal, and replacement standards are outlined in the City's General Plan and in Chapter 33 (Zoning), Article 55 (Grading and Erosion Control) of the City's Municipal Code (Ordinance 2001-21). The City's General Plan recognizes any oak tree species and other mature trees, as defined below, as significant aesthetic and ecological resources deserving protection within the boundaries of the City. Section 33-1052 and 33-1068 of the City's Municipal Code sets forth rules and standards related to mature tree removal, protection, and replacement.

The definition of mature tree states any self-supporting woody perennial plant, native or ornamental, with a single well-defined stem or multiple stems supporting a crown of branches. The single stem or one of the multiple stems of any mature oak tree (genus *Quercus*), shall have a diameter four inches or greater when measured at four and one-half feet (Diameter Breast Height [DBH]) above the tree's natural grade. All other mature trees shall have a diameter of eight inches DBH or greater for a single stem or one of the multiple stems.

Protected tree is defined as any oak which has a ten inch or greater DBH, or any other species of individual tree listed on the local historic register, or determined to substantially contribute to the historic character of property or structure listed on the local historic register, pursuant to Article 40 of the City of Escondido Zoning Code.

3.3.2 Multiple Habitat Conservation Program (MHCP) and Escondido's Subarea Plan (Subarea Plan)

The North County Multiple Habitat Conservation Program (MHCP) is a comprehensive, multiple jurisdictional planning program designed to create, manage, and monitor an ecosystem preserve in northwestern San Diego County. It is one of several large, multiple jurisdictional habitat planning efforts in San Diego County, each of which constitutes a "subregional" plan under the State of California's Natural Community Conservation Planning Act of 1991. The preserve system is intended to protect viable populations of native plant and animal species and their habitats in perpetuity, while

accommodating continued economic development and quality of life for residents of North County. The MHCP subregion encompasses the seven incorporated cities of northwestern San Diego County (Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista). These jurisdictions will implement their portions of the MHCP plan through citywide “subarea” plans, which describe the specific policies each city will institute for the MHCP.

The City of Escondido’s Subarea Plan (Subarea Plan) is not adopted by the City or approved by CDFW or USFWS, though the City uses it as guidance when reviewing impacts to biological resources. The Subarea Plan represents the City’s contribution to the MHCP and to regional NCCP conservation goals. The city has prepared this subarea plan to direct the conservation of natural biotic communities and sensitive plant and animal species within the city pursuant to the California Natural Community Conservation Planning (NCCP) Act of 1991 and the California and U.S. Endangered Species Acts (CESA and ESA). The Subarea Plan is an NCCP and a Habitat Conservation Plan (HCP) pursuant to Section 10(a) of the U.S. Endangered Species Act (as amended in 1982).

4.0 Methods of Study

4.1 Approach

This BTR is based on information compiled through field reconnaissance and appropriate reference materials. Surveys included a general biological survey and vegetation mapping, a tree survey, and a jurisdictional waters and wetlands delineation.

4.2 Literature Review

Assessment of the Project site began with a review of relevant literature on the biological resources of the site and the surrounding vicinities. The California Natural Diversity Database (CNDDDB), a CDFW species account database, was reviewed for all pertinent information regarding the localities of known observations of sensitive species and habitats in the vicinity of the site (CNDDDB 2021; **Figure 3**). The vicinity of the site included the following USGS topographic quadrangles: Valley Center, Bonsall, Pala, Boucher Hill, San Marcos, Rodriquez Mountain, Rancho Santa Fe, Escondido, San Pasqual. Federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) (USFWS 2021a), CDFW, and the California Native Plant Society (CNPS) (CNPS 2021) were reviewed in conjunction with anticipated listed species with potential to occur within the Project vicinity. Additional data sources reviewed include USFWS critical habitat maps (USFWS 2021b) and United States Department of Agriculture Natural Resources Conservation Service (NRCS) soils mapping (NRCS 2021). In addition, numerous regional flora and fauna field guides were

utilized to assist in the identification of species and suitable habitats. A list of all relevant references reviewed is included in Section 9.0, *References*.

4.2.1 Plant Community Mapping

Plant communities were mapped in the field directly onto a 200-scale (1" = 200') aerial map, focusing on dominant plant species. Plant species were identified using plant field and taxonomical guides, such as *The Jepson Manual: Vascular Plants of California*, second edition (Baldwin et al. 2012). Plant community names, codes, and descriptions follow the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) as modified in *Draft Vegetation Communities of San Diego County* (Oberbauer, Kelly, and Buegge 2008). The Subarea Plan Habitat Group designation of each vegetation community was also included. After completing the fieldwork, the plant community polygons were digitized using Geographic Information System (GIS) technology to calculate acreages. Where necessary, deviations were made on best professional judgment when areas did not fit into a specific habitat description. After completing the fieldwork, the plant community polygons were digitized using Geographic Information System (GIS) technology to calculate acreages.

4.2.2 Sensitive Habitats

Sensitive habitats are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. Sensitive habitats are often threatened with local extirpation and are therefore considered valuable biological resources. Sensitive Habitats are considered "sensitive" by the California Native Plant Society (CNPS) and CDFW if they meet any of the criteria listed below.

- The habitat is recognized and considered sensitive by CDFW, USFWS, and/or special interest groups such as CNPS.
- The habitat is under the jurisdiction of the Corps pursuant to Section 404 of the CWA.
- The habitat is under the jurisdiction of CDFW pursuant to Sections 1600 through 1612 of the California Fish and Game Code.
- The habitat is known or believed to be of high priority for inventory in the California Natural Diversity Database (CNDDDB).
- The habitat is considered regionally rare.
- The habitat has undergone a largescale reduction due to increased encroachment and development.
- The habitat supports special status plant and/or wildlife species (defined below).
- The habitat functions as an important corridor for wildlife movement.

Legend

 Project Boundary

 2-mile Buffer

CNDDB Occurences

 coastal California gnatcatcher

 Dulzura pocket mouse

 least Bell's vireo

 Rainbow manzanita

 Ramona horkelia

 Robinson's pepper-grass

 southern California rufous-crowned sparrow

 summer holly

 tricolored blackbird

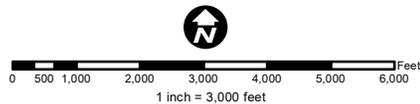
Critical Habitat

 Coastal California Gnatcatcher

Project Site

GIS Prepared By:
Carlson SLS

Created: April 7, 2021



Data Source: Bing Map
CNDDB (04/2021)

Argus Land Company: Tract F & H Project
CNDDB Occurrence and Critical Habitat

FIGURE 3

4.2.3 Sensitive Plant Species

The potential for sensitive plant species was assessed based upon the known occurrence of species in the area as identified from CDFW, USFWS, and CNPS databases, and the presence or absence of suitable habitat within the Project site. Suitable habitat is defined as areas with appropriate vegetation communities, soils and/or topography (elevation at MSL) to support sensitive plant species based on known occurrences in those habitats. The available literature, databases, and existing field conditions were reviewed and compared to identify sensitive plant species that have the potential to occur within the Project site (**Appendix A**). During the field assessment, any observed special plant species location(s) and extent(s) were recorded in field notes and mapped using GPS.

4.2.4 Critical Habitat

Under the ESA, the federal government is required to designate "critical habitat" for any species it lists under the ESA (**Figure 3**). Federal agencies are prohibited from authorizing, funding or carrying out actions that "destroy or adversely modify" critical habitats. Section 3 of the ESA defines critical habitat as:

- The specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection.
- The specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

"Conservation" means the use of all methods and procedures that are necessary to bring an endangered or a threatened species to the point at which listing under the ESA is no longer necessary. Critical habitat receives protection under Section 7(a)(2) of the ESA through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a federal agency. Section 7(a)(2) also requires conferences on federal actions that are likely to result in the destruction or adverse modification of proposed critical habitat.

The USFWS's online service for information regarding Threatened and Endangered Species Final Critical Habitat designation within California was reviewed to determine if the Project site occurs within any species' designated Critical Habitat. The USFWS regulatory mapping process for the designation of critical habitat is an imprecise, broad-based, mapping exercise of areas that may or may not include constituent elements of the critical habitat designation. Due to this approach in mapping, large areas are designated as critical habitat regardless of the existing habitat, and as a result may include developed areas, such as buildings, roads, hardscape, and other such facilities, as well as natural habitats.

The constituent elements of the critical habitat designation consider the physical and biological features needed for life processes and successful reproduction of the listed species. These include:

- Space for individual and population growth for normal behavior;
- Habitat cover or shelter;
- Food, water, or other nutritional or physiological requirements;
- Sites for breeding and rearing offspring; and
- Habitat that is protected from disturbance or is representative of the historical geographic and ecological distribution of a species.

4.2.5 Sensitive Wildlife Species

The potential for sensitive wildlife species was assessed based upon the known occurrence of species in the area as identified from CDFW and USFWS databases, and the presence or absence of suitable habitat within the site. Suitable habitat is defined as areas with appropriate vegetation communities and/or topography (elevation at MSL) to support sensitive wildlife species based on known occurrences in those habitats and/or CDFW and USFWS documented habitat descriptions for the species. The available literature, databases, and existing field conditions were reviewed and compared to identify sensitive wildlife species that have the potential to occur within the Project site (**Appendix B**).

4.2.6 Regional Connectivity/Wildlife Movement Corridor

An analysis of wildlife movement was conducted based on information compiled from the literature, analysis of aerial photographs and topographic maps, direct observations made in the field during survey work, and an analysis of existing wildlife movement functions. Relative to corridor issues, the focus of this assessment was to determine if development of the Project site would have significant impacts on the regional wildlife movement associated with the site and the immediate vicinity.

4.3 Field Investigations

A general biological survey, vegetation mapping, tree inventory survey, and a delineation of jurisdictional waters and wetlands was conducted for the Project site by CSLS biologists Brianna Bernard and Crysta Dickson on March 16 and April 7, 2021. During the field visit, the biologists assessed the existing habitat on the Project site. The plant communities observed were identified and mapped. The biologists paid special attention to those habitat areas that appeared to provide suitable habitat for special status plant and wildlife species. Aerial photographs and maps were used to assist in the delineation of plant community boundaries.

4.3.1 General Plant Inventory

All plant species observed during the general and focused surveys were either identified in the field or collected and later identified using taxonomic keys. Plant

community names, codes, and descriptions follow the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) as modified in Draft Vegetation Communities of San Diego County (Oberbauer, Kelly, and Buegge 2008). All plant species observed were recorded in field notes.

4.3.2 Tree Inventory and Survey

CSLS mapped and collected tree attribute information for trees within the Project site meeting the City's definition of a "protected tree" and "mature tree," as defined in Section 33 - 1069, Article 55 of Chapter 33 of the City of Escondido Municipal Code. The definition of a mature tree and protected tree can be found in *Section 3.3.1* above. The location of each individual mature tree was mapped using a Trimble R1 Global Positioning System (GPS) receiver with ARC Collector application.

4.3.3 General Wildlife Inventory

All wildlife species observed on the Project site, as well as any diagnostic sign (call, tracks, nests, scat, remains, or other sign), were recorded in field notes. Binoculars and regional field guides were utilized for the identification of wildlife, as necessary. Wildlife taxonomy follows Stebbins (2003) and California Herps (2015) for amphibians and reptiles, the American Ornithologists' Union (1998) for birds, and Jameson and Peeters (1988) for mammals. All wildlife species detected were recorded in field notes.

4.4 MHCP

The Project occurs within the North County Multiple Habitat Conservation Program (MHCP). The Project occurs within the boundaries of the Draft City of Escondido Subarea Plan (Subarea Plan), which has not yet been approved or adopted. The Project site within the Subarea Plan is identified as disturbed and developed land and agriculture. The Project site is not found inside any Biological Core or Linkage Area. Furthermore, the Project site is located outside of areas targeted for conservation, including Focused Planning Areas, Hardline Preserve, Major Amendment Area, Natural Habitats (Outside of FPA), Core Gnatcatcher Conservation, Biological Core and Linkage Area (BCLA), and Edge Habitat.

4.5 Jurisdictional Delineation

A jurisdictional delineation to denote the limits of any potential jurisdictional features was conducted by CSLS biologists Brianna Bernard and Crysta Dickson on March 16 and April 7, 2021. The purpose of the delineation was to assess the location, extent and acreage of "waters of the U.S." and/or wetlands under the jurisdiction of the Corps, "waters of the State" and/or wetlands under the jurisdiction of the RWQCB, and/or streambed and associated riparian habitat under the jurisdiction of CDFW.

The Corps and the RWQCB have jurisdiction over Waters of the United States. Jurisdictional non-wetland features for the Waters of the United States are typically determined through the observation of an Ordinary High Water Mark (OHWM), which is defined as the "line on the shore established by the fluctuation of water and indicated

by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.” Projects with impacts to Waters of the United States are regulated under Sections 401 and 404 of the Clean Water Act. On April 21, 2020 the U.S. Environmental Protection Agency (EPA) and the Corps published the Navigable Waters Protection Rule to define “Waters of the United States” in the Federal Register. The April 2020 definition includes four simple categories of jurisdictional waters, including:

- (1) the territorial seas and traditional navigable waters;
- (2) perennial and intermittent tributaries to those waters;
- (3) certain lakes, ponds and impoundments; and
- (4) wetlands adjacent to jurisdictional waters.

The April 2020 definition provides clear exclusions for many water features that traditionally have been regulated, such as ephemeral drainages. The April 2020 definition has been formally adopted by EPA and the Corps and was used for this Jurisdictional Delineation.

To determine the presence of a jurisdictional wetland for the Waters of the United States, three indicators are required: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. The methodology published in the *United States Army Corps of Engineers 1987 Wetland Delineation Manual* and the *Arid West Supplement* sets the standards for meeting each of the three indicators, which normally require more than 50 percent cover of dominant plant species typical of a wetland, soils exhibiting characteristics of saturation, and hydrological indicators be present.

It is important to note that the RWQCB definition of wetland was redefined and the new definition went into effect May 28, 2020. The definition of a wetland is as follows: An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation. This RWQCB modified three-parameter definition is similar to the federal definition in that it identifies three wetland characteristics that determine the presence of a wetland: wetland hydrology, hydric soils, and hydrophytic vegetation. Unlike the federal definition, however, the RWQCB wetland definition allows for the presence of hydric substrates as a criterion for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland.

However, if any vegetation is present, then the Corps delineation procedures would apply to the vegetated component (i.e., hydrophytes must dominate). Examples of

waters that would be considered wetlands by the RWQCB definition, but not by the federal wetland definition, are non-vegetated wetlands, or wetlands characterized by exposed bare substrates like mudflats and playas, as long as they meet the three-parameters as described in the RWQCB definition. It is important to note that while the Corps may not designate a feature as a wetland, that feature could be considered a special aquatic site or other water of the U.S. by the Corps and potentially subject to Corps' jurisdiction.

CDFW has jurisdiction over water of the Department's interest (California Fish and Game Code §§1600 et seq.; California Code of Regulations, Title 14, §720), referred to as Waters of the State. Section 1602 of the California Fish and Game Code (FGC) applies to all rivers, streams, lakes and streambeds. CDFW defines a stream as "a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic hydrologic course regime, and where the width of its course can reasonably be identified by physical or biological indicators" (Brady and Vyverberg 2013). Likewise, CDFW regulates jurisdictional areas of riparian habitat only to the extent that those areas are part of a stream, river, or lake as defined above. Waters of the State pertaining to Porter-Cologne in relation to RWQCB jurisdiction are defined by California Water Code Section 13050(e) as any surface or ground water within the boundaries of the state.

Prior to the field investigation, CSLS biologist reviewed historical aerial imagery and topography for the Project Site to determine the potential for perennial, intermittent, or ephemeral drainages and associated riparian resources. Generally, indicators of jurisdictional drainages on an aerial photo include vegetation and/or incised lines indicating the path of flowing water. Following the desktop research, CSLS biologists conducted an onsite field investigation. Based on the collective results of the desktop investigation and the field surveys, any observed jurisdictional features were mapped using the following parameters:

- The limits of the Corps' jurisdiction extend to the OHWM. OHWM indicators include: the observation of benches, break in bank slope, particle size distribution, sediment deposits, drift, litter, and/or change in plant community.
- The RWQCB shares the Corps' jurisdictional methodology, and the Regional Board's May 2020 wetland definition.
- CDFW's jurisdiction applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state. CDFW's authority also includes riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, CDFW jurisdiction is mapped to the top of bank of the stream or the extent of streambed dependent vegetation.

5.0 Results

5.1 Critical Habitat and CNDDDB Occurrences

No critical habitat is mapped on the Project site. The closest mapped critical habitat is for the coastal California gnatcatcher (*Polioptila californica californica*) and it is located approximately 0.63-miles to the northeast of the Project site.

5.2 Plant Communities

The vegetation communities and habitat conditions were inspected to confirm presence and habitat quality of the vegetation found onsite. Vegetation mapping and acreages for each vegetation community is based on the observations of the field surveys, which are listed below in Table 1 and graphically depicted on **Figure 4**. Representative photographs of the vegetation communities can be found **Figure 5 and 6**.

The field survey and aerials encompassing the Project site and surrounding 500-foot buffer around the Project site were used to determine existing vegetation communities. The communities found onsite are described below. The surrounding 500-foot buffer consists primarily of urban/developed, eucalyptus woodland, non-native grasslands, and disturbed vegetation communities.

The general description of the habitats observed on the Project Site during the field survey are described below (**Figure 4**). A complete plant compendium can be found in **Appendix C**.

Table 1. Plant Communities Observed on the Project site¹

Vegetation Community	Acreage
Coast Live Oak Woodland (71160)	0.39
Willow Stand (61320)	0.03
Non-Native Grasslands (42200)	6.79
Eucalyptus Woodland (79100)	1.77
Disturbed Habitat (11300)	1.17
Urban/Developed (12000)	3.64
TOTAL	13.79
<u>Notes:</u>	
1. Plant Communities within the surrounding 500-foot buffer is not included within the total acreage. Communities consists of urban/developed, eucalyptus woodland, non-native grasslands, and disturbed vegetation communities.	

5.2.1 Coast Live Oak Woodland (71160)

This woodland area is dominated by Coast Live Oak (*Quercus agrifolia*). The vegetation community is located adjacent to the Eucalyptus woodland. The vegetation community is scattered with lemon scented gum (*Eucalyptus citriodora*), mulefat (*Baccharis*

salicifolia), tree tobacco (*Nicotiana glauca*) and a single tamarisk (*Tamarix ramosissima*) and red willow tree sapling (*Salix laevigata*). Overall, the understory is void of vegetation however is scattered with ripgut brome (*Bromus diandrus*), milk thistle (*Silybum marianum*), bur clover (*Medicago polymorpha*), stinging nettle (*Urtica dioica*), and common vetch (*Vicia sativa ssp. nigra*). This community is located on the northern portion of the Project site.

5.2.2 Willow Stand (61320)

This community consists of a single arroyo willow (*Salix lasiolepis*) tree. The understory is bare and consists of trash/debris. No other riparian species were observed within this stand.

5.2.3 Non-native Grasslands (42200)

A majority of the Project site is comprised of non-native grasslands. The non-native grassland habitat is dominated by slender oat (*Avena barbata*). Other grass and forb species within this community includes wild radish (*Raphanus raphistrum*), red stemmed filaree (*Erodium cicutarium*), red brome (*Bromus madritensis* subsp. *rubens*), London rocket (*Sisymbrium irio*), short pod mustard (*Hirschfeldia incana*), narrow leaved plantain (*Plantago lanceolata*), ragweed (*Ambrosia psilostachya*), and blue-eyed grass (*Sisyrinchium bellum*). Scattered trees, such as pine trees (*Pinus sp.*) and a single black walnut (*Juglans nigra*), was observed within this community.

5.2.4 Eucalyptus Woodland (79100)

Approximately 1.77 acres of eucalyptus woodland is present on the site and is composed of various eucalyptus trees but primarily lemon scented gum (*Eucalyptus citriodora*). The eucalyptus woodland includes scattered Mexican palm trees (*Washingtonia robusta*), Brazilian pepper (*Schinus terebinthifolia*), bridal creeper (*Asparagus asparagoides*), and poison oak (*Toxicodendron diversilobum*). The understory consists of mainly of bare ground with tree debris and leaf litter. The understory has scattered brome. This vegetation community is also found along Lehner Avenue adjacent to the housing area (developed community).

5.2.5 Disturbed (11300)

The disturbed habitat area is associated with the historical orchard usages found on the Project site. This area consists of avocado trees (*Persea americana*), along with mandarin tree (*Citrus reticulata*), and kumquat trees (*Citrus japonica*). This vegetation community also includes ornamental species associated with the residences, including chinaberry (*Melia azedarach*) trees and palm trees (*Washingtonia robusta*).

5.2.6 Urban / Developed (12000)

The developed areas are not vegetated and consist of existing structures, asphalt parking lots, dirt roads, sidewalks and concrete paths.

5.2.7 Surrounding 500-foot Buffer

A majority of the surrounding 500-foot buffer consists of residential housing and built environments. No direct impacts are expected to occur to the vegetation communities within the surrounding 500-foot buffer.

5.3 Tree Survey Results

CSLS biologists Brianna Bernard and Crysta Dickson completed an inventory and mapping of native and non-native “mature” and “protected” trees that occur on the project site on March 16 and April 7, 2021. Mature and protected trees are defined in Section 33-1069, Article 55 of Chapter 33 of the City’s Municipal Code. **Figure 7** depicts the native and non-native trees that are considered mature by the City’s definition. The total Mature and Protected Trees on the Project site is 248 trees. No heritage trees occur onsite. A total of 236 mature trees are located on the Project site. Of the total 236 mature trees, 37 are native species meeting the definition as outline within the City’s Municipal Code and includes: 34 coast live oaks with a DBH of 4-inches to 9.99-inches; a single black walnut with a 13.55-inches DBH and two arroyo willow tree with a DBH of 7.8-inches and 12-inches. The remaining 199 trees are non-natives species. A total of 12 trees are considered protected trees under the definition, all of which are coast live oak trees with a DBH greater than 10 inches. **Table 2** below summarizes the tree data found onsite. Data and mapping from the tree survey effort are included as **Appendix D**.

Table 2. Protected and Mature Trees on the Project site

Mature Trees	DBH	Number of trees
Native trees ¹	4 inches to 9.99 inches	37
Non-native trees species	8-inches or greater	199
<i>SUBTOTAL</i>	-	236
Protected Trees	DBH (inches)	Number of trees
Coast Live Oak	10-inches or greater	12
<i>SUBTOTAL</i>	-	12
TOTAL	-	248
<i>1. Native trees consists of 34 Coast Live Oak trees DBH 4 inch to 9.99, 1 black walnut tree with a DBH of 13.55- inches and two arroyo willow trees with a DBH of 7.8-inches and 12-inches.</i>		

5.4 General Wildlife Inventory

Observations regarding the wildlife species present were made during the field visit (**Tables 3**). Sensitive wildlife species occurring or potentially occurring are discussed below in Section 5.7, *Sensitive Wildlife Species*.

Table 3. Wildlife Species Observed during the Field Visit

Scientific Name	Common Name
<i>Accipiter cooperii</i>	Cooper's Hawk
<i>Carpodacus mexicanus</i>	house finch
<i>Cathartes aura</i>	Turkey Vulture
<i>Peucaea cassinii</i>	Cassin's sparrow
<i>Tyrannus verticalis</i>	Western Kingbird
<i>Psaltriparus minimus</i>	Bushtit
<i>Melospiza melodia</i>	Song Sparrow
<i>Troglodytes aedon</i>	House wren
<i>Setophaga coronata</i>	Yellow-rumped warbler
<i>Anas platyrhynchos</i>	Mallard
<i>Melanerpes formicivorus</i>	Acorn woodpecker
<i>Sitta carolinensis</i>	White-breasted nuthatch
<i>Sayornis saya</i>	Say's phoebe
<i>Corvus brachyrhynchos</i>	American crow
<i>Zenaida macroura</i>	mourning dove
<i>Melospiza crissalis</i>	California towhee
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Calypte anna</i>	Anna's hummingbird
<i>Sayornis nigricans</i>	black phoebe
<i>Thryomanes bewickii</i>	Bewick's wren
<i>Mimus polyglottos</i>	northern mockingbird
<i>Pipilo maculatus</i>	spotted towhee
<i>Spinus psaltria</i>	lesser goldfinch

Legend

 Project Boundary

Vegetation Community

 Coast Live Oak Woodland (71160)

 Willow Stand (61320)

 Non-Native Grasslands (42200)

 Eucalyptus Woodland (79100)

 Disturbed (11300)

 Urban/Developed (12000)

GIS Prepared By:
Carlson SLS

Created: April 7, 2021




1 inch = 200 feet

Data Sources: Bing Maps

Argus Land Company: Tract F & H Project
Vegetation Map

Figure 5 Photographs



Looking north near Stanley at the Project site containing non-native grasslands in the foreground and eucalyptus and oak woodland in the background.



Looking east at the Project site near Conway Avenue at the Eucalyptus and Oak Woodland Areas.



Looking south from Stanley at the Project site containing disturbed historical agriculture. Several avocado trees were observed; however, the health was poor, and they appeared half dead.

Figure 6 Photographs



Looking west near Lehner Ave at the Project site containing non-native grasslands and residential units.



Typical developed area with ornamental species.



The understory of the woodland area is mainly bare but contains scattered non-natives, leaf litter, and trash/debris.

Legend

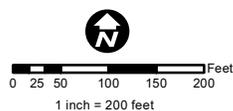
 Project Boundary

Trees

- Native Protected Trees - DBH greater than 10-inches
- Native Mature Trees - DBH greater than 4-inches (oaks) or 8-inches (other natives)
- Non-Native Mature Trees - DBH greater than 8-inches

GIS Prepared By:
Carlson SLS

Created: April 7, 2021



Data Sources: Bing Maps
Field Survey (3/17/21)
Field Survey (4/7/21)

Argus Land Company: Tract F & H Project
Protected and Mature Trees

FIGURE 7

5.5 Sensitive Plant Communities

A CNDDDB search within the Valley Center USGS topographic quadrangle found no special-status vegetation community designated by CDFW.

5.6 Sensitive Plant Species

Sensitive plants include those listed, or candidates for listing, by the USFWS and CDFW; and species considered sensitive by the CNPS (particularly Lists 1A, 1B, and 2). Five sensitive plant species were reported within 2-miles of the Project site based on the CNDDDB and within the USGS 7.5' Valley Center quadrangle search. The potential for sensitive plant species to occur on the Project site is discussed below and as indicated in **Appendix A**.

5.6.1 Sensitive Plant Species with Potential to Occur

Due to the non-native cover of the Project site, it was determined no sensitive plant species had potential to occur and the Project site does not support the vegetation associations, soils, or hydrology required by many of the special status plants known to the region. A complete list of species and their potential to occur onsite can be found in **Appendix A**.

Rainbow manzanita (*Arctostaphylos rainbowensis*)

Status: California Rare Plant Rank 1B.1

Distribution: Riverside and San Diego Counties.

Habitat(s): Habitats supporting chaparral. Known from 205 to 670 meters (672 to 2,198 feet) MSL. Blooms December through March.

Status onsite: None. The Project site lacks suitable habitat. Not observed during field visit.

Orcutt's brodiaea (*Brodiaea orcuttii*)

Status: California Rare Plant Rank 1B.1, state threatened, federally endangered

Distribution: Riverside and San Diego Counties.

Habitat(s): Habitats supporting closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grasslands and vernal pools supporting mesic and clay soils. Known from 30 to 1692 meters (98 to 5,551 feet) MSL. Blooms May through July.

Status onsite: None. The site lacks suitable habitat and soils. Not observed during field visit.

Southern tarplant (*Centromadia parryi* ssp. *australis*)

Status: California Rare Plant Rank 1B.1

Distribution: Los Angeles, Orange, Santa Barbara, Santa Catalina Island, San Diego and Ventura Counties.

Habitat(s): Habitats supporting marshes and swamps (margins), valley and foothill grasslands (vernally mesic), and vernal pools. Known from 0 to 480 meters (0 to 1,575 feet) MSL. Blooms May through November.

Status onsite: None. The site lacks suitable habitats. Not observed during field surveys.

Summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)

Status: California Rare Plant Rank 1B.2

Distribution: Orange, Riverside, Santa Barbara, and San Diego Counties.

Habitat(s): Habitats supporting chaparral and cismontane woodlands. Known from 30 to 790 meters (98 to 2,591 feet) MSL. Blooms April through June.

Status onsite: None. The site lacks suitable habitat and soils. Not observed during field visit.

Ramona horkelia (*Horkelia truncata*)

Status: California Rare Plant Rank 1B.3

Distribution: San Diego County.

Habitat(s): Habitats supporting chaparral and cismontane woodland, supporting clay and gabbroic soils. Known from 400 to 1,330 meters (1,312 to 4,363 feet) MSL. Blooms May through June.

Status onsite: None. The site lacks suitable habitat and soils. Not observed during field visit.

5.7 Sensitive Wildlife Species

Sensitive wildlife include those species listed as Endangered or Threatened under the FESA or CESA, candidates for listing by the USFWS or CDFW, and California Watch List, Fully Protected and Species of Special Concern to CDFW. Several sensitive wildlife species were reported in the vicinity of the Project site based on the CNDDDB and within the 9-quadrangle search. No special status wildlife was identified or observed within the Project site during the field surveys. However, 23 sensitive wildlife species were determined to have the potential to occur within the 9-quadrangle search. The 23 species include the following species: tricolor blackbird (*Agelaius tricolor*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Southern California legless lizard (*Anniella stebbinsi*), pallid bat (*Antrozous pallidus*), Bell's sage sparrow (*Artemisospiza belli belli*), orange-throated whiptail (*Aspidoscelis hyperythra*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), Dulzura pocket mouse (*Chaetodipus californicus femoralis*), western yellow-bellied cuckoo (*Coccyzus americanus occidentalis*), Townsend's big-eared bat (*Corynorhinus townsendii*), western pond turtle (*Emys marmorata*), western yellow bat (*Lasiurus xanthinus*), California black rail (*Laterallus jamaicensis coturniculus*), pocket free-tailed bat (*Nyctinomops femorosaccus*), big free-tailed bat (*Nyctinomops macrotis*), coast horned lizard (*Phrynosoma blainvillii*), white-faced ibis (*Plegadis chihi*),

coastal California gnatcatcher, western spadefoot (*Spea hammondi*), American badger (*Taxidea taxus*), and least Bell's vireo (*Vireo bellii pusillus*).

Of the 23 sensitive wildlife species, the only listed species with low potential to occur onsite is the Swainson's Hawk due to potential suitable nesting habitat within the eucalyptus woodland. The remaining special status animal species known to the region have a no potential to occur within the Project site due primarily to the lack of suitable habitat, isolation of the Project site from undeveloped habitat blocks in the region, and disturbances associated with the highly urbanized setting. The Project site does not support the constituent elements required by many of the special status animals known to the region for nesting/breeding, foraging, dispersal, and other life history requirements.

Several non-listed, sensitive Watch List bird species could potentially nest and/or forage over the site, although the potential is low. These species are relatively common to the region and include species such as Cooper's hawk (*Accipiter cooperii*).

The potential for sensitive wildlife species to occur on the Project site is discussed further in **Appendix B**.

5.7.1 Migratory Birds and Raptors

The Project site supports foraging and nesting habitat for nesting birds including raptors. An active red-tailed hawk nest was observed within the north western portion of the eucalyptus woodland area. Along with the large eucalyptus trees and larger oak trees, the Project site contains large open areas of non-native grasslands suitable for foraging.

5.8 Wildlife Movement

5.8.1 Overview

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat, separating different populations of a single species. Corridors effectively act as links between these populations.

The Project site was evaluated for evidence of a wildlife movement corridor. The following resources were used to determine the potential for the site to be used as a wildlife corridor:

- information compiled from the literature review, including, aerial photographs, USGS topographic maps, and resource maps for the vicinity;

- field survey; and
- knowledge of desired topography and resource requirements.

Important corridors and linkages have been identified on a local and regional scale throughout the Subarea Plan and the County of San Diego MSCP. The planning objectives of most corridors and linkages in western San Diego County include establishing a connection between the northern and southern regional populations of the coastal California gnatcatcher, in addition to facilitating movement and connectivity of habitat for large mammals and riparian bird species.

5.8.2 Wildlife Movement Within the Project site

While the Project site is composed of large spans of non-native grasslands and a eucalyptus and oak woodland area, the Project site also includes residential dwellings. Furthermore, the Project site is surrounded by residential development and is therefore restricted in its potential to support regional wildlife movement. The Project site is further characterized by open, exposed areas that lack suitable cover outside of the woodland area and resources that are typically associated with wildlife movement areas (i.e. water). No known wildlife corridors or linkage areas per the Subarea Plan or San Diego MSCP are mapped as occurring on or in the immediate vicinity of the Project site.

Although there is no regional movement through the Project site, there is some potential for smaller or “local” movement through the site. Movement on a smaller scale could occur within the site for species that are less restricted in movement pathway requirements or are adapted to urban areas [e.g., raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), and bird species in general). Habitat within the site is dominated by non-native grasslands and eucalyptus woodland. As such, it may support some wildlife movement within the site and/or nearby areas for foraging. Common bird species may utilize the site for foraging and nesting. The home range and average dispersal distance of many of these species may be entirely contained within the site and immediate vicinity.

In summary, the Project site supports foraging habitat for species on a local scale. However, the Project site would not be expected to be utilized as a wildlife corridor, linkage, or specific travel route to and from nursery sites other important resources. This is due to surrounding residential development, therefore, the Project site provides no function to facilitate movement for wildlife species on a regional scale.

5.9 Jurisdictional Waters and Wetlands

Based on the literature review, USGS quadrangle topographic map, and field surveys, no jurisdictional features were observed onsite meeting the definition of Waters of the United States or Waters of the State. The Project site consists primarily of non-native grasslands, eucalyptus woodland, coast live oak woodland, disturbed habitat, and developed areas. No wetlands, riparian, or drainage features were observed.

During the literature review the NWI database revealed a mapped freshwater emergent wetland area and drainage stream on the northern portion of the Project site and adjacent to Conway Drive. The mapping done for NWI database is broad based on aerial at a high-level mapping exercise of areas that may or may not include true wetlands and drainage stream. It is used as a tool to obtain potential locations of jurisdictional wetlands on a project site. Due to this approach mapping may be incorrect or mapped due to shadowing observed on an aerial. During the field survey the NWI mapped wetland area and mapped stream was carefully inspected to determine the presence of streams and/or wetlands that would fall under the jurisdictional definition. The area was determined to be mapped incorrectly on NWI database and no stream, drainage ditch, or wetlands was observed during the field survey.

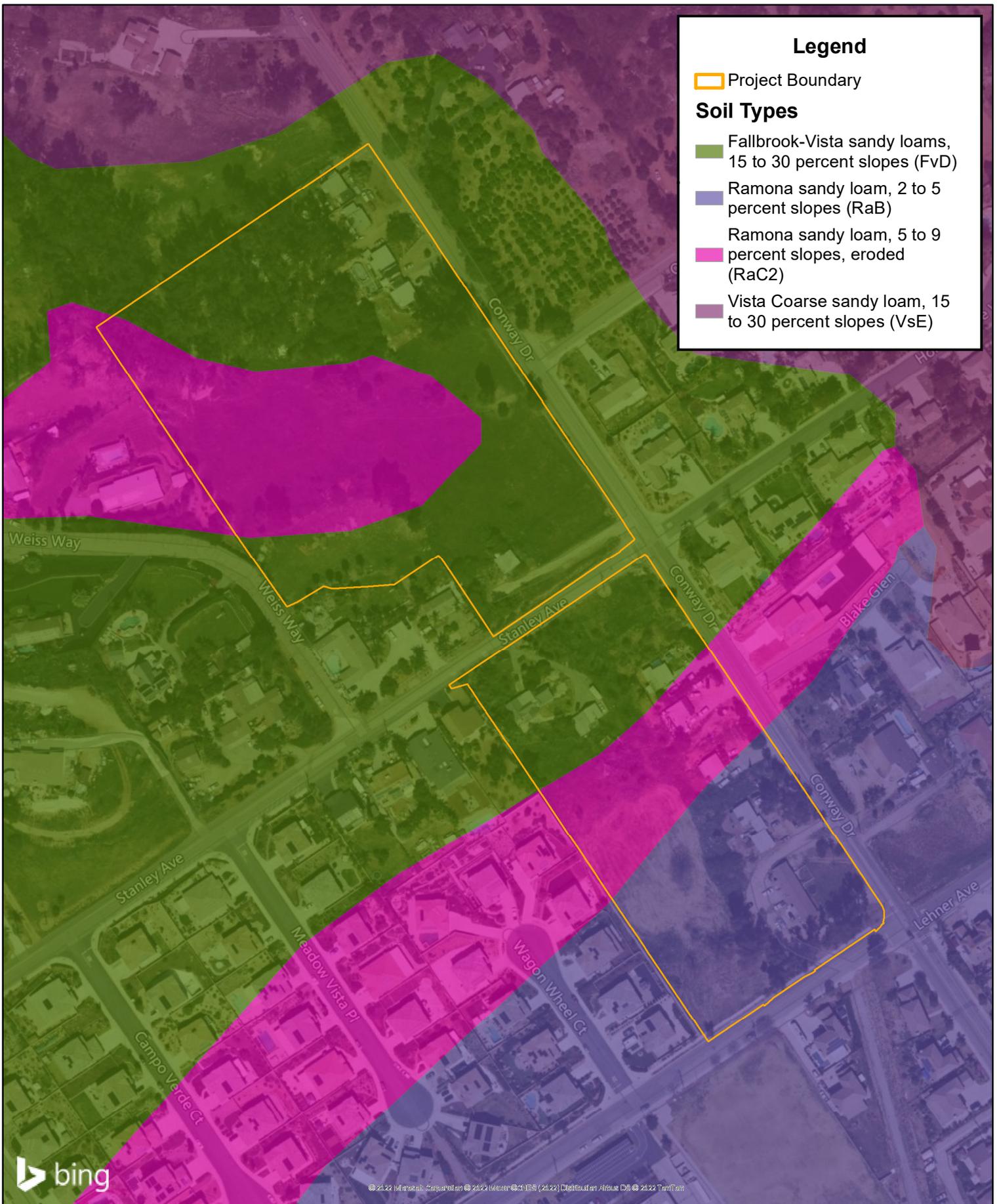
Therefore, based on the field survey, there are no features identified on the Project site that meet the definition and are considered jurisdictional Waters of the United States or Waters of the State, pursuant to Section 1600-1603 of the California Fish and Game Code and Section 401 and 404 of the Clean Water Act, respectively.

5.10 Soils

The United States Department of Agriculture NRCS lists several soil types (series) for the Project site. Please see below for the following soil type, which was used to determine the possibility for sensitive wildlife and plant species. No unique soil types exist on the Project site.

The following four soil types are mapped on the Project site and shown on **Figure 8**:

- Fallbrook-Vista sandy loams, 15 to 30 percent slopes (FvD)
- Ramona sandy loam, 2 to 5 percent slopes (RaB)
- Ramona sandy loam, 5 to 9 percent slopes, eroded (RaC2)
- Vista Coarse sandy loam, 15 to 30 percent slopes (VsE)



Legend

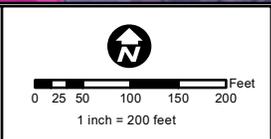
Project Boundary

Soil Types

- Fallbrook-Vista sandy loams, 15 to 30 percent slopes (FvD)
- Ramona sandy loam, 2 to 5 percent slopes (RaB)
- Ramona sandy loam, 5 to 9 percent slopes, eroded (RaC2)
- Vista Coarse sandy loam, 15 to 30 percent slopes (VsE)

GIS Prepared By:
Carlson SLS

Created: April 7, 2021



Data Sources: Bing Maps

Argus Land Company: Tract F & H Project

Soil Map

FIGURE 8

6.0 Threshold of Significance

Appendix G of the CEQA Guidelines is used by public agencies in determining whether a project may have a significant impact on biological resources. Under Appendix G, a project may have a significant impact on biological resources if it would:

- Threshold BIO-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 CDFW or USFWS.
- Threshold BIO-B** Have a substantial adverse effect on any riparian habitat or other sensitive plant community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.
- Threshold BIO-C** Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Threshold BIO-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 areas.
- Threshold BIO-E** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Threshold BIO-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.

For the purposes of this impact analysis the following definitions apply:

- “Substantial adverse effect” means loss or harm of a magnitude which, based on current scientific data and knowledge would: (1) substantially reduce population numbers of a listed, candidate, sensitive, rare, or otherwise special status species; (2) substantially reduce the distribution of a sensitive plant community/habitat type; or (3) eliminate or substantially impair the functions and values of a biological resource (e.g., streams, wetlands, or woodlands) in a geographical area defined by interrelated biological components and systems. In the case of this analysis, the prescribed geographical area is considered to be the region that includes the USGS topographic quadrangle for the site. For some species,

the geographic area may extend to the vicinity of the site based on known distributions of the species.

- “Conflict” means contradiction of a magnitude, which based on foreseeable circumstances, would preclude or prevent substantial compliance.
- “Rare” means: (1) that the species exists in such small numbers throughout all, or a significant portion of, its range that it may become endangered if its environment worsens; or (2) the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as that term is used in the FESA.

7.0 Significance Determination and Proposed Mitigation

7.1 Regulatory Setting

Sensitive species are provided protection by either Federal or State resource management agencies, or both, under provisions of the FESA and CESA.

There are a number of performance criteria and standard conditions that must be met as part of any review and approval of the proposed project. These include compliance with all of the terms, provisions, and requirements with applicable laws that relate to Federal, State, and local regulating agencies related to potential impacts to sensitive plant and wildlife species, wetlands, riparian habitats, and blue lined stream courses. Impacts are sometimes locally important but not significant because, although they would result in an adverse alteration of existing local conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

7.2 Project Related Impacts

For the purpose of this assessment, project-related impacts consist of direct and indirect impacts. Direct impacts are considered to be those that involve the loss, modification or disturbance of natural habitats (i.e., vegetation or plant communities), which in turn, directly affect plant and wildlife species dependent on that habitat. Direct impacts also include the destruction of individual plants or wildlife, which is typically the case in species of no to low mobility (i.e., plants, amphibians, reptiles, and small mammals). The collective loss of individuals in these manners may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and, hence, population stability.

Indirect impacts are considered to be those that involve the effects of increases in ambient levels of sensory stimuli (e.g., noise, light), unnatural predators (e.g., domestic cats and other non-native animals), and competitors (e.g., exotic plants, non-native animals). Indirect impacts may be associated with the construction and/or operation of a project; therefore, these impacts may be both short-term and long-term in their duration. These impacts are commonly referred to as “edge effects” and may result in changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to the Project site.

The determination of impacts in this analysis is based on the proposed project development plan and the biological values of the habitat and/or sensitivity of plant and wildlife species to be affected. Any recommended mitigation measures to address impacts are discussed below, along with compliance of existing regulations. Based on the preliminary plans (Figures 9 and 10), the following vegetation impacts are anticipated (Table 4; Figure 11). A single stormdrain and head wall is proposed within the north western portion of the Project. While the overall footprint of the storm drain is minimal, a permanent impact area of 10-feet on either side of the pipe was assumed as due to the construction and potential impact to roots to the surrounding trees due to working within the drip line. Riprap is proposed to occur at the end of the headwall to dissipate flows. The riprap limits are assumed to be 5-feet in width and 10-feet in length. No direct impacts are expected to occur to the vegetation communities located within the surrounding 500-foot buffer area.

Table 4. Impacts to Plant Communities Observed on the Project site¹

Vegetation Community	Existing Acreage	Total Impacted	Total Avoided
Coast Live Oak Woodland (71160)	0.39	0.39	0.00
Willow Stand (61320)	0.03	0.03	0.00
Non-Native Grasslands (42200)	6.79	6.65	0.14
Eucalyptus Woodland (79100)	1.77	1.09	0.68
Disturbed Habitat (11300)	1.17	1.17	0.00
Urban/Developed (12000)	3.64	3.39	0.25
TOTAL	13.79	12.72	1.07
<i>Notes:</i>			
1. Plant Communities within the surrounding 500-foot buffer is not included within the total acreage. Communities consists of urban/developed, eucalyptus woodland, non-native grasslands, and disturbed vegetation communities.			

Of the total 236 mature trees found onsite, a total of 175 will be impacted with the construction of the Project (Table 5; Figure 12). Of the 175 mature trees that will be impacted, 34 are mature native species (31 coast live oak trees, 2 arroyo willow, and 1 black walnut) meeting the definition as outlined by the City’s municipal code. Impacts to the remaining 141 trees are to the non-native tree species.

Of the total 12 protected trees found on site, a total of 11 trees will be impacted, all of which are coast live oak trees. Therefore, a total of 186 trees meeting the definition of mature and protected trees are expected to be impacted as a result of Project implementation. A complete breakdown of the trees impacted can be found in Appendix D.

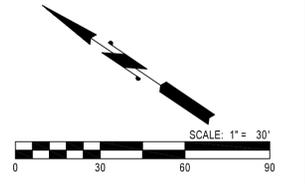
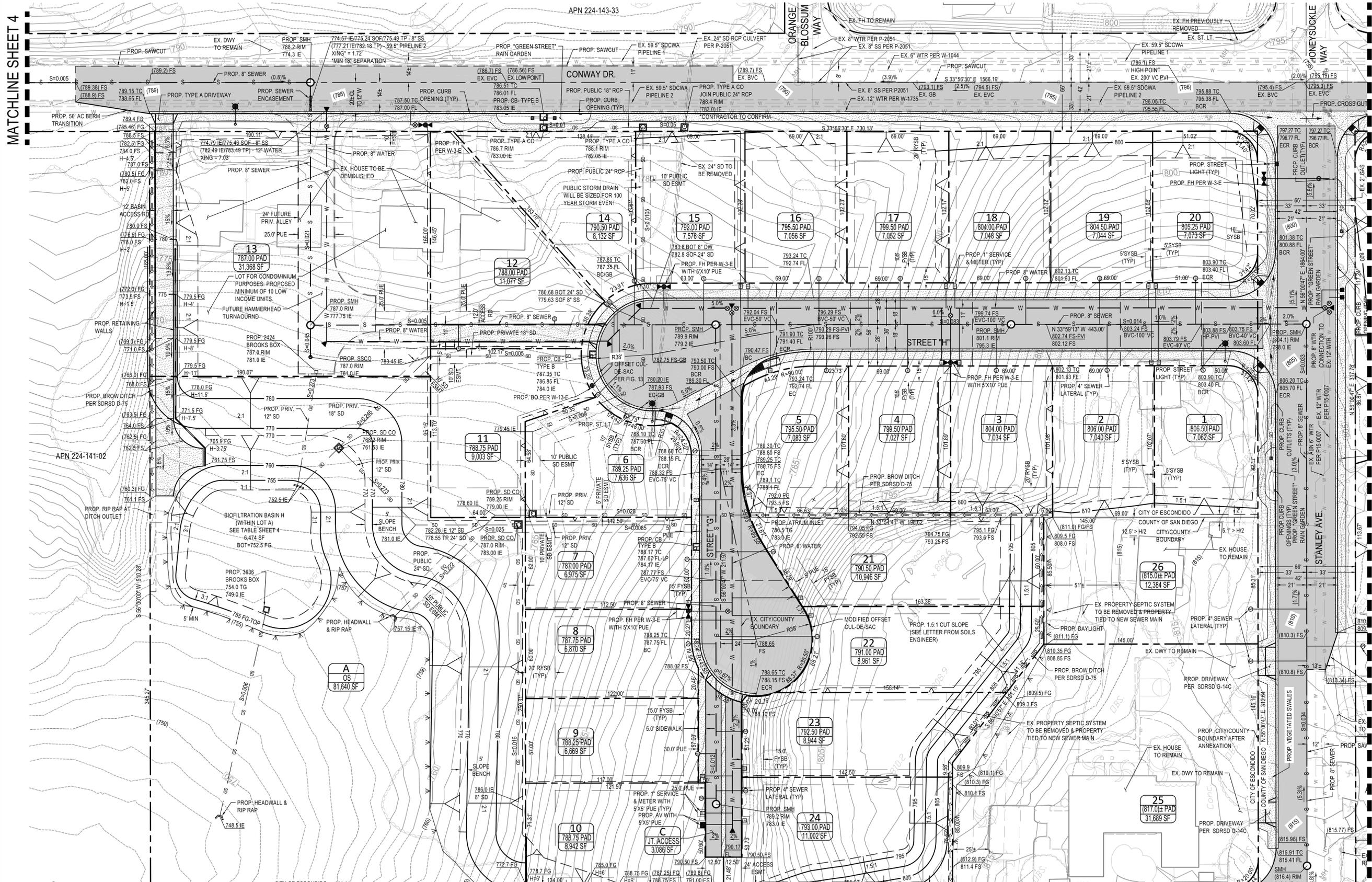
Table 5. Impacts to Protected and Mature Trees on the Project site

Mature Trees	DBH	Existing Number of trees	Total Impacted	Total Avoided
Native trees	4 inches to 9.99 inches	37 ¹	34 ²	3
Non-native trees species	8-inches or greater	199	141	58
<i>SUBTOTAL</i>	-	236	175²	61
Protected Trees	DBH (inches)	Existing Number of trees	Total Impacted	Total Avoided
Coast Live Oak	10-inches or greater	12	11	1
<i>SUBTOTAL</i>	-	12	11	1
TOTAL		248	186	64
<p>1. Native trees consists of 34 Coast Live Oak trees DBH 4 inch to 9.99 trees 1 black walnut tree with a DBH of 13.55- inches and two arroyo willow trees with a DBH of 7.8-inches and 12-inches. 2. Impacted native trees consists of 31 Coast Live Oak trees, 1 black walnut tree, and two arroyo willow trees.</p>				

CITY OF ESCONDIDO TRACT NO. TENTATIVE SUBDIVISION MAP

MATCHLINE SHEET 4

MATCHLINE SHEET 3



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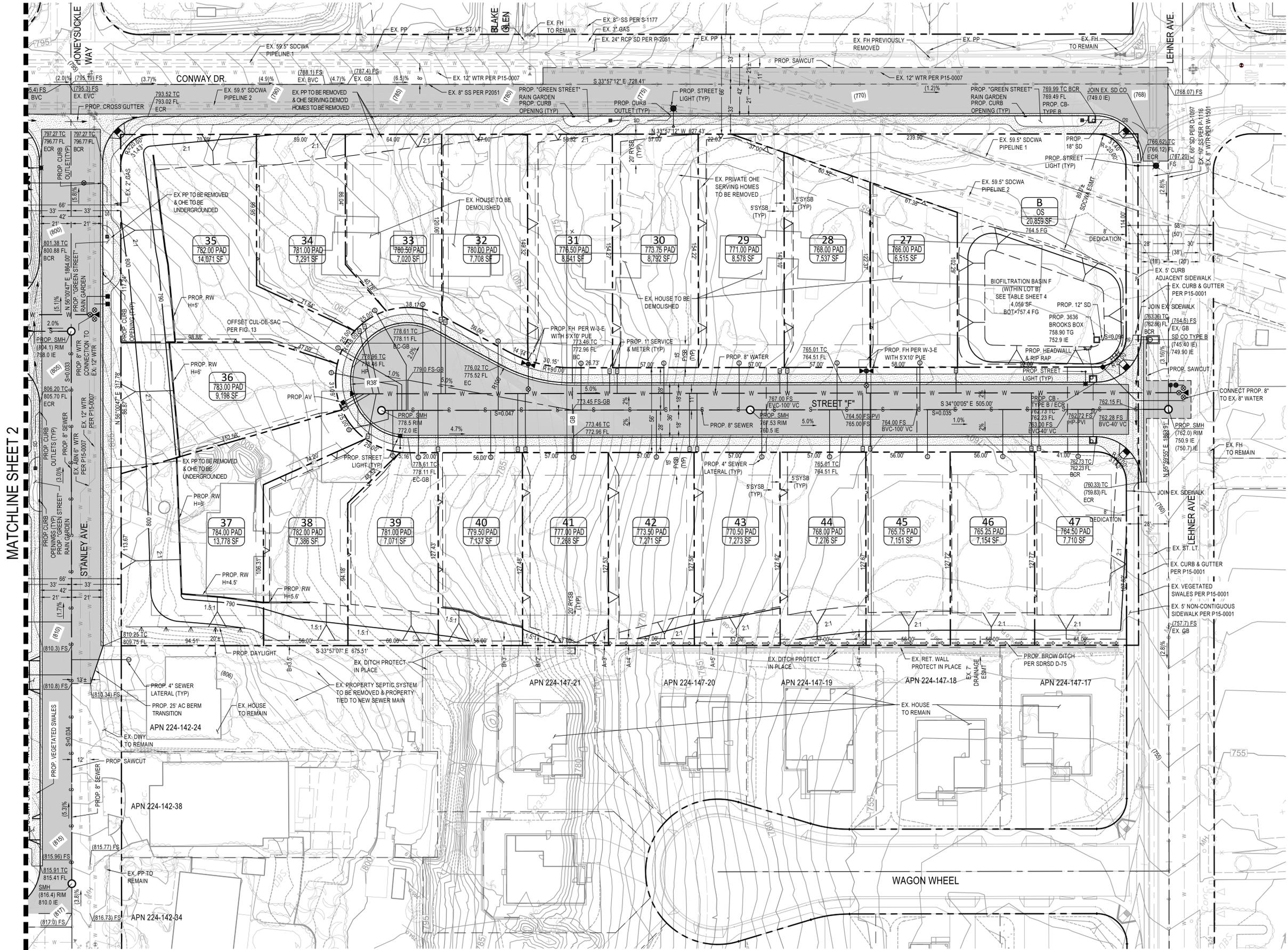
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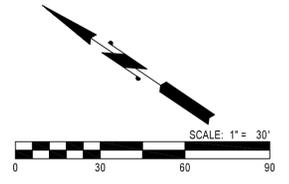
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APN 224-141-02

CITY OF ESCONDIDO TRACT NO. TENTATIVE SUBDIVISION MAP



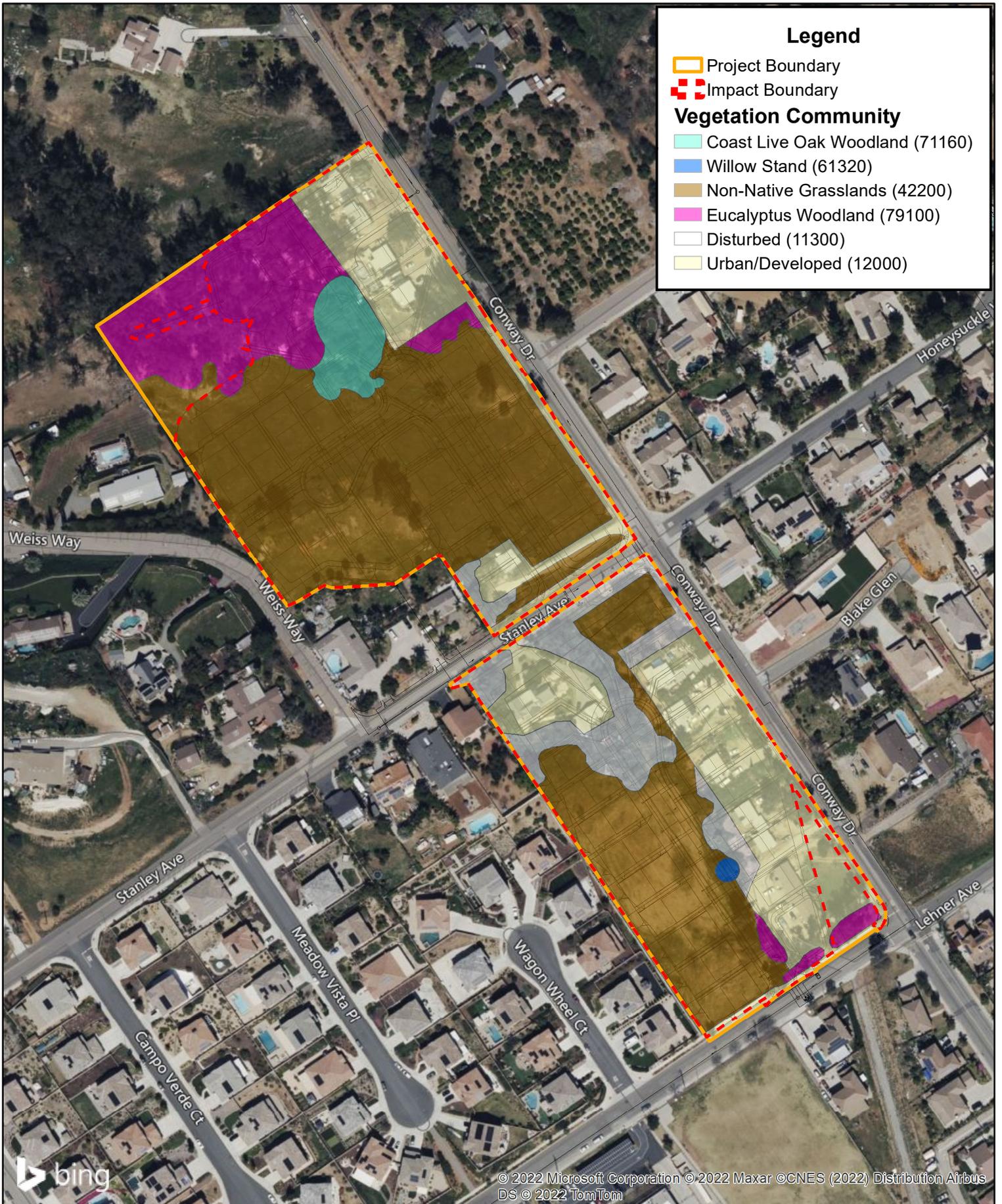
MATCHLINE SHEET 2



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Figure 10

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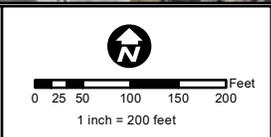


Legend

- Project Boundary
- Impact Boundary
- Vegetation Community**
- Coast Live Oak Woodland (71160)
- Willow Stand (61320)
- Non-Native Grasslands (42200)
- Eucalyptus Woodland (79100)
- Disturbed (11300)
- Urban/Developed (12000)

GIS Prepared By:
Carlson SLS

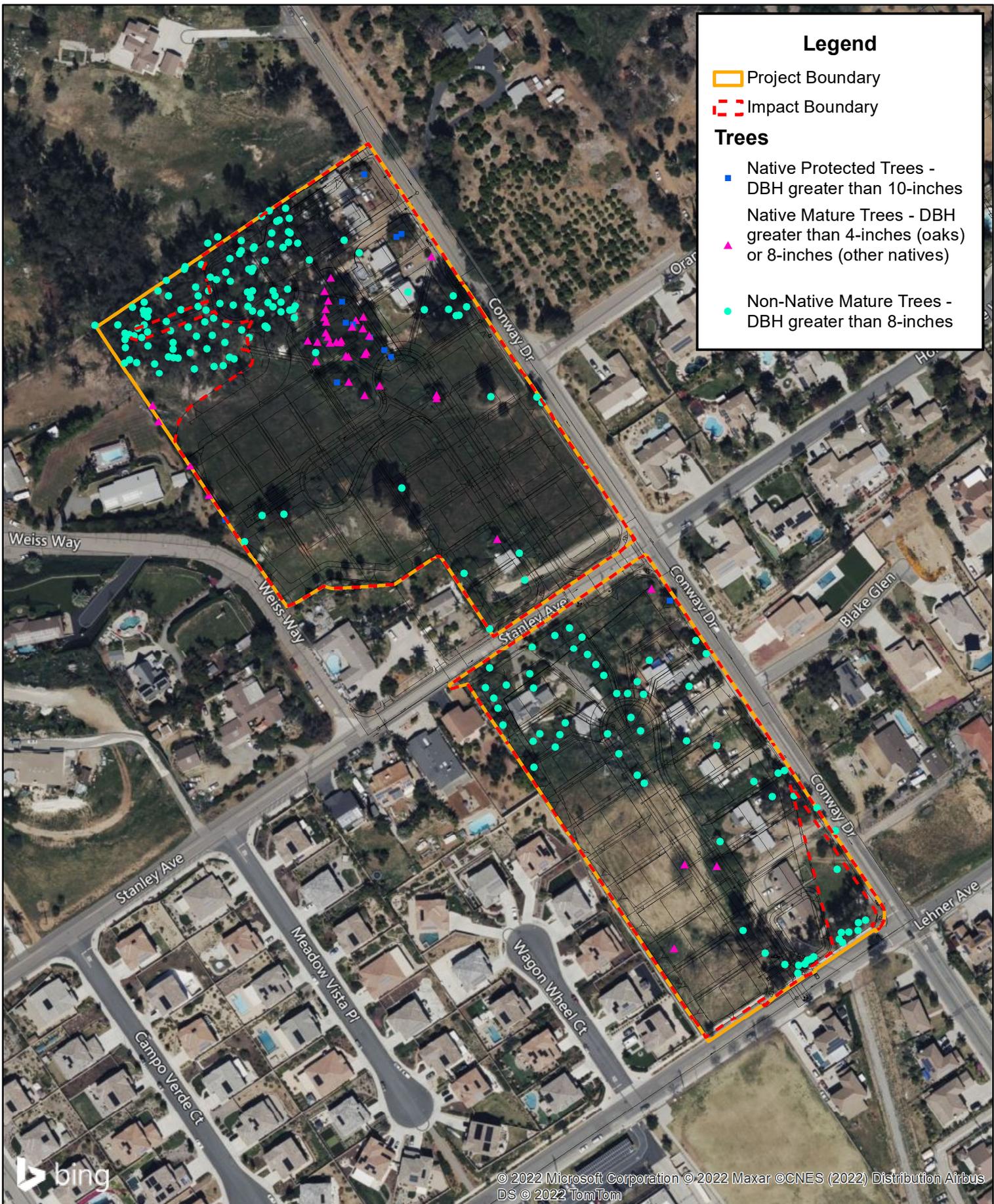
Created: September 25, 2022



Data Sources: Bing Maps
CAD (07/25/22)

Argus Land Company: Tract F & H Project
Vegetation Impacts Map

FIGURE 10



Legend

- Project Boundary
- Impact Boundary

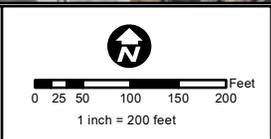
Trees

- Native Protected Trees - DBH greater than 10-inches
- ▲ Native Mature Trees - DBH greater than 4-inches (oaks) or 8-inches (other natives)
- Non-Native Mature Trees - DBH greater than 8-inches



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GIS Prepared By:
Carlson SLS
Created: September 25, 2022



Data Sources: Bing Maps
Field Survey (3/17/21)
Field Survey (4/7/21)
CAD (07/25/22)

Argus Land Company: Tract F & H Project
Impacts to Protected and Mature Trees

FIGURE 11

7.3 Threshold BIO-A

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as 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?

Less than Significant with Mitigation Measures Incorporated.

7.3.1 Sensitive Plant Species

Development of the Project site would result in the direct removal of portions of non-native grasslands, coast live oak woodland, disturbed, and urban/developed habitat. No special status plant species were identified to occur onsite, nor were any observed onsite. The Project would include the removal of portions of non-native grasslands, coast live oak woodland, disturbed, and urban/developed habitat; therefore, impacts to sensitive plant species would not be significant and no mitigation is required.

7.3.2 Sensitive Wildlife Species

Development of the Project site would result in the disruption and removal of habitat and the loss and displacement of non-sensitive common wildlife species. Due to the level of existing disturbance and urban development onsite and within the vicinity (e.g., nearby development), these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds. Therefore, impacts to common wildlife species would not be considered a significant impact and no mitigation is required.

The surrounding 500-foot buffer area consists of urban/developed, eucalyptus woodland, non-native grasslands, and disturbed vegetation communities. Some of these vegetation communities have potential to support sensitive wildlife foraging and nesting habitat. Potential adverse indirect impacts to common wildlife, specifically to the area adjacent to the eucalyptus and coast live oak woodland area include an increase in construction related noise; an increase in litter, pollutants, dust, oil, and other human debris during construction; and an increase in noise and nighttime lighting during long-term operations. While no sensitive species were observed during the field survey, it is expected that any sensitive or common wildlife species using surrounding habitats would avoid habitats affected by these "spillover" impacts, thereby decreasing diversity beyond the actual development envelope.

During construction, indirect impacts may occur to the woodland area from the increase of noise and construction traffic. As part of the Project design, Standard Best Management Practices (BMPs) are to be implemented to provide proper trash receptacles and management of dust/oil/pollutants, and well as limiting construction noise based on the City Noise Ordinance. Further, these indirect impacts are short in duration, only occurring during construction activities.

Short-term noise from construction activities could temporarily affect certain wildlife during breeding activities. For the proposed Project, construction noise is not expected to adversely and indirectly affect sensitive wildlife species due to the fact that none have potential to use the site for breeding activities. Some of the mature trees could be used for nesting by raptor species that are common to the area, such as red-tailed hawk. **Mitigation Measure Bio - 1 (MM BIO-1)** is proposed to ensure that activities affecting potential nesting habitat are restricted to periods outside of the raptor breeding season or, where activities must occur, pre-activity surveys and avoidance measures are implemented. Therefore, noise-related impacts would be less than significant with implementation of the mitigation measures.

Surveys for raptors, potential nests, and other sign were noted during the general biological and tree field surveys. The Project site provides high quality foraging opportunities and nesting habitat for common raptors that are resident and migratory to the region. The eucalyptus and coast live oak woodlands provide suitable perching habitat and the adjacent non-native grasslands provide open habitat for hunting. The Project avoids 0.68 acres of eucalyptus woodland habitat, suitable for raptors and other species breeding and foraging habitats. A total of 6.65 acres of impacts is anticipated to occur to non-native grasslands, which is suitable foraging habitat for raptors and other avian species and is considered a potentially significant impact. To offset the impacts to the non-native grasslands, the applicant shall purchase 3.33-acres, a 0.5:1 ratio, of non-native grasslands at Daley Ranch Mitigation Bank or other City approved Mitigation Bank as outlined within **Mitigation Measure Bio-2 (MM BIO-2)**. Implementation of **Mitigation Measure MM BIO-2** would reduce potential impacts to the non-native grasslands to a less than significant level.

Direct impacts associated with vegetation removal may occur to all avian species covered under the Migratory Bird Treaty Act (MBTA) with the removal of potential nesting and foraging habitat. The MBTA protects nesting activities of both native and non-native bird species. Under the Act it is unlawful to harm, harass, or take a nest. If Project construction is scheduled to occur during the typical breeding bird season (January 15 through August 31 for raptors and February 15 through August 31 for all other avian species), direct removal of vegetation and indirect short-term noise effects

to birds that may forage or nest onsite or within the buffer area may occur. In order to reduce direct and indirect impacts on nesting birds, if vegetation removal and/or construction activities were to occur during nesting bird season, a pre-construction nesting bird survey would be required within five (5) days of disturbances during typical nesting bird season to delineate any active nests found within the Project site. Pre-construction nesting bird surveys as outlined within **Mitigation Measure BIO - 1 (MM BIO - 1)** would ensure protection against direct impacts associated with vegetation removal or indirect impacts associated with construction related noise impacts for avian species covered under the MBTA during the typical nesting bird season. Implementation of **MM BIO-1** would reduce potential impacts to the avian species to a less than significant level if nesting individuals are present.

MM BIO-1 *Prior to ground disturbances that would impact potentially suitable nesting habitat for avian species, the project applicant shall adhere to the following:*

- 1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to the extent feasible to avoid potential impacts to nesting birds and/or ground nesters.*
- 2. Any construction activities that occur during typical nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat, on-site and within 300-feet surrounding the site (as feasible), be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement ground disturbances. If active nests are identified, the biologist would establish buffers around the vegetation (500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers would be halted until the nesting effort is finished (i.e. the juveniles are surviving independent from the nest). The onsite biologist would review and verify compliance with these nesting boundaries and would verify the nesting effort has finished. Work can resume within these areas when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall*

be prepared and submitted to City for mitigation monitoring compliance record keeping.

MM BIO-2 *Prior to issuance of the grading permit, the Project Applicant shall purchase 3.33-acres (0.5:1 ratio to the 6.65 acres of NNG impacts) of Non-Native Grasslands at the Daley Ranch Mitigation Bank or other City approved Mitigation Bank.*

7.4 Threshold BIO - B

Would the Project 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?

Less than Significant with Mitigation Measures Incorporated.

7.4.1 Sensitive Plant Communities

Impacts to coast live oak woodland are significant because the Subarea Plan and MSCP considers it a sensitive habitat. A total of 0.39 acres of coast live oak woodland would be impacted as a result of Project implementation. To offset the impacts to the coast live oak woodland, the applicant shall purchase 0.78-acres, a 2:1 ratio, of coast live oak woodland at Daley Ranch Mitigation Bank or other City approved Mitigation Bank as outlined within **Mitigation Measure Bio-3 (MM BIO-3)**. Implementation of **Mitigation Measure MM BIO-3** would reduce potential impacts to the coast live oak woodland to a less than significant level.

Impacts to non-native grasslands are significant because, directly and indirect, non-native grasslands are key to the conservation of a large number of Subarea Plan and MSCP target species. The habitat community provides foraging for raptors and may be succeeded naturally by other native habitats over time. A total of 6.65 acres of non-native grasslands would be impacted as a result of Project implementation. To offset the impacts to the non-native grasslands, the applicant shall purchase 3.33- acres, a 0.5:1 ratio, of non-native grasslands at Daley Ranch Mitigation Bank or other City approved Mitigation Bank as outlined within **Mitigation Measure Bio-2 (MM BIO-2)**. Implementation of **Mitigation Measure MM BIO-2** would reduce potential impacts to the non-native grasslands to a less than significant level.

MM BIO-3 *Prior to issuance of the grading permit, the Project Applicant shall purchase 0.78-acres, (2:1 ratio to the 0.39-acres of Oak Woodland impacts) of Coast Live Oak Woodland at the Daley Ranch Mitigation Bank or other City approved Mitigation Bank.*

7.4.2 CDFW Jurisdiction

No jurisdictional features were identified on the Project site subject to Section 1602 of the California Fish and Game Code, as regulated by CDFW. Therefore, no impacts would occur.

7.5 Threshold BIO - C

Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact.

No jurisdictional non-wetland or wetland waters regulated under Section 404 of the CWA were identified on the Project site. Therefore, no impacts would occur.

7.6 Threshold BIO - D

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 corridors, or impede the use of native wildlife nursery sites?

Less than Significant with Mitigation Incorporated.

7.6.1 Wildlife Movement

The Project site is surrounded by existing development, and as such, does not by itself function as and does not contribute to any wildlife corridors or linkages. The site supports potential live-in and movement habitat for species on a local scale (i.e., some limited live-in and marginal movement habitat for reptile, bird, and mammal species), however, the site provides little to no function to facilitate wildlife movement on a regional scale. Furthermore, the site is not identified as a Special Linkage area within the Subarea Plan or the County's MSCP. Movement on a local scale likely occurs with species adapted to urban environments due to the surrounding development and disturbances in the vicinity of the site. Although implementation of the Project would result in disturbances to local wildlife movement within the site, those species adapted to urban areas would be expected to persist on-site following construction. As such, impacts would be less than significant, and no mitigation measures would be required.

7.6.2 Migratory Birds and Raptors

The Project site supports foraging habitat for migratory birds and raptors due to the non-native grasslands habitat occurring on the Project site. The Project site provides

nesting habitat for migratory birds and raptors due to the eucalyptus and coast live oak woodlands present on the Project site. Nesting activity typically occurs from January 15 through August 31 for raptors and February 15 through August 31 for all other avian species. Disturbing or destroying active nests is a violation of the MBTA (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Wildlife Code Section 3503. As such, direct impacts to breeding birds (e.g. through nest removal) or indirect impacts (e.g. by noise causing abandonment of the nest) is considered a potentially significant impact. Compliance with the MBTA would reduce impacts to a less than significant level, as detailed in **MM BIO-1**. Furthermore, the purchase of coast live oak woodland and non-native grasslands would reduce impacts to a less than significant level and preserve foraging and nesting habitat within the City, as detailed in **MM BIO-2** and **MM BIO-3**.

7.7 Threshold BIO - E

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant with Mitigation.

As depicted on Figure 7, the Project site contains mature and protected trees subject to mitigation for unavoidable impacts pursuant to Section 33-1069, Article 55 of Chapter 33 of the City's Municipal Code. The Project will result in unavoidable impacts to these trees, including up to 175 mature trees and 11 protected trees.

Impacts will be mitigated through replacement of trees at a minimum of 1:1 mitigation ratio for mature trees and a minimum of 2:1 ratio for protected trees in accordance with **Mitigation Measure BIO-4 (MM BIO-4)**. Furthermore, as outlined within **MM BIO-3**, coast live oak woodland habitat shall be mitigated at a 2:1 ratio. Implementation of **MM BIO-3** and **MM BIO-4** would reduce potential impacts to local policies or ordinances protecting biological resources to a less than significant level.

MM BIO-4 *The Project Applicant shall replace impacted mature trees at a minimum of 1:1 ratio, a total of 175 trees, unless other biologically equivalent or superior mitigation has been determined by the City. Trees may be replaced either on or off-site. The number, size, and species of replacement trees shall be determined on a case-by-case basis by the Development Services Director pursuant to Escondido Municipal Code Section 33-1069.*

The Project Applicant shall replace impacted protected trees at a minimum of 2:1 ratio, a total of 22 trees, unless other biologically equivalent or superior mitigation has been determined by the City. Protected trees may be replaced on or off-site. The size of the replaced protected trees shall be a minimum of 24-inch box or as determined by the Development Services Director and shall be replaced in-kind with the same species as impacted.

*To avoid double counting mitigation of oak trees since Mitigation Measure MM BIO-3 requires mitigation for coast live oak woodland habitat that includes individual oak trees subject to this mitigation measure, the number of oak trees associated with the purchase of oak woodland habitat (either actual or estimate) mitigation credits may also be used to satisfy the individual tree replacement mitigation requirement found in this **Mitigation Measure MM BIO-4**.*

7.8 Threshold BIO - F

Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact.

In the region, the Project site occurs within the boundaries of the North County Multiple Habitat Conservation Program (MHCP). The only Subarea Plan that has been approved and adopted within the North County MHCP is the City of Carlsbad MHCP Subarea Plan, also known as the Carlsbad Habitat Management Plan (HMP). The Project occurs within the boundaries of the Draft Escondido MHCP Subarea Plan, which has not yet been approved or adopted.

Within the North County MHCP, the site is situated in areas identified as Developed/Disturbed Land, outside of areas targeted for conservation, including Focused Planning Area (FPA), Hardline Areas (90% to 100% Conservation), Softline Areas (Less than 90% Conservation), Hardline Preserves, Major Amendment Area, Natural Habitats (Outside of FPA), Core Gnatcatcher Conservation, Biological Core and Linkage Area (BCLA), and Edge Habitat. Furthermore, the Project site is not proposed in any areas targeted for conservation and would not conflict with the provisions of the North County MHCP. Therefore, the Project site is not proposed in any areas targeted for conservation and would not conflict with the provisions or preclude the future implementation of the Draft Escondido MHCP Subarea Plan. No impact would occur.

Therefore, the Project does not conflict with any adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan and no mitigation is required.

8.0 Cumulative Impacts

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed Project. CEQA deems a cumulative impact analysis to be adequate if a list of "related projects" is included in the EIR or the proposed project is consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(b)(1)(B)]. CEQA also states that no further cumulative impact analysis is necessary for impacts of a proposed project consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(d)]. The Project is consistent with the City of Riverside's existing Zoning Code and General Plan land designation.

The loss of biological resources on the Project site must be considered in the context of the other development in the area. The Project's direct impact analysis identified four biological resources including; nesting birds, coast live oak woodland vegetation community, non-native grasslands vegetation community, impacts to mature and protected trees. When combined with impacts from other reasonably past, present, and future projects, could result in a cumulative biological impact.

Direct impacts may occur to nesting birds, should construction activities and ground disturbances begin during the typical nesting season. However, adherence and implementation of **MM BIO - 1** will ensure impacts to avian species or their habitats are minimized thus reducing the Project's contribution to cumulative impacts to less than significant. Both coast live oak woodland and non-native grasslands vegetation community are considered sensitive vegetation communities pursuant to the City's Subarea Plan and impacts to these communities may result in a significant impact. However, adherence and implementation of **MM BIO-2 and MM BIO-3** will ensure impacts to these communities are minimized thus reducing the Project's contribution to cumulative impacts to less than significant.

Finally, impacts to mature and protected trees as defined in the City of Escondido's municipal code could result in significant impacts. Pursuant to regulatory requirements, Projects in the City are required to compensate the loss of mature and protected trees. However, adherence and implementation of **MM BIO-4** will ensure impacts to these communities are minimized thus reducing the Project's contribution to cumulative impacts to less than significant.

With the implementation of the above, the cumulative impacts would be less than significant with mitigation incorporated.

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APPENDIX A

Special Status Plant Species Potential Occurrence Determination

APPENDIX A

Special Status Plant Species Potential Occurrence Determination

This table summarizes conclusions from analysis and field surveys regarding the potential occurrence of special status plant species within the Project site for the USGS 7.5-Minute Topographic Map Valley Center and the surrounding two-mile radius. During the field surveys, the potential for special status plant species to occur within the Project site was assessed based on the following criteria:

- Present: observed on the site during the field surveys, or recorded on-site by other qualified biologists.
- Known to Occur: observed on site in the recent past, but not observed during the most recent biological survey.
- High potential to occur: observed in similar habitat in the region by a qualified biologist or habitat on the site is a type often utilized by the species, and the site is within the known distribution and elevation range of the species.
- Moderate potential to occur: reported sightings in surrounding region, or the site is within the known distribution and elevation range of the species, and habitat on the site is a type occasionally used by the species.
- Low potential to occur: the site is within the known distribution and elevation range of the species, but habitat on the site is rarely used by the species or for which there are no known recorded occurrences of the species within or adjacent to the site.
- None: a focused study failed to detect the species or no suitable habitat is present.
- Unknown: the species' distributional/elevation range and habitat are poorly known.

Even with field surveys, biologists assessed the probability of occurrence rather than make a definitive conclusion about species presence or absence. Failure to detect the presence of the species is not definitive and may be due to variable effects associated with fire, rainfall patterns, and/or season.

Appendix A – Special Status Plant Species Potential Occurrence Determination

Special Status Plants: Potential to Occur within the Study Area

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence within the Study Area
<i>Arctostaphylos rainbowensis</i>	Rainbow manzanita	CRPR: 1.B1	Habitats supporting chaparral. Known from 205 to 670 meters (672 to 2,198 feet) MSL. Blooms December through March.	None. The Project site lacks suitable habitat. Not observed during field visit.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	FE, SE CRPR: 1.B1	Habitats supporting closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grasslands and vernal pools supporting mesic and clay soils. Known from 30 to 1692 meters (98 to 5,551 feet) MSL. Blooms May through July.	None. The Project site lacks suitable habitat. Not observed during field visit.
<i>Centromadia parryi ssp. australis</i>	Southern tarplant	CRPR: 1.B1	Habitats supporting marshes and swamps (margins), valley and foothill grasslands (vernally mesic), and vernal pools. Known from 0 to 480 meters (0 to 1,575 feet) MSL. Blooms May through November.	None. The Project site lacks suitable habitat. Not observed during field visit.
<i>Comarostaphylis diversifolia ssp. diversifolia</i>	Summer holly	CRPR: 1.B2	Habitats supporting chaparral and cismontane woodlands. Known from 30 to 790 meters (98 to 2,591 feet) MSL. Blooms April through June.	None. The Project site lacks suitable habitat. Not observed during field visit.
<i>Horkelia truncata</i>	Ramona horkelia	CRPR: 1.B3	Habitats supporting chaparral and cismontane woodland, supporting clay and gabbroic soils. Known from 400 to 1,330 meters (1,312 to 4,363 feet) MSL. Blooms May through June.	

Appendix A – Special Status Plant Species Potential Occurrence Determination

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence within the Study Area
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	CRPR: 4.3	Habitats include chaparral and coastal scrub. Known from 1 to 885 meters (3 to 2,900 feet) MSL. Blooming Period: January through July.	None. The site lacks suitable habitats. Not observed during field surveys.

Legend

Federal Endangered Species Act (ESA) Listing Codes: federal listing is pursuant to the Federal Endangered Species Act of 1973, as amended (ESA).

FE = federally listed as endangered: any species, subspecies, or variety of plant or animal that is in danger of extinction throughout all or a significant portion of their range.

FT = federally listed as threatened: any species, subspecies, or variety of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future.

California Endangered Species Act (CESA) Listing Codes: state listing is pursuant to § 1904 (Native Plant Protection Act of 1977) and §2074.2 and §2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing of Endangered, Threatened and Rare species of plants and animals.

SE = state listed as endangered: any species, subspecies, or variety of plant or animal that are in serious danger of becoming extinct throughout all, or a significant portion, of their range.

ST = state listed as threatened: any species, subspecies, or variety of plant or animal that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future.

California Rare Plant Ranks (Formerly known as CRPR Lists): the CRPR is a statewide, non-profit organization that maintains, with CDFW, an Inventory of Rare and Endangered Plants of California. In the spring of 2011, CRPR and CDFW officially changed the name "CRPR List" or "CRPR Ranks" to "California Rare Plant Rank" (or CPRP). This was done to reduce confusion over the fact that CRPR and CDFW jointly manage the Rare Plant Status Review Groups and the rank assignments are the product of a collaborative effort and not solely a CRPR assignment.

CRPR: 1B - California Rare Plant Rank 1B (formerly List 1B): Plants Rare, Threatened, or Endangered in California and Elsewhere. All of the plants constituting California Rare Plant Rank 1B meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

CRPR: 2 - California Rare Plant Rank 2 (formerly List 2): Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere. All of the plants constituting California Rare Plant Rank 2 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code,

and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

CRPR: 4 - California Rare Plant Rank 4 (formerly List 4): Plants of Limited Distribution - A Watch List. Very few of the plants constituting California Rare Plant Rank 4 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and CRPR and CDFW strongly recommend that California Rare Plant Rank 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.

California Native Plant Society (CRPR) Threat Ranks: The CRPR Threat Rank is an extension added onto the California Rare Plant Rank (CRPR) and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.

0.1 = seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2 = fairly endangered in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

Sources:

- Calflora website - search for plants (Calflora 2021).
- CRPR Inventory of Rare and Endangered Plants (CRPR 2021).
- The Status of Rare, Threatened, and Endangered Plants and Animals of California, 2000-2004 (CDFW 2021).
- The Jepson Manual: *Vascular Plants of California*, second edition (Baldwin *et al.* 2012).
- RareFind, CDFW, California Natural Diversity Database (CNDDDB) (CDFW 2021f).
- State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2021).

APPENDIX B

Special Status Wildlife Potential Occurrence
Determination

APPENDIX B

Special Status Wildlife Potential Occurrence Determination

This table summarizes conclusions from analysis and field surveys regarding the potential occurrence of special status wildlife species within the Project site for the USGS 7.5-Minute Topographic Map Riverside East and the surrounding two-mile radius. During the field surveys, the potential for special status wildlife species to occur within the Project Site was assessed based on the following criteria:

- Present: observed on the site during the field surveys, or previously recorded on-site by other qualified biologists.
- Known to Occur: observed on site in the recent past, but not observed during the most recent biological survey.
- High potential to occur: observed in similar habitat in the region by a qualified biologist or habitat on the site is a type often utilized by the species, and the site is within the known distribution and elevation range of the species.
- Moderate potential to occur: reported sightings in surrounding region, or the site is within the known distribution and elevation range of the species, and habitat on the site is a type occasionally used by the species.
- Low potential to occur: the site is within the known distribution and elevation range of the species, but habitat on the site is rarely used by the species or for which there are no known recorded occurrences of the species within or adjacent to the site.
- None: a focused study failed to detect the species or no suitable habitat is present.
- Unknown: the species' distributional/elevation range and habitat are poorly known.

Even with field surveys, biologists assessed probability of occurrence rather than make definitive conclusions about species presence or absence. Failure to detect the species is not definitive and may be due to variable effects associated with migration, weather, fire, and/or time of day and year.

Special Status Wildlife: Potential to Occur within the Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
<i>Agelaius tricolor</i>	Tricolor blackbird	ST, SSC, BLMS, BBC	Tricolor blackbird colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat composed of grassland, woodland, or agricultural cropland.	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	WL	They are found on grass-covered hillsides, coastal sage scrub, and chaparral and often occur near the edges of the denser scrub and chaparral associations. Preference is shown for tracts of California sagebrush. Optimal habitat consists of sparse, low brush or grass, hilly slopes preferably interspersed with boulders and outcrops. The species may occur on steep grassy slopes without shrubs if rock outcrops are present. It is a very secretive species.	None. No suitable habitat is found within the Project site. Not observed during field surveys.
<i>Anniella stebbinsi</i>	Southern California legless lizard	SSC	Coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans.	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Antrozous pallidus</i>	Pallid bat	BLMS, SSC	Arid deserts and grasslands. Shallow caves, crevices, rock outcrops, buildings, tree cavities. Especially near water. Colonial. Audible echolocation signal.	None. Limited suitable habitat found within the Project site. Not observed during field survey.
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	WL, BBC	Chaparral and coastal sage scrub along the coastal lowlands, inland valleys and in the lower foothills of local mountains.	None. Suitable habitat does not exist within Project site. Not observed during field survey.

Appendix B – Special Status Wildlife Potential Occurrence Determination

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
<i>Aspidoscelis hyperythra beldingi</i>	orangethroat whiptail	SSC, FSS	The species is generally found in semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral. Habitat types include low elevation chaparral, non-native grassland, (Riversidian) coastal sage scrub, juniper woodland and oak woodland. Associations include alluvial fan scrub and riparian areas. Friable soil appears to be a necessary requirement for excavating burrows and hiding eggs.	Low. Suitable habitat does not exist within Project site. Not observed during field survey.
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	SSC	This species is found in a variety of habitats, primarily hot and dry open areas with sparse vegetation including chaparral, woodland, and riparian areas. This subspecies is found in coastal southern California, north into Ventura County, and south into Baja California. Additional important habitat characteristics include Important habitat components include shrub cover with accumulated leaf litter, and an abundance of invertebrate prey, particularly termites.	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Athene cunicularia hypugaea</i>	burrowing owl	SSC, BLMS, BCC	Burrowing owls are a year-round resident of California including habitats of open, dry grassland, and desert. They are generally restricted to mostly flat, open country with suitable nest sites. They use rodent or other burrows for roosting and	None. No suitable habitat is found within the Project site. Not observed during field survey.

Appendix B – Special Status Wildlife Potential Occurrence Determination

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
			nesting cover and acquire their burrows from either abandonment or eviction. Burrowing owls typically hunt from a perch.	
<i>Buteo swainsoni</i>	Swainson's hawk	ST, BLMS, BBC	This hawk prefers open grasslands and desert-like habitats. It is common to see this hawk perched on a fence post in a prairie or open range. The Swainson's Hawk also inhabits agricultural areas, and is known to follow farmer's tractors in search of insect or rodent prey.	Low. Suitable habitat found within the eucalyptus woodland for nesting and non-native grasslands for foraging.
<i>Chaetidipus californicus femoralis</i>	Dulzura pocket mouse	SSC	Brushy areas of coastal sage scrub, chamise-redshank & montane chaparral, sagebrush, annual grassland, valley foothill hardwood, valley foothill hardwood-- conifer & montane hardwood. Probably most attracted to interface of grassland and brush.	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT, SE, BLMS, FSS, BCC	This species is an uncommon to rare summer resident of valley foothill and desert riparian habitats in scattered locations in California. Formerly much more common and widespread throughout lowland California. Roosts and nests in densely foliated, deciduous trees and shrubs in extensive thickets, particularly willows.	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Corynorhynchus townsendii</i>	Townsend's big-eared bat	BLMS, SSC	Caves, mines, buildings. Found in a variety of habitats, arid and mesic. Individual or colonial. Extremely sensitive	None. No suitable habitat is found within the Project site. Not observed during field surveys.

Appendix B – Special Status Wildlife Potential Occurrence Determination

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
			to disturbance.	
<i>Emys marmorata</i>	western pond turtle	SCC, BLMS	Inhabits permanent or nearly permanent water below 1,830 meters (6000 feet) throughout California, west of the Sierra Cascade.	None. No suitable habitat is found within the Project site. Not observed during field surveys.
<i>Lasiurus xanthinus</i>	western yellow bat	SSC	Roost in trees, hanging from the underside of a leaf. Commonly found in the southwestern U.S. roosting in the skirt of dead fronds in both native and non-native palm trees and have also been documented roosting in cottonwood trees.	Low. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	ST, BLMS, BBC, Fully Protected	Black Rails nest in marshes and wet meadows across North America, including riparian marshes, coastal prairies, saltmarshes, and impounded wetlands. All of the habitats have stable shallow water. Nests are primarily made of southern cattail or spikerush and are elevated above the mud substrate in clumps of vegetation. Black rails have also been known to nest on top of a mat of dead vegetation from the previous years' growth.	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	SSC	This bat species prefers rocky desert areas with high cliffs or rock outcrops. Rock crevices in cliffs are preferred as roosting sites, since the bat must drop from the roost to gain flight speed. Typically reproduces in rock crevices,	None. No suitable habitat is found within the Project site. Not observed during field survey.

Appendix B – Special Status Wildlife Potential Occurrence Determination

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
			caverns, or buildings. Ranges from southern California to New Mexico.	
<i>Nyctinomops macrotis</i>	Big free-tailed bat	SSC	Big free-tailed bats mainly inhabit rugged, rocky habitats in arid landscapes. It has been located in a variety of plant associations including desert shrub, woodlands, and evergreen forests.	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Phrynosoma blainvillii</i>	coast horned lizard	SSC, BLMS	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland and riparian woodlands.	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Plegadis chihi</i>	White-faced ibis	WL	White-faced Ibises forage in shallow wetlands, usually among short plants such as sedges, spikerush, glasswort, saltgrass, and greasewood. Salt, brackish, and freshwater marshes all provide foraging habitat. They also frequent wet agricultural fields with low plant cover, including alfalfa, barley, wheat, oats, and rice, along with livestock pastures and hayfields.	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT, SSC	A non-migratory, permanent resident of coastal sage scrub habitat, which is a broad category of vegetation that includes the following plant communities: Ventura coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, southern coastal bluff scrub, and coastal	None. No suitable habitat is found within the Project site. Not observed during field survey.

Appendix B – Special Status Wildlife Potential Occurrence Determination

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
			sage-chaparral scrub. They also use chaparral, grassland and riparian habitats next to coastal sage scrub, but these habitats are used dispersal and foraging. They avoid nesting on steep slopes.	
<i>Spea hammondii</i>	western spadefoot	SSC, BLMS	May be found in coastal sage scrub, open chaparral, pine-oak woodlands and grassland habitats, but is most common in grasslands with vernal pools or mixed grassland/coastal sage scrub areas. Within these habitats, they require rain pools/vernal pools in which to reproduce and that persist with more than three weeks of standing water in which to metamorphose successfully. They can also breed in slow-moving streams (e.g., areas flooded by intermittent streams). Water breeding sites must lack fish, bullfrogs, and crayfish in order for to successfully reproduce and metamorphose. They estivate in sandy, gravelly soil in upland habitats adjacent to potential breeding sites in burrows approximating 1 meter in depth.	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Taxidea taxus</i>	American badger	SSC	Badgers prefer to live in dry, open grasslands, fields, and pastures. They are found from high alpine meadows to sea level	None. No suitable habitat is found within the Project site. Not observed during field survey.
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, SE	Least Bell's vireos primarily occupy riverine riparian habitats that typically	None. No suitable habitat is found within the Project site. Not observed

Appendix B – Special Status Wildlife Potential Occurrence Determination

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
			feature dense cover within 1-2 m of the ground and a dense, stratified canopy. Typically, it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodland, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses. 2,000 feet elevation in the interior. This species is generally restricted to major river systems in San Diego County.	during field survey.

Legend
<p><u>Federal Endangered Species Act (ESA) Listing Codes:</u> federal listing is pursuant to the Federal Endangered Species Act (ESA) of 1973, as amended. The official federal listing of Endangered and Threatened Animals is published in the Federal Register, 50 CFR 17.11.</p> <p>FE = federally listed as endangered: any species, subspecies, or variety of plant or animal that is in danger of extinction throughout all or a significant portion of their range.</p> <p>FT = federally listed as threatened: any species, subspecies, or variety of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future.</p> <p>FC = federal candidate for listing.</p> <p>FPT = federally proposed threatened.</p> <p><u>California Endangered Species Act (CESA) Listing Codes:</u> state listing is pursuant to §2074.2 and §2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing of Endangered, Threatened and Rare species of plants and animals. The official California listing of Endangered and Threatened animals is contained in the California Code of Regulations, Title 14, and Section 670.5.</p> <p>SE = state listed as endangered: any species, subspecies, or variety of plant or animal that are in serious danger of becoming extinct throughout all, or a significant portion, of their range.</p> <p>ST = state listed as threatened: any species, subspecies, or variety of plant or animal that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future.</p> <p>SCT = state candidate for listing as threatened.</p> <p>SCE = state candidate for listing as endangered.</p>

California Department of Fish and Wildlife (CDFW):

SSC = species of special concern: status applies to animals which 1) are declining at a rate that could result in listing, or 2) historically occurred in low numbers and known threats to their persistence currently exist. The CDFW has designated certain vertebrate species as “species of special concern” because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

Fully protected = animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

WL = watch list: these birds have been designated as “Taxa to Watch” in the *California Bird Species of Special Concern report* (Shuford and Gardali 2008). The report defines “Taxa to Watch” as those that are not on the current special concern list that (1) formerly were on the 1978 (Remsen 1978) or 1992 (CDFG 1992) special concern lists and are not currently listed as state threatened and endangered; (2) have been removed (delisted) from either the state or federal threatened and endangered lists (and remain on neither), or (3) are currently designated as “fully protected” in California.

United States Fish and Wildlife Service (USFWS):

BCC = USFWS bird of conservation concern: listed in the USFWS'S 2008 *Birds of Conservation Concern* report. The report identifies species, subspecies, and populations of all migratory non-game birds that, without additional conservation actions, are likely to become candidates for listing under the ESA. While all of the bird species included in the report are priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing.

United States Forest Service (USFS):

FSS = Forest Service sensitive: those plant and animal species identified by a Regional Forester that are not listed or proposed for listing under the ESA and for which population viability is a concern, as evidenced by: (a) significant current or predicted downward trends in population numbers or density or (b) significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.”

United States Bureau of Land Management (BLM):

BLMS = BLM sensitive: those plant and animal species on BLM administered lands and that are (1) under status review by the USFWS/NMFS; or (2) whose numbers are declining so rapidly that federal listing may become necessary, or (3) with typically small and widely dispersed populations; or (4) those inhabiting ecological refugia or other specialized or unique habitats. BLM policy is to provide the same level of protection as USFWS candidate species.

California Department of Forestry and Fire Protection (CDF):

CDF: S = CDF sensitive: species is a California Department of Forestry and Fire Protection sensitive species. The Board of Forestry classifies as sensitive species those species that warrant special protection during timber operations.

Sources:

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- *Life on the Edge: A Guide to California's Endangered Natural Resources. Wildlife* (Thelander et al. 1994).
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- *Mammals of North America* (Kays and Wilson 2002).
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- NatureServe Explorer (NatureServe 2021).
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- Standard Common and Current Scientific Names (Center for North American Herpetology website [CNAH] website 2021).
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- Terrestrial Mammal Species of Special Concern in California (Bolster 1998).

APPENDIX C

Plant Species Recorded During Field Surveys

Appendix C

Plant Species Observed during the Field Surveys

EUDICOTS
ANACARDIACEAE–Sumac Or Cashew Family
Schinus terebinthifolius–Brazilian peppertree*
Toxicodendron diversilobum–poison oak
ASTERACEAE–Sunflower Family
Ambrosia psilostachya–western ragweed
Baccharis salicifolia–mulefat
Silybum marianum–blessed milkthistle*
Taxodium distichum–no common name*
BIGNONIACEAE–Bignonia Family
Jacaranda mimosifolia–blue jacaranda*
BRASSICACEAE–Mustard Family
Hirschfeldia incana–shortpod mustard*
Raphanus raphanistrum–wild radish*
Sisymbrium irio–London rocket*
FABACEAE–Legume Family
Acacia pycnantha–golden wattle*
Ceratonia siliqua–St. John's bread*
Medicago polymorpha–burclover*
Vicia sativa ssp. nigra–garden vetch*
FAGACEAE–Oak Family
Quercus agrifolia–coast live oak
GERANIACEAE–Geranium Family
Erodium cicutarium–redstem stork's bill*
LAURACEAE–Laurel Family
Laurus nobilis–sweet bay*
Persea americana–avocado*
MELIACEAE–Mahogany Family
Melia azedarach–Chinaberrytree*
MORACEAE–Mulberry Family
Ficus carica–edible fig*
Morus alba–white mulberry*
MYRTACEAE–Myrtle Family
Eucalyptus citriodora–lemonscented gum*
OLEACEAE–Olive Family
Olea europaea–olive*
PLANTAGINACEAE–Plantain Family
Plantago lanceolata–narrowleaf plantain*

PROTEACEAE–Protea Family
Grevillea robusta–silkoak*
SALICACEAE–Willow Family
Salix laevigata–red willow
Salix lasiolepis–arroyo willow
SCROPHULARIACEAE–Figwort Family
Myoporum laetum–myoporum*
SOLANACEAE–Nightshade Family
Nicotiana glauca–tree tobacco*
TAMARICACEAE–Tamarisk Family
Tamarix ramosissima–tamarisk*
URTICACEAE–Nettle Family
Urtica dioica–stinging nettle
MONOCOTS
ARECACEAE–Palm Family
Washingtonia robusta–Washington fan palm*
ASPARAGACEAE–Asparagus Family
Asparagus asparagoides–African asparagus fern*
IRIDACEAE–Iris Family
Sisyrinchium bellum–western blue-eyed grass
POACEAE–Grass Family
Avena barbata–slender oat*
Bromus diandrus–ripgut brome*
Bromus madritensis ssp. rubens–red brome*

APPENDIX D

Protected and Mature Tree Inventory Data

Arugus Tree Inventory

Tree Number	Tree Species		DBH (in.)	Height (ft)	Comments/ Health	Native or Non-Native	Mature or Protected	Impacted
	Common Name	Scientific Name						
25	Coast Live Oak	<i>Quercus agrifolia</i>	3.6	15	multitrunk	Native		Yes
26	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	18.9	60	multitrunk	Non-Native	Mature	Yes
27	Tamarisk	<i>Tamarix ramosissima</i>	2.65	12		Non-Native		Yes
28	Coast Live Oak	<i>Quercus agrifolia</i>	8.2	20	multitrunk	Native	Mature	Yes
29	Coast Live Oak	<i>Quercus agrifolia</i>	6.8	20	multitrunk	Native	Mature	Yes
30	Red Willow	<i>Salix laevigata</i>	3	20		Native		Yes
31	Coast Live Oak	<i>Quercus agrifolia</i>	7.6	20		Native	Mature	Yes
32	Coast Live Oak	<i>Quercus agrifolia</i>	5.2	20	multitrunk	Native	Mature	Yes
33	Coast Live Oak	<i>Quercus agrifolia</i>	8.15	25	multitrunk	Native	Mature	Yes
34	Coast Live Oak	<i>Quercus agrifolia</i>	1.8	8	multitrunk	Native		Yes
35	Coast Live Oak	<i>Quercus agrifolia</i>	2.6	10	multitrunk	Native		Yes
36	Coast Live Oak	<i>Quercus agrifolia</i>	10.6	20	multitrunk	Native	Protected	Yes
37	Coast Live Oak	<i>Quercus agrifolia</i>	1	7		Native		Yes
38	Coast Live Oak	<i>Quercus agrifolia</i>	2.9	10		Native		Yes
39	Coast Live Oak	<i>Quercus agrifolia</i>	10.75	25		Native	Protected	Yes
40	Coast Live Oak	<i>Quercus agrifolia</i>	13.8	35	multitrunk	Native	Protected	Yes
41	Coast Live Oak	<i>Quercus agrifolia</i>	9.6	30		Native	Mature	Yes
42	Coast Live Oak	<i>Quercus agrifolia</i>	8.85	30	multitrunk	Native	Mature	Yes
43	Coast Live Oak	<i>Quercus agrifolia</i>	11.25	30	multitrunk	Native	Protected	Yes
44	Coast Live Oak	<i>Quercus agrifolia</i>	6.5	30	multitrunk	Native	Mature	Yes
45	Coast Live Oak	<i>Quercus agrifolia</i>	5.6	20	multitrunk	Native	Mature	Yes
46	Coast Live Oak	<i>Quercus agrifolia</i>	5	20	multitrunk	Native	Mature	Yes
47	Coast Live Oak	<i>Quercus agrifolia</i>	15	50		Native	Protected	Yes
48	Coast Live Oak	<i>Quercus agrifolia</i>	4.9	30	multitrunk	Native	Mature	Yes
49	Coast Live Oak	<i>Quercus agrifolia</i>	6.9	25	multitrunk	Native	Mature	Yes
50	Coast Live Oak	<i>Quercus agrifolia</i>	5.5	30	multitrunk	Native	Mature	Yes
51	Coast Live Oak	<i>Quercus agrifolia</i>	3.7	30	multitrunk	Native		Yes
52	Coast Live Oak	<i>Quercus agrifolia</i>	6.25	30	multitrunk	Native	Mature	Yes
53	Coast Live Oak	<i>Quercus agrifolia</i>	5.6	30	multitrunk	Native	Mature	Yes
54	Coast Live Oak	<i>Quercus agrifolia</i>	4.6	25	multitrunk	Native	Mature	Yes
55	Coast Live Oak	<i>Quercus agrifolia</i>	7.6	30	multitrunk	Native	Mature	Yes
56	Coast Live Oak	<i>Quercus agrifolia</i>	4.7	30	multitrunk	Native	Mature	Yes
57	Coast Live Oak	<i>Quercus agrifolia</i>	4.65	20	multitrunk	Native	Mature	Yes
58	Coast Live Oak	<i>Quercus agrifolia</i>	5.4	35		Native	Mature	Yes
59	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	11.45	50		Non-Native	Mature	Yes
60	Coast Live Oak	<i>Quercus agrifolia</i>	7.45	40	multitrunk	Native	Mature	Yes
61	Coast Live Oak	<i>Quercus agrifolia</i>	29.3	50-06		Native	Protected	Yes
62	Coast Live Oak	<i>Quercus agrifolia</i>	14.8	40		Native	Protected	Yes
63	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12.25	40	multitrunk	Non-Native	Mature	Yes
64	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	17.65	50-60		Non-Native	Mature	Yes
65	Coast Live Oak	<i>Quercus agrifolia</i>	4.6	20		Native	Mature	Yes

Arugus Tree Inventory

Tree Number	Tree Species		DBH (in.)	Height (ft)	Comments/ Health	Native or Non-Native	Mature or Protected	Impacted
	Common Name	Scientific Name						
66	Coast Live Oak	<i>Quercus agrifolia</i>	5.45	25		Native	Mature	Yes
67	Coast Live Oak	<i>Quercus agrifolia</i>	7	25	multitrunk	Native	Mature	Yes
68	Palm	<i>Washingtonia robusta</i>	16	25		Non-Native	Mature	Yes
69	Coast Live Oak	<i>Quercus agrifolia</i>	9.2	25		Native	Mature	Yes
70	Coast Live Oak	<i>Quercus agrifolia</i>	4	15		Native	Mature	Yes
71	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	24.2	50		Non-Native	Mature	Yes
72	Coast Live Oak	<i>Quercus agrifolia</i>	9.35	40	multitrunk	Native	Mature	Yes
73	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	5.1	25		Non-Native		Yes
74	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	7.5	15		Non-Native		Yes
75	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	3.9	20		Non-Native		Yes
76	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	4.4	20		Non-Native		Yes
77	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	4.5	20		Non-Native		Yes
78	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	5.2	20		Non-Native		Yes
79	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	24.5	60		Non-Native	Mature	Yes
80	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8.7	25		Non-Native	Mature	Yes
81	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12.5	25		Non-Native	Mature	Yes
82	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	5.4	20		Non-Native		Yes
83	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.4	40		Non-Native	Mature	Yes
84	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8.5	40		Non-Native	Mature	Yes
85	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	58	60+		Non-Native	Mature	Yes
86	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.5	40		Non-Native	Mature	Yes
87	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	14.05	40		Non-Native	Mature	Yes
88	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	11	40		Non-Native	Mature	Yes
89	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	17.8	60		Non-Native	Mature	Yes
90	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	11.3	50		Non-Native	Mature	Yes
91	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	23.5	60		Non-Native	Mature	Yes
92	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	34	60		Non-Native	Mature	Yes
93	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	16.35	40	multitrunk	Non-Native	Mature	Yes
94	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	24.6	40		Non-Native	Mature	Yes
95	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	15.35	30	multitrunk	Non-Native	Mature	Yes
96	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	22	50		Non-Native	Mature	Yes
97	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	11.2	40		Non-Native	Mature	Yes
98	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	46	60	multitrunk	Non-Native	Mature	Yes
99	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	27.2	60		Non-Native	Mature	Yes
100	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	9.6	30		Non-Native	Mature	Yes
101	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	9.1	30	multitrunk	Non-Native	Mature	Yes
102	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.3	25		Non-Native	Mature	Yes
103	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	18.5	40		Non-Native	Mature	Yes
104	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	3.4	15	multitrunk	Non-Native		Yes
105	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	52	60		Non-Native	Mature	Yes
106	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.1	40		Non-Native	Mature	Yes

Arugus Tree Inventory

Tree Number	Tree Species		DBH (in.)	Height (ft)	Comments/ Health	Native or Non-Native	Mature or Protected	Impacted
	Common Name	Scientific Name						
107	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	23	30		Non-Native	Mature	Yes
108	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	15.9	40		Non-Native	Mature	Yes
109	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12	30		Non-Native	Mature	Yes
110	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8.7	30		Non-Native	Mature	Yes
111	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	9.75	15		Non-Native	Mature	Yes
112	European olive	<i>Olea europaea</i>	2.7	15	multitrunk	Non-Native		Yes
113	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	29.2	60	multitrunk	Non-Native	Mature	Yes
114	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8.3	35		Non-Native	Mature	
115	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	15	40		Non-Native	Mature	
116	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	7.8	10		Non-Native		Yes
117	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	7.9	30		Non-Native		Yes
118	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	6.15	6		Non-Native		
119	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	5.65	20		Non-Native		
120	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	5.4	20		Non-Native		
121	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	9.6	30		Non-Native	Mature	
122	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	26.7	60		Non-Native	Mature	Yes
123	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	6	30		Non-Native		Yes
124	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	5.1	25		Non-Native		Yes
125	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.75	50		Non-Native	Mature	Yes
126	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	9.7	30		Non-Native	Mature	Yes
127	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	16	40		Non-Native	Mature	Yes
128	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	2.55	15	trunk resprouting	Non-Native		Yes
129	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	2.75	20	trunk resprouting	Non-Native		Yes
130	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.95	50		Non-Native	Mature	Yes
131	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	6.15	30		Non-Native		Yes
132	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.4	30		Non-Native	Mature	Yes
133	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	16.35	40	multitrunk	Non-Native	Mature	Yes
134	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.1	40		Non-Native	Mature	Yes
135	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8.35	25		Non-Native	Mature	Yes
136	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8.5	30		Non-Native	Mature	Yes
137	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	11.2	40		Non-Native	Mature	Yes
138	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	13.35	40		Non-Native	Mature	Yes
139	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	58	60	multitrunk	Non-Native	Mature	Yes
140	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	32	50	multitrunk	Non-Native	Mature	Yes
141	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	6.25	25		Non-Native		
142	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	30	50	multitrunk	Non-Native	Mature	Yes
143	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	23.8	50		Non-Native	Mature	
144	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	21.5	50	multitrunk	Non-Native	Mature	
145	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8.8	30		Non-Native	Mature	
146	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8.1	30		Non-Native	Mature	
147	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	17.3	40	multitrunk	Non-Native	Mature	

Arugus Tree Inventory

Tree Number	Tree Species		DBH (in.)	Height (ft)	Comments/ Health	Native or Non-Native	Mature or Protected	Impacted
	Common Name	Scientific Name						
148	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	16.5	40	multitrunk	Non-Native	Mature	
149	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	20.3	60		Non-Native	Mature	
150	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12	50		Non-Native	Mature	
151	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	30.2	60	multitrunk	Non-Native	Mature	
152	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	30.2	60	trunk covered in poison oak	Non-Native	Mature	
153	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12.5	50		Non-Native	Mature	
154	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	20	50	multitrunk	Non-Native	Mature	
155	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	43	60	multitrunk - red-tailed Hawk nest	Non-Native	Mature	Yes
156	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12.1	50	multitrunk	Non-Native	Mature	Yes
157	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	7.9	40		Non-Native		
158	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.65	40		Non-Native	Mature	
159	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	20	60		Non-Native	Mature	
160	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	46	40		Non-Native	Mature	
161	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	7.6	30		Non-Native		
162	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	9.1	30		Non-Native	Mature	
163	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	13.1	50	multitrunk	Non-Native	Mature	
164	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	7.5	30		Non-Native		
165	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	5.6	30		Non-Native		
166	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	5.6	25		Non-Native		
167	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	7.2	25		Non-Native		
168	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	9.7	40		Non-Native	Mature	
169	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	21.85	60		Non-Native	Mature	
170	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12.25	60	multitrunk	Non-Native	Mature	
171	Coast Live Oak	<i>Quercus agrifolia</i>	7.45	20		Native	Mature	
172	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.7	40		Non-Native	Mature	
173	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	11	40		Non-Native	Mature	
174	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	7.4	20		Non-Native		
175	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	23.7	60	multitrunk	Non-Native	Mature	Yes
176	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	23.7	60		Non-Native	Mature	
177	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.9	60	multitrunk	Non-Native	Mature	Yes
178	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	5	30	multitrunk	Non-Native		Yes
179	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	19.5	30		Non-Native	Mature	Yes
180	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12.3	30	multitrunk	Non-Native	Mature	
181	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.35	40	multitrunk	Non-Native	Mature	
182	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	20.23	60	multitrunk	Non-Native	Mature	
183	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	17	60		Non-Native	Mature	
184	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8.9	20	sprouted trunk	Non-Native	Mature	
185	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	15.15	50		Non-Native	Mature	
186	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	7	30		Non-Native		

Arugus Tree Inventory

Tree Number	Tree Species		DBH (in.)	Height (ft)	Comments/ Health	Native or Non-Native	Mature or Protected	Impacted
	Common Name	Scientific Name						
187	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	18.55	60	multitrunk	Non-Native	Mature	Yes
188	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	6.1	40		Non-Native		
189	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	33	60	multitrunk	Non-Native	Mature	
190	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	13	20		Non-Native	Mature	
191	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	13.25	40	multitrunk	Non-Native	Mature	
192	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	28	40	multitrunk	Non-Native	Mature	
193	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	16.25	40	Fallen but alive	Non-Native	Mature	
194	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8.2	30		Non-Native	Mature	
195	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	19.7	40	Fallen but alive	Non-Native	Mature	
196	Coast Live Oak	<i>Quercus agrifolia</i>	4.75	15		Native	Mature	
197	Coast Live Oak	<i>Quercus agrifolia</i>	2.5	12		Native		Yes
198	Ngaio Tree	<i>Myoporum laetum</i>	6.2	15	multitrunk	Non-Native		Yes
199	Coast Live Oak	<i>Quercus agrifolia</i>	7.3	25		Native	Mature	Yes
200	Coast Live Oak	<i>Quercus agrifolia</i>	9.6	25		Native	Mature	
201	Coast Live Oak	<i>Quercus agrifolia</i>	12.4	25		Native	Protected	
202	Fig	<i>Ficus carica</i>	13	30		Non-Native	Mature	Yes
203	Pine	<i>Pinus sp.</i>	5.2	25		Non-Native		Yes
204	Pine	<i>Pinus sp.</i>	9.7	25		Non-Native	Mature	Yes
205	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	16.2	30		Non-Native	Mature	Yes
206	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	10.1	30	multitrunk	Non-Native	Mature	Yes
207	Chinaberry	<i>Melia azedarach</i>	8	15	multitrunk	Non-Native	Mature	Yes
208	Coast Live Oak	<i>Quercus agrifolia</i>	-	-	3 saplings	Native		Yes
209	Coast Live Oak	<i>Quercus agrifolia</i>	6.5	15		Native	Mature	Yes
210	Palm	<i>Washingtonia robusta</i>	6.5	15		Non-Native		Yes
211	Orange	<i>Citrus X sinensis</i>	4.1	12		Non-Native		Yes
212	Avocado	<i>Persea americana</i>	18.9	15		Non-Native	Mature	Yes
213	Avocado	<i>Persea americana</i>	18.1	12		Non-Native	Mature	Yes
214	Avocado	<i>Persea americana</i>	15	15	half dead	Non-Native	Mature	Yes
215	Avocado	<i>Persea americana</i>	23	20	half dead	Non-Native	Mature	Yes
216	Avocado	<i>Persea americana</i>	14	25	multitrunk, half dead	Non-Native	Mature	Yes
217	Avocado	<i>Persea americana</i>	13.8	25	half dead	Non-Native	Mature	Yes
218	Avocado	<i>Persea americana</i>	18.8	25	half dead	Non-Native	Mature	Yes
219	Avocado	<i>Persea americana</i>	13.1	30	half dead	Non-Native	Mature	Yes
220	Avocado	<i>Persea americana</i>	15.9	30	multitrunk, half dead	Non-Native	Mature	Yes
221	Avocado	<i>Persea americana</i>	12.5	15	half dead	Non-Native	Mature	Yes
222	Avocado	<i>Persea americana</i>	15.5	20	half dead	Non-Native	Mature	Yes
223	Avocado	<i>Persea americana</i>	11.9	25	half dead	Non-Native	Mature	Yes
224	Avocado	<i>Persea americana</i>	13.5	20	half dead	Non-Native	Mature	Yes
225	Avocado	<i>Persea americana</i>	9.6	25	half dead	Non-Native	Mature	Yes
226	Avocado	<i>Persea americana</i>	15	30	multitrunk, half dead	Non-Native	Mature	Yes
227	Avocado	<i>Persea americana</i>	9.4	25	multitrunk, half dead	Non-Native	Mature	Yes

Arugus Tree Inventory

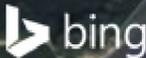
Tree Number	Tree Species		DBH (in.)	Height (ft)	Comments/ Health	Native or Non-Native	Mature or Protected	Impacted
	Common Name	Scientific Name						
228	Avocado	<i>Persea americana</i>	15.9	25	multitrunk, half dead	Non-Native	Mature	Yes
229	Coast Live Oak	<i>Quercus agrifolia</i>	-	7	sapling	Native		Yes
230	Carob	<i>Ceratonia siliqua</i>	6.1	20	multitrunk	Non-Native		Yes
231	Bay Laurel	<i>Laurus nobilis</i>	8.05	30	multitrunk	Non-Native	Mature	Yes
232	Avocado	<i>Persea americana</i>	15	25	half dead	Non-Native	Mature	Yes
233	Avocado	<i>Persea americana</i>	12.2	20		Non-Native	Mature	Yes
234	Avocado	<i>Persea americana</i>	20	25		Non-Native	Mature	Yes
235	Avocado	<i>Persea americana</i>	17.7	30	half dead	Non-Native	Mature	Yes
236	Avocado	<i>Persea americana</i>	14.2	20	half dead	Non-Native	Mature	Yes
237	Coast Live Oak	<i>Quercus agrifolia</i>	12.6	35		Native	Protected	Yes
238	Coast Live Oak	<i>Quercus agrifolia</i>	4	12		Native	Mature	Yes
239	Arroyo Willow	<i>Salix lasiolepis</i>	7.8	15	fallen over - multitrunk	Native	Mature	Yes
240	Arroyo Willow	<i>Salix lasiolepis</i>	12	20	multitrunk	Native	Mature	Yes
241	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	16.5	50	multitrunk	Non-Native	Mature	Yes
242	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	4.2	25	multitrunk	Non-Native		Yes
243	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12.4	60	multitrunk	Non-Native	Mature	Yes
244	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	23.3	60	multitrunk	Non-Native	Mature	Yes
245	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	20.4	60	multitrunk	Non-Native	Mature	Yes
246	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	36	60		Non-Native	Mature	Yes
247	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12	60	multitrunk	Non-Native	Mature	Yes
248	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	40	60	multitrunk	Non-Native	Mature	Yes
249	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	13.7	30		Non-Native	Mature	Yes
250	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	44	60	multitrunk	Non-Native	Mature	Yes
251	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	6.1	30	multitrunk	Non-Native		
252	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	9.4	25		Non-Native	Mature	
253	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	23.2	60	multitrunk	Non-Native	Mature	
254	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	8	25	multitrunk	Non-Native	Mature	
255	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	18.2	60		Non-Native	Mature	
256	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	17.2	60	multitrunk	Non-Native	Mature	
257	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	9.1	30		Non-Native	Mature	
258	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	59	60	multitrunk	Non-Native	Mature	
259	White Mulberry	<i>Morus alba</i>	15.55	25		Non-Native	Mature	Yes
260	Avocado	<i>Persea americana</i>	11.8	15		Non-Native	Mature	Yes
261	Palm	<i>Washingtonia robusta</i>	7.8	10		Non-Native		Yes
262	Blue Jacaranda	<i>Jacaranda mimosifolia</i>	7	25	multitrunk	Non-Native		Yes
263	Chinaberry	<i>Melia azedarach</i>	7.5	30	multitrunk	Non-Native		Yes
264	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	24	50	multitrunk	Non-Native	Mature	Yes
265	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	22.22	60		Non-Native	Mature	Yes
266	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	24.2	60		Non-Native	Mature	Yes
267	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	42	60		Non-Native	Mature	Yes
268	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	66.2	50		Non-Native	Mature	Yes

Arugus Tree Inventory

Tree Number	Tree Species		DBH (in.)	Height (ft)	Comments/ Health	Native or Non-Native	Mature or Protected	Impacted
	Common Name	Scientific Name						
269	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	46.3	50		Non-Native	Mature	Yes
270	Chinaberry	<i>Melia azedarach</i>	11	20	multitrunk	Non-Native	Mature	Yes
271	Coast Live Oak	<i>Quercus agrifolia</i>	4.8	9		Native	Mature	Yes
272	Coast Live Oak	<i>Quercus agrifolia</i>	15	25	multitrunk	Native	Protected	Yes
273	Coast Live Oak	<i>Quercus agrifolia</i>	11.5	20		Native	Protected	Yes
274	Coast Live Oak	<i>Quercus agrifolia</i>	13.65	20		Native	Protected	Yes
275	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	42	60	multitrunk	Non-Native	Mature	Yes
276	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	24	70		Non-Native	Mature	Yes
277	Avocado	<i>Persea americana</i>	8.45	25	multitrunk	Non-Native	Mature	Yes
278	Avocado	<i>Persea americana</i>	12.05	12	multitrunk	Non-Native	Mature	Yes
279	Avocado	<i>Persea americana</i>	15.9	25	half dead	Non-Native	Mature	Yes
280	Avocado	<i>Persea americana</i>	14.7	20	multitrunk - half dead	Non-Native	Mature	Yes
281	Avocado	<i>Persea americana</i>	13.45	20	multitrunk - half dead	Non-Native	Mature	Yes
282	Avocado	<i>Persea americana</i>	19.25	30	half dead	Non-Native	Mature	Yes
283	Pine	<i>Pinus sp.</i>	10.45	15		Non-Native	Mature	Yes
284	Oriental arborvitae	<i>Platycladus orientalis</i>	4.8	15	multitrunk	Non-Native		Yes
285	Chinese Holly	<i>Ilex cornuta</i>	9.5	20	multitrunk	Non-Native	Mature	Yes
286	Oriental arborvitae	<i>Platycladus orientalis</i>	4	10	clumps of 4 shrubs	Non-Native		Yes
287	European olive	<i>Olea europaea</i>	11.9	25	choked out by english ivy	Non-Native	Mature	Yes
288	Avocado	<i>Persea americana</i>	4.45	15	multitrunk	Non-Native		Yes
289	Palm	<i>Washingtonia robusta</i>	16.05	50		Non-Native	Mature	Yes
290	Australian Acacia	<i>Acacia pycnantha</i>	10.7	20		Non-Native	Mature	Yes
291	Australian Acacia	<i>Acacia pycnantha</i>	6.45	20	multitrunk	Non-Native		Yes
292	Australian Acacia	<i>Acacia pycnantha</i>	5.05	15	multitrunk	Non-Native		Yes
293	Australian Acacia	<i>Acacia pycnantha</i>	9.55	20	multitrunk	Non-Native	Mature	Yes
294	Australian Acacia	<i>Acacia pycnantha</i>	5.8	15	multitrunk	Non-Native		Yes
295	Australian Acacia	<i>Acacia pycnantha</i>	4.8	15		Non-Native		Yes
296	Australian Acacia	<i>Acacia pycnantha</i>	3.8	15		Non-Native		Yes
297	Mandarin	<i>Citrus reticulata</i>	4	10	multitrunk	Non-Native		Yes
298	Australian Acacia	<i>Acacia pycnantha</i>	8.6	20		Non-Native	Mature	Yes
299	Australian Acacia	<i>Acacia pycnantha</i>	5.55	20		Non-Native		Yes
300	Australian Acacia	<i>Acacia pycnantha</i>	5.1	12	multitrunk	Non-Native		Yes
301	Australian Acacia	<i>Acacia pycnantha</i>	5.2	12	multitrunk	Non-Native		Yes
302	Australian Acacia	<i>Acacia pycnantha</i>	3.2	8	multitrunk	Non-Native		Yes
303	Australian Acacia	<i>Acacia pycnantha</i>	5.9	6	fallen over	Non-Native		Yes
304	Australian Acacia	<i>Acacia pycnantha</i>	5.05	10	multitrunk	Non-Native		Yes
305	Pine	<i>Pinus sp.</i>	10	15		Non-Native	Mature	Yes
306	Oriental arborvitae	<i>Platycladus orientalis</i>	6	12	multitrunk	Non-Native		Yes
307	Oriental arborvitae	<i>Platycladus orientalis</i>	6	12		Non-Native		Yes
308	Cypress	<i>Taxodium distichum</i>	8	15		Non-Native	Mature	Yes

Arugus Tree Inventory

Tree Number	Tree Species		DBH (in.)	Height (ft)	Comments/ Health	Native or Non-Native	Mature or Protected	Impacted
	Common Name	Scientific Name						
309	Australian Acacia	<i>Acacia pycnantha</i>	9.8	25		Non-Native	Mature	Yes
310	Palm	<i>Washingtonia robusta</i>	23	40		Non-Native	Mature	Yes
311	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	24.8	30		Non-Native	Mature	Yes
312	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	35	50		Non-Native	Mature	Yes
313	Australian Acacia	<i>Acacia pycnantha</i>	7.1	15		Non-Native		Yes
314	Palm	<i>Washingtonia robusta</i>	19.8	40		Non-Native	Mature	Yes
315	Palm	<i>Washingtonia robusta</i>	21.1	40		Non-Native	Mature	Yes
316	Australian Acacia	<i>Acacia pycnantha</i>	7.3	15	multitrunk	Non-Native		
317	Palm	<i>Washingtonia robusta</i>	14.55	40		Non-Native	Mature	
318	Black Walnut	<i>Juglans nigra</i>	13.55	30	multitrunk	Native	Mature	Yes
319	Palm	<i>Washingtonia robusta</i>	20.2	15		Non-Native	Mature	Yes
320	Silky Oak	<i>Grevillea robusta</i>	14.5	30		Non-Native	Mature	Yes
321	Kumquat	<i>Citrus japonica</i>	2.7	15	multitrunk	Non-Native		Yes
322	Kumquat	<i>Citrus japonica</i>	3.3	12	multitrunk	Non-Native		Yes
323	Avocado	<i>Persea americana</i>	4	15	multitrunk	Non-Native		Yes
324	Avocado	<i>Persea americana</i>	15.1	30	multitrunk	Non-Native	Mature	Yes
325	Tree Tabacco	<i>Nicotiana glauca</i>	5	15		Non-Native		Yes
326	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	24	50	multitrunk	Non-Native	Mature	Yes
327	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	12.4	50	multitrunk	Non-Native	Mature	Yes
328	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	Yes
329	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30	multitrunk	Non-Native	Mature	
330	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	
331	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	
332	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	
333	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	
334	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	
335	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	
336	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	Yes
337	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	Yes
338	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	
339	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	
340	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	
341	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	Yes
342	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	Yes
343	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	Yes
344	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	
345	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	Yes
346	Lemon Scented Gum	<i>Eucalyptus citriodora</i>	>10	30		Non-Native	Mature	Yes



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Data Sources: Bing Maps
Field Survey (3/16/21)
Field Survey (4/7/21)

Argus Land Company: Tract F & H Project
Protected and Mature Trees
Sheet 1 of 4

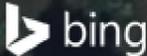


Legend

Project Boundary

Trees

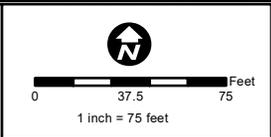
- Native Protected Trees - DBH greater than 10-inches
- ▲ Native Mature Trees - DBH greater than 4-inches (oaks) or 8-inches (other natives)
- Non-Native Mature Trees - DBH greater than 8-inches



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Argus Land Company: Tract F & H Project
Protected and Mature Trees
Sheet 2 of 4



Legend

Project Boundary

Trees

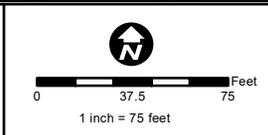
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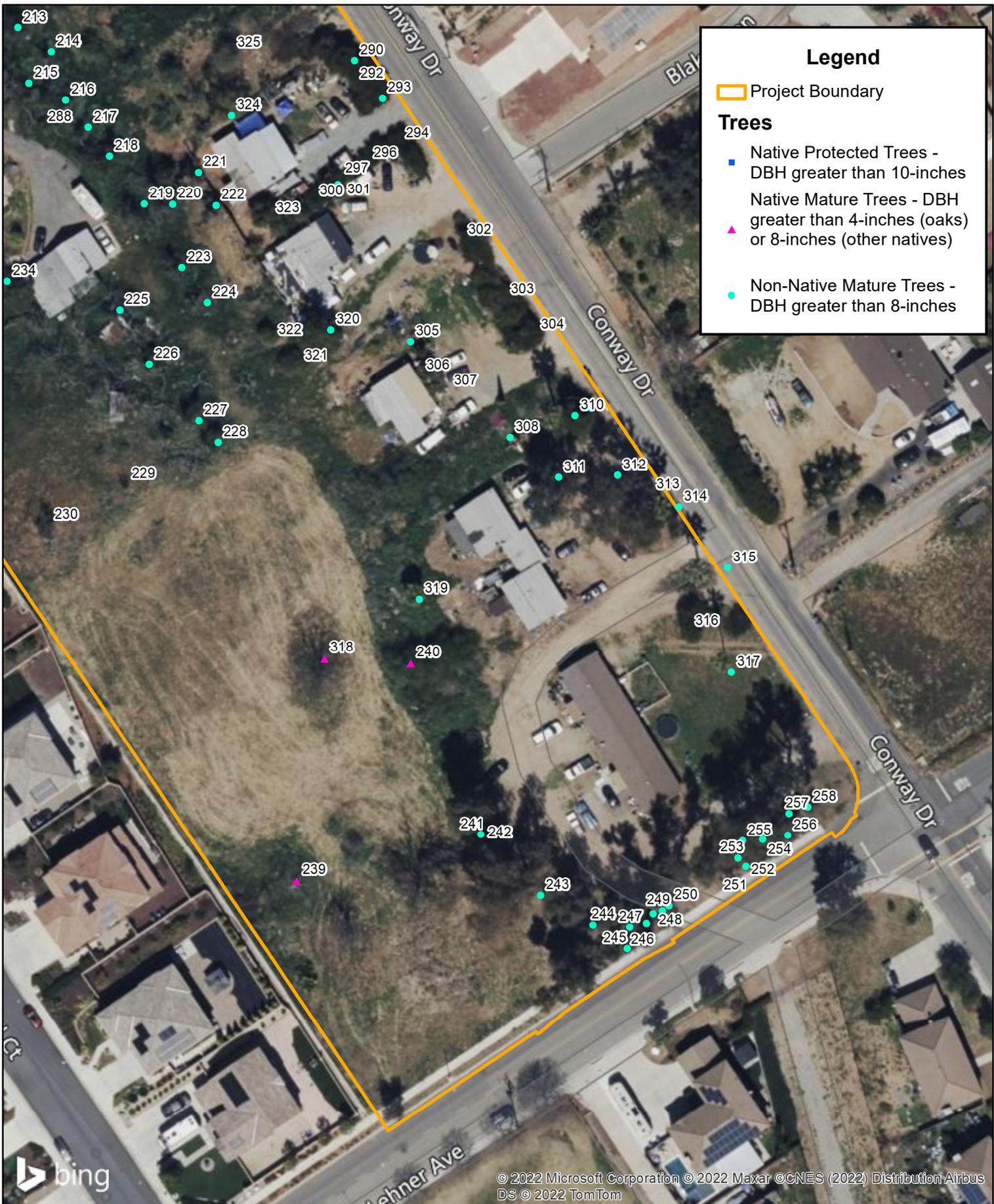
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Data Sources: Bing Maps
Field Survey (3/16/21)
Field Survey (4/7/21)

Argus Land Company: Tract F & H Project
Protected and Mature Trees
Sheet 3 of 4



Legend

Project Boundary

Trees

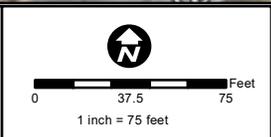
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Argus Land Company: Tract F & H Project

Protected and Mature Trees

Sheet 4 of 4

Impacted Protected and Mature Trees



Legend

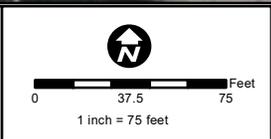
- Project Boundary
- Impact Boundary

Trees

- Native Protected Trees - DBH greater than 10-inches
- ▲ Native Mature Trees - DBH greater than 4-inches (oaks) or 8-inches (other natives)
- Non-Native Mature Trees - DBH greater than 8-inches

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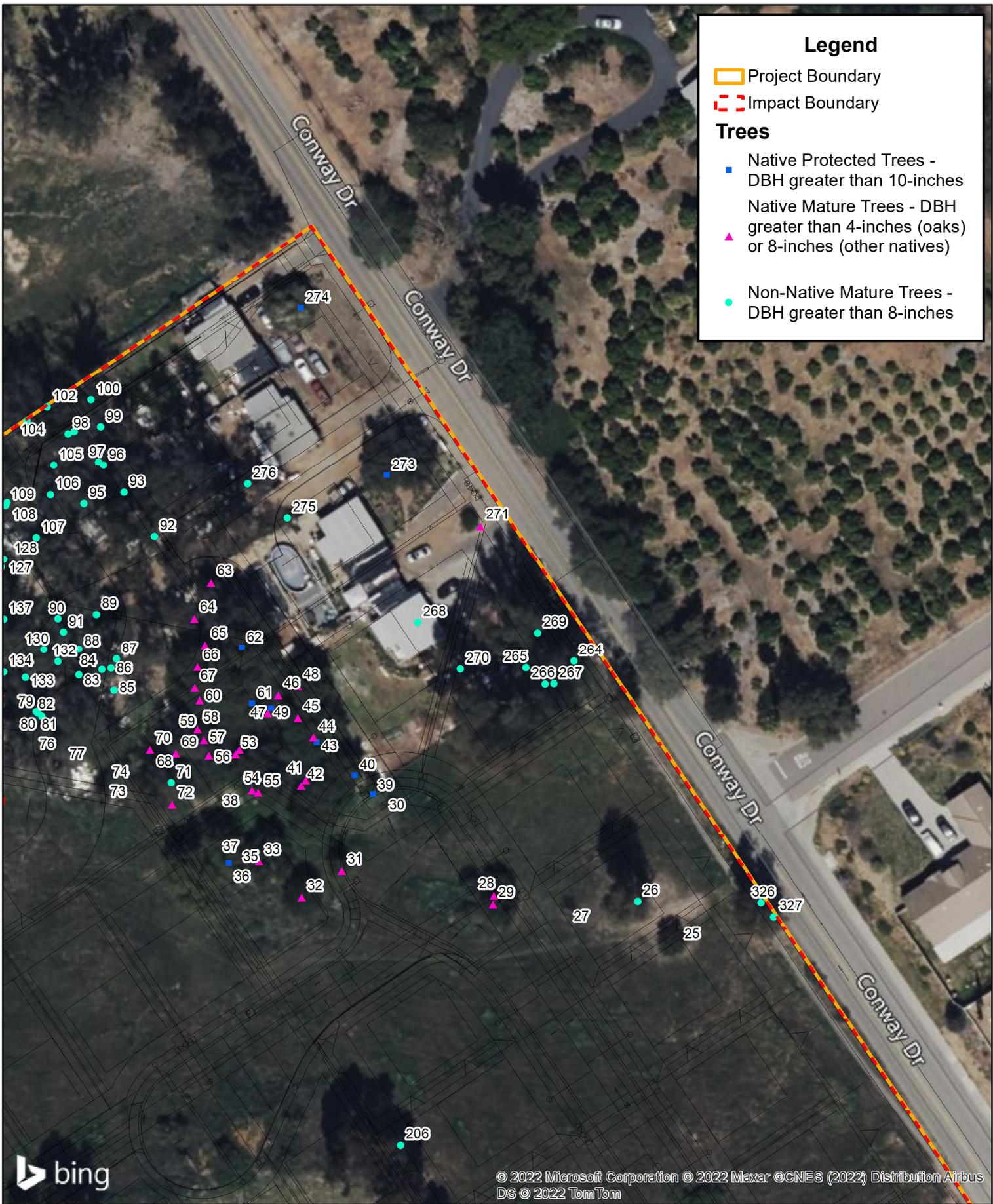


Data Sources: Bing Maps
Field Survey (3/16/21)
Field Survey (4/7/21)

Argus Land Company: Tract F & H Project

Impacts to Protected and Mature Trees

Sheet 2 of 4

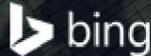


Legend

Project Boundary
 Impact Boundary

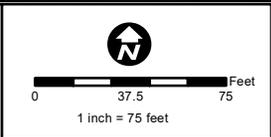
Trees

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Argus Land Company: Tract F & H Project
Impacts to Protected and Mature Trees
Sheet 2 of 4

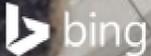


Legend

- Project Boundary
- Impact Boundary

Trees

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Argus Land Company: Tract F & H Project
Impacts to Protected and Mature Trees
Sheet 3 of 4



Legend

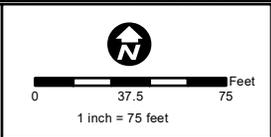
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Argus Land Company: Tract F & H Project
Impacts to Protected and Mature Trees
Sheet 4 of 4