APPENDIX A

BIOLOGICAL RESOURCES TECHNICAL REPORTS

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Aquatic Resources Delineation

Ganahl Lumber Hardware Store and Lumber Yard Project

San Juan Capistrano, California

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February 1, 2019

30 YEARS

ECORP Consulting, Inc.

ENVIRONMENTAL CONSULTANTS

SUMMARY

This report presents the results of an aquatic resources delineation of jurisdictional Waters of the United States and Waters of the State of California for the proposed Ganahl Lumber Hardware Store and Lumber Yard Project along Interstate 5 in San Juan Capistrano, California. On December 18, 2018, an ECORP Consulting, Inc. biologist conducted the fieldwork using the methods outlined in the 1987 *Corps of Engineers Wetlands Delineation Manual,* the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a*)*, and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the United States*. The on-site delineation was conducted to determine the presence or absence of Waters of the U.S./State, including wetlands that are subject to Section 404 of the Federal Clean Water Act. This report was prepared to support the request for a jurisdictional determination from the U.S. Army Corps of Engineers, Sacramento District.

CONTACT INFORMATION

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1.0 INTRODUCTION

On behalf of Ganahl Lumber Company, ECORP Consulting, Inc. (ECORP) conducted a delineation of potential Waters of the United States (U.S.) and Waters of the State of California (State) for the proposed Ganahl Lumber Hardware Store and Lumber Yard Project (Project), San Juan Capistrano, Orange County, California (Figure 1. *Project Vicinity* and Figure 2. *Project Location*). The site is located on the Dana Point 7.5-minute topographical quadrangle (U.S., Geological Survey [USGS] 1994 and 1977, respectively). For reference, the approximate center of the project area is located at latitude 33.476212° and longitude -117.677532° within the Aliso-San Onofre Watershed (Figure 3. *Hydrologic Unit Code #18070301*) [Natural Resources Conservation Service (NRCS), U.S. Geological Survey (USGS), and Environmental Protection Agency (USEPA) 2016].

This report describes potential Waters of the U.S., including wetlands, identified within the site that may be regulated by the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA) and the State Water Resources Control Board (SWRCB). The information presented in this report provides data required by the USACE Los Angeles District for conducting Jurisdictional Determinations. The potential Waters of the U.S. boundaries depicted in this report represent a calculated estimation of the jurisdictional area within the site, and are subject to modification following the USACE verification process. This report also covers California Department of Fish and Wildlife (CDFW) jurisdiction.

Ganahl Lumber Company proposes the development of the Lower Rosan Ranch for the construction and operation of the Ganahl Lumber Hardware Store and Lumber Yard Project in Orange County, California. The project site encompasses approximately 17 acres and includes the development of three separate components. The proposed Ganahl Lumber Hardware Store and Lumber Yard would be constructed in the center of the property. The proposed Project also includes improvements to approximately two acres for food service space and approximately 4.4 acres for long term vehicle storage. The Proposed Project would start construction in May 2020 and would take approximately 44 to 49 months.

1.1 Driving Directions to Project Site

T he driving directions to the Project site from Sacramento are included in Attachment A.

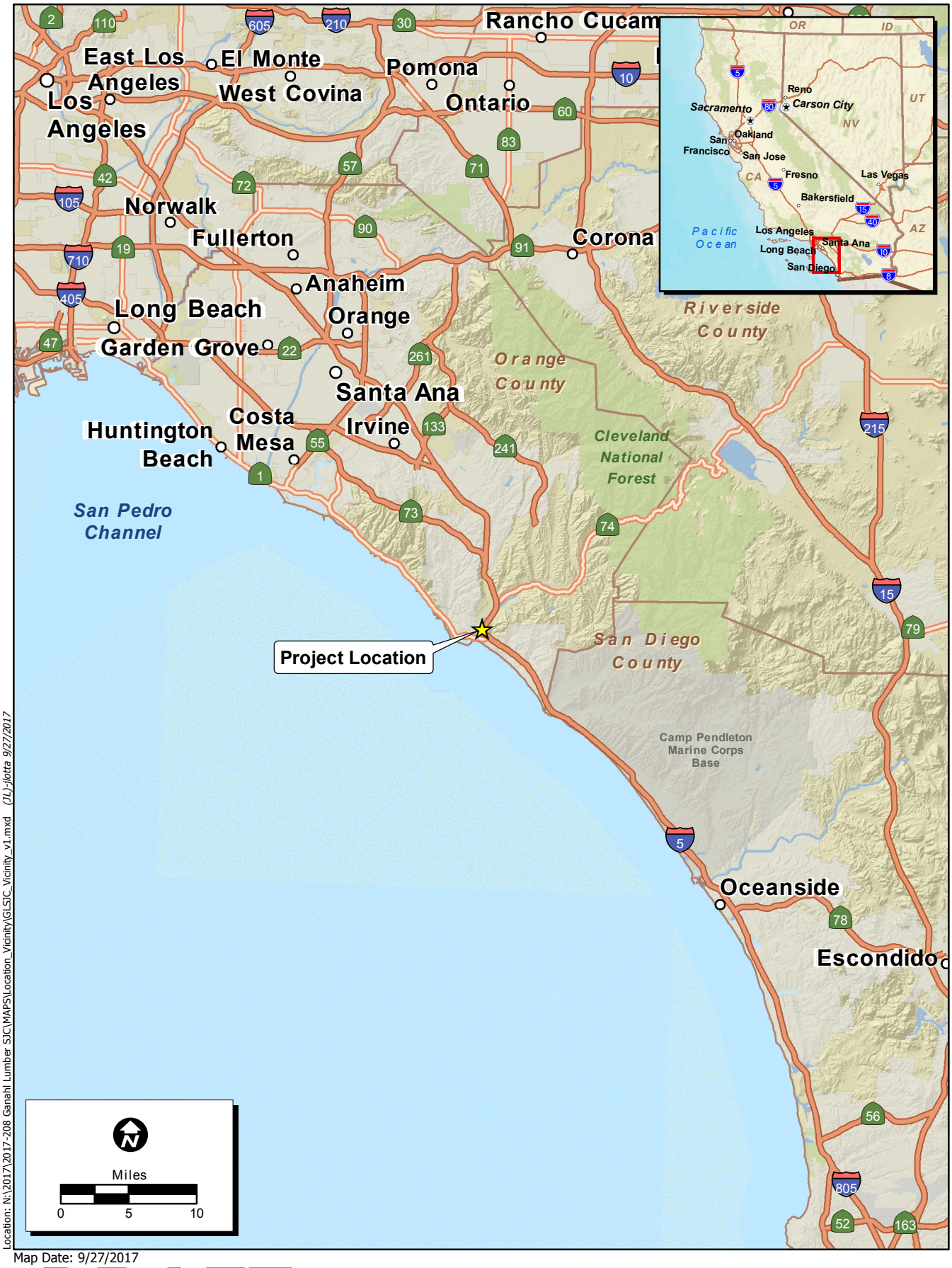
2.0 REGULATORY SETTING

2.1 Waters of the United States

This report describes potential Waters of the U.S., including wetlands that may be regulated by the USACE under Section 404 of the CWA.

2.1.1 Wetlands

Wetlands are "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" [51 FR 41250, Nov. 13, 1986, as amended at 58 FR 45036, Aug. 25, 1993]. Wetlands can be perennial or intermittent, and isolated or adjacent to other waters.



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Map Date: 9/27/2017

Service Layer Credits: Sources: Esri, USGS, NOAA

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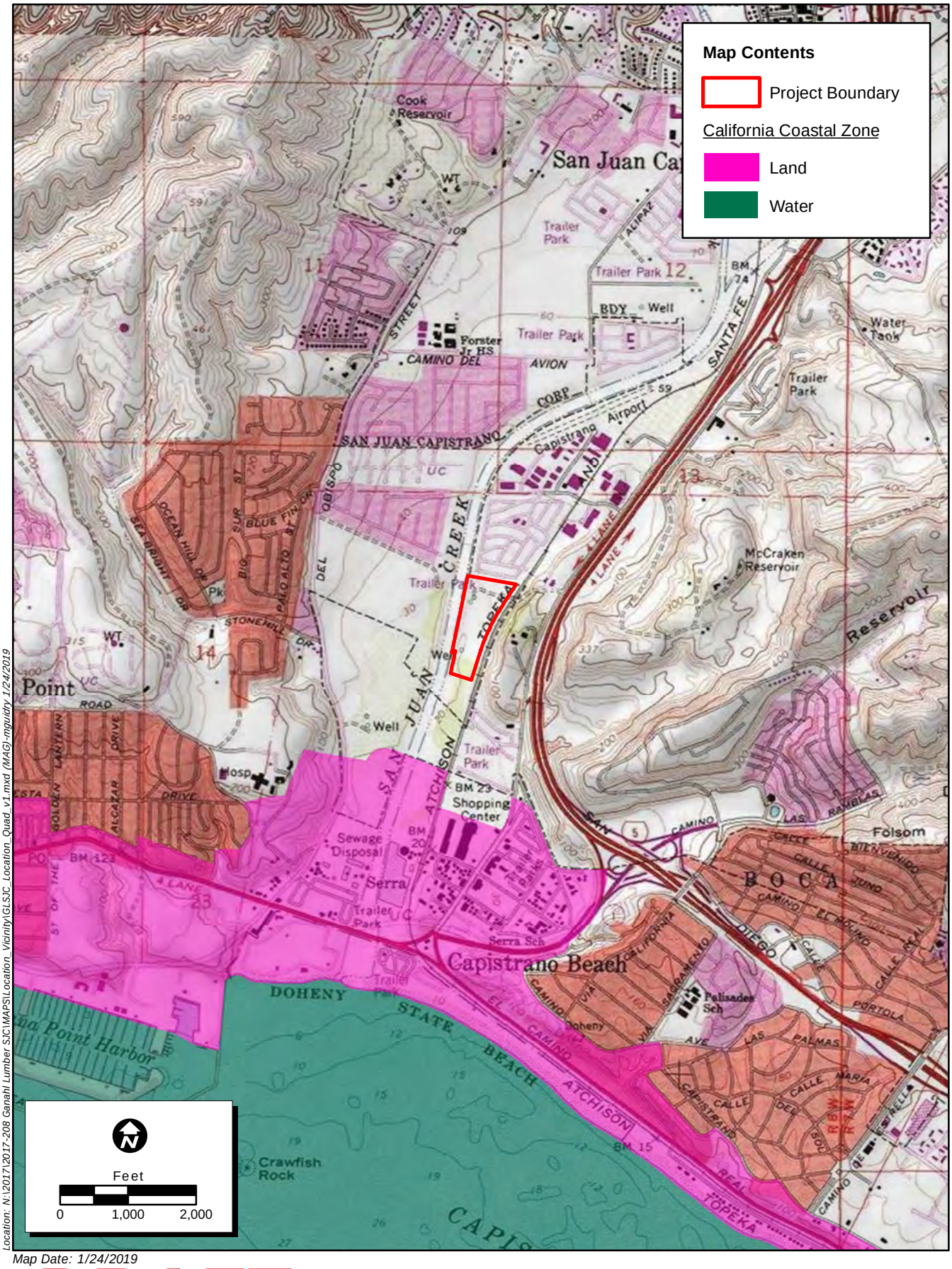
Figure 1. Project Vicinity

2017-208 Ganahl Lumber SJC



Map Date: 1/24/2019

Service Layer Credits: the California Coastal Commission (http://www.coastal.ca.gov)

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Figure 2. Project Location

2017-208 Ganahl Lumber SJC

Location: N:\2017\2017-208 Ganahl Lumber SJC\MAPS\Hydro\HUC\v1\GLS.JC_HUC_V1.mxd (MAG)-mguidry 1/24/2019

Map Date: 1/24/2019
Photo Source: NAIP 2016

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Figure 3. HUC 12 Mapping

2017-208 Ganahl Lumber SJC

2.1.2 Other Waters

Other waters are non-tidal, perennial, and intermittent watercourses and tributaries to such watercourses [51 FR 41250, Nov. 13, 1986, as amended at 58 FR 45036, Aug. 25, 1993]. The limit of USACE jurisdiction for non-tidal watercourses (without adjacent wetlands) is defined in 33 CFR 328.4(c)(1) as the "ordinary high-water mark" (OHWM). The OHWM is defined as the "*line on the shore established by the fluctuations of water and indicated by physical characteristics such as 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*" [51 FR 41250, Nov. 13, 1986, as amended at 58 FR 45036, Aug. 25, 1993]. The bank-to-bank extent of the channel that contains the water-flow during a normal rainfall year generally serves as a good first approximation of the lateral limit of USACE jurisdiction. The upstream limits of other waters are defined as the point where the OHWM is no longer perceptible.

2.2 Federal Clean Water Act

The USACE regulates discharge of dredged or fill material into Waters of the United States under Section 404 of the CWA. "Discharge of fill material" is defined as the addition of fill material into Waters of the U.S., including, but not limited to:

- placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction;
- site-development fills for recreational, industrial, commercial, residential, and other uses;
- causeways or road fills; and
- fill for intake and outfall pipes, and subaqueous utility lines [33 C.F.R. §328.2(f)].

In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Substantial impacts to wetlands, over 0.5 acre of impact, may require an individual permit. Projects that only minimally affect wetlands (less than 0.5 acre of impact) may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the SWRCB.

2.3 Jurisdictional Assessment

The Clean Water Rule (CWR) was published in June 2015, but implementation of the rule was stayed until September 2018. It is currently (2018) in effect for 22 states, including California, the District of Columbia, and the U.S. territories. The CWR establishes categories of waters that are jurisdictional, waters that are excluded, and waters that require a case-specific significant nexus evaluation to determine if they are Waters of the U.S. By rule, the CWR defines Waters of the U.S. to include Traditional Navigable Waters (TNW), interstate waters, and territorial seas, impoundments of jurisdictional waters, and tributaries and

adjacent (i.e. bordering, contiguous, or neighboring) waters to TNW, interstate waters, or territorial seas (USACE and USEPA 2015).

According to the CWR, neighboring is defined as waters located within 100 feet of the OHWM of a jurisdictional feature, within the 100-year floodplain of a jurisdictional feature and within 1,500 feet of the feature, or within 1,500 feet of the high tide line of a TNW, interstate water, or territorial sea. Western vernal pools in California and several other location-specific aquatic feature types are evaluated on a case-by-case basis to determine whether they have a significant nexus to TNWs, interstate waters, or territorial seas (USACE and USEPA 2017).

Feature types that are categorically excluded from CWA jurisdiction include waste treatment systems, prior converted cropland, ditches with intermittent or ephemeral flow that are not relocated tributaries or excavated in a tributary, ditches that do not flow, directly or indirectly, into a jurisdictional water, artificially irrigated areas that would revert to dry land in the absence of irrigation, artificial, constructed lakes or ponds created by excavating and/or diking dry land, small ornamental waters, artificial reflecting or swimming pools created by excavating and/or diking dry land, water-filled depressions created in dry land incidental to mining or construction activities, erosional features such as gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways, and puddles (USACE and USEPA 2017).

2.4 Porter-Cologne Water Quality Act

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of storm water runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Under the Porter-Cologne Water Quality Act, the SWRCB regulates actions that would involve "discharging waste, or proposing to discharge waste, with any region that could affect the water of the state" [Water Code 13260(a)].

2.4.1 Waters of the State

Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" [Water Code 13050 (e)]. The SWRCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State that are not regulated by the USACE due to a lack of connectivity with a navigable water body. Regulation of Waters of the State is handled through the local Regional Water Quality Control Board (RWQCB), which may require issuance of a Waste Discharge Requirements for these activities.

2.4.2 California Department of Fish & Game, Streambed Alteration Agreement

Section 1602 of the Fish and Game Code requires that a Streambed Alteration Application (SAA) be submitted to the CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the proposed

actions and, if necessary, submits proposed measures to protect affected fish and wildlife resources to the applicant. The final proposal that is mutually agreed upon by CDFW and the Applicant is the SAA. Projects that require a SAA often also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the SAA overlap.

3.0 METHODS

This delineation of potential Waters of the U.S. was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Region Supplement) (USACE 2008a), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b). The boundaries of potential Waters of the U.S. were delineated through aerial photograph interpretation and standard field methodologies. No suspected wetlands were located on site, as a result no Arid West Region – Wetland Determination Data Forms were completed. Field maps with aerial photograph background were provided by California Department of Transportation Central Region Biology, North Branch (Caltrans). A color aerial photograph (1"=400' scale, NAIP 2012) was used to assist with mapping and ground-truthing. Munsell Soil Color Charts (Kollmorgen Instruments Co. 1990) and the Web Soil Survey (NRCS 2017) were used to aid in identifying hydric soils in the field. The Jepson Manual, 2nd Edition (Baldwin et al. 2012) was used for plant nomenclature and identification.

Field surveys were conducted on 18 December 2018 by ECORP biologist Scott Taylor. Mr. Taylor walked the entire 17-acre project site/study area, hereafter referred to as the Delineation Area or DA, to determine the location and extent of potential Waters of the U.S. within the DA. Paired sampling point locations were sampled to evaluate whether or not the vegetation, hydrology, and soils data supported a determination of wetland or non-wetland status. Sample points were taken to sample vegetation, soils and hydrology of potential wetland features (described in more detail below). The total area of the wetlands and other waters within the site was recorded in the field using a post-processing capable global positioning system (GPS).

3.1 Routine Determinations for Wetlands

To be determined a wetland under federal guidelines, the following three criteria must be met:

- A majority of dominant vegetation species are wetland associated species
- Hydrologic conditions exist that result in periods of flooding, ponding, or saturation during the growing season
- Hydric soils are present

3.1.1 Vegetation

Hydrophytic vegetation is defined as the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanent or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present (Environmental Laboratory 1987). The definition of wetlands includes the phrase "a prevalence of vegetation typically

adapted for life in saturated soil conditions." Prevalent vegetation is characterized by the dominant plant species comprising the plant community (Environmental Laboratory 1987). The dominance test is the basic hydrophytic vegetation indicator and was applied at each data point location. The "50/20 rule" was used to select the dominant plant species from each stratum of the community. The rule states that for each stratum in the plant community, dominant species are the most abundant plant species (when ranked in descending order of coverage and cumulatively totaled) that immediately exceed 50 percent of the total coverage for the stratum, plus any additional species that individually comprise 20 percent or more of the total cover in the stratum (HQUSACE 1992; USACE 2008b).

Dominant plant species observed at each data point were then classified according to their indicator status (probability of occurrence in wetlands) (Table 1), North American Digital Flora: National Wetland Plant List (Lichvar et al. 2016). If the majority (greater than 50 percent) of the dominant vegetation on a site are classified as obligate (OBL), facultative wetland (FACW), or facultative (FAC), then the site was considered to be dominated by hydrophytic vegetation.

Table 1. Classification of Wetland-Associated Plant Species[1]

Plant Species Classification	Abbreviation	Probability of Occurring in Wetland
Obligate	OBL	Almost always occur in wetlands
Facultative Wetland	FACW	Usually occur in wetlands, but may occur in non-wetlands
Facultative	FAC	Occur in wetlands and non-wetlands
Facultative Upland	FACU	Usually occur in non-wetlands, but may occur in wetlands
Upland	UPL	Almost never occur in wetlands
Plants That Are Not Listed (assumed upland species)	N/L	Does not occur in wetlands in any region.

[1]Source: Lichvar et al. 2012

In instances where indicators of hydric soil and wetland hydrology were present, but the plant community failed the dominance test, the vegetation was re-evaluated using the prevalence index. The prevalence index is a weighted-average wetland indicator status of all plant species in the sampling plot, where each indicator status category is given a numeric code (OBL=1, FACW=2, FAC=3, FACU=4, and UPL=5) and weighting is by abundance (percent cover). If the plant community failed the prevalence index, the presence/absence of plant morphological adaptations to prolonged inundation or saturation in the root zone was evaluated.

3.1.2 Soils

A hydric soil is defined as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (NRCS 2018). Indicators that a hydric soil is present include, but are not limited to, histosols, histic epipedon, hydrogen sulfide, depleted below dark surface, sandy redox, loamy gleyed matrix, depleted matrix, redox dark surface, redox depressions, and vernal pools.

A soil pit was excavated to the depth needed to document an indicator, to confirm the absence of indicators, or until refusal at each data point. The soil was then examined for hydric soil indicators. Soil colors were determined while the soil was moist using the Munsell Soil Color Book (Munsell Color 2009).

3.1.3 Hydrology

Wetlands, by definition, are seasonally or perennially inundated or saturated at or near (within 12 inches of) the soil surface. Primary indicators of wetland hydrology include, but are not limited to: visual observation of saturated soils, visual observation of inundation, surface soil cracks, inundation visible on aerial imagery, water-stained leaves, oxidized rhizospheres along living roots, aquatic invertebrates, water marks (secondary indicator in riverine environments), drift lines (secondary indicator in riverine environments), and sediment deposits (secondary indicator in riverine environments). The occurrence of one primary indicator is sufficient to conclude that wetland hydrology is present. If no primary indicators are observed, two or more secondary indicators are required to conclude wetland hydrology is present. Secondary indicators include, but are not limited to: drainage patterns, crayfish burrows, FAC-neutral test, and shallow aquitard.

3.2 Ordinary High-Water Mark/Non-Wetland Waters

The discussion in this section briefly summarizes *A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b). OHWM indicators commonly found in the Arid West include a clear natural scour line impressed on the bank, recent bank erosion, destruction of native terrestrial vegetation, and the present of litter and debris. Resources needed to delineate OHWM include aerial photography and other imagery, topographic maps and other maps (e.g. geological, soil, vegetation), rainfall data, stream gage data, and existing delineations (if present). Field identification of the OHWM includes noting general impression of the vegetation species and distribution, geomorphic features present, surrounding upland land use and hydrologic alterations, and in-stream and floodplain structures. In the field, the process of delineating the OHWM includes the identification of a low-flow channel (if present), a transition to an active floodplain, and an active floodplain through the presence of geomorphic features (e.g. presence of an active floodplain, benches, break in bank slope, staining of rocks, litter or drift) and vegetation indicators (e.g. presence of sparse/low vegetation, annual herbs, hydromesic ruderals, pioneer tree seedlings and saplings, xeroriparian species).

3.3 Weather Conditions During Survey

Weather conditions for the survey were ideal, with clear skies, wind from 0 to 3 miles per hour, and temperatures ranging from 62 to 66 degrees Fahrenheit.

4.0 RESULTS

4.1 Existing Site Conditions

The Project site encompasses approximately 17 acres and is located predominantly north of Stonehill Drive between the San Juan Creek Channel/Trail and the Burlington Northern Santa Fe (BNSF) rail line, less than 0.25 mile west of Interstate 5. Surrounding areas include residential development to the north and west and commercial development to the south and east. The site is bordered to the west by San Juan Creek, the San Juan Creek Trail, and Creekside Park. The Project is located in the South Coast Subregion of the Southwestern California region of the California Floristic Province (Baldwin, et al., editors. 2012). This

area is characterized by a hot semi-arid climate, which is comprised of hot and dry summer months and cold winter months with most of the precipitation recorded as rainfall. The Project site is situated at an elevation of approximately 12 meters above mean seal level (msl).

The project site is subjected to repeated and ongoing disturbance from vehicular traffic, homeless occupancy, and periodic mowing of grassland areas. Small areas of disturbed California sagebrush scrub represented the only native vegetation community on site. A small patch of mule fat (*Baccharis salicifolia*) was present in disturbed habitat just outside of Drainage 1 but was not of sufficient size or composition to qualify as a riparian vegetation community. The other vegetation community present on the project site was California annual grassland No sensitive vegetation communities were observed on the project site. In addition, two land cover types, disturbed areas and developed areas were observed on the project site. The plant species observed within these cover types consisted of nonnative or invasive weedy species. Classification of the vegetation communities and land cover types within the project area are described in detail below and those that occur on the project site are displayed in Figure 4.

4.1.1 Vegetation Communities

California Sagebrush Scrub – Disturbed (*Artemesia Californica* Shrubland Alliance)

Artemesia Californica Shrubland Alliance (California sagebrush scrub) is a vegetation type characterized by low-growing shrubs where California sagebrush, a drought deciduous shrub, represents more than 60 percent of the relative cover in the shrub canopy. This community represented the only native vegetation community on the project site and covered approximately one percent of the project site. The small areas of California sagebrush scrub consisted of two small stands located in the southwestern corner of the project site along developed edges and may have been planted previously as opposed to naturally occurring. The California sagebrush scrub along the southwestern edge of the project site consisted mainly of California sagebrush, but included coyote brush (*Baccharis pilularis*) and Menzies' goldenbush (*Isocoma menziesii*), along with nonnative weedy plants interspersed throughout.

California Annual Grassland

California annual grassland was located in large patches in the northern portion of the project site and covered 36 percent of the project site. California annual grassland is a classification derived from the first edition of the Manual of California Vegetation [Sawyer and Keeler-Wolf 1995] that covers a wide range of herbaceous cover. The second edition [Sawyer et al. 2009] breaks this category down into a number of stands and the majority of the vegetation within the site could be classified as a combination of several of these stands. Dominant species within the California annual grassland areas of the site consist of nonnative species such as brome grasses, nonnative mustards, and a variety of thistles that include tocalote (*Centaurea melitensis*). These areas would likely fall into the following classifications: *Bromus* (*diandrus, hordeaceus*) – Brachypodium distachyon [false brome] semi-natural stands, *Brassica* (*nigra*) and other mustards semi-natural stands, and Centaurea (*melitensis, solstitialis*) semi-natural stands, all of which are stands of herbaceous vegetation dominated by nonnative species.

Figure 4. Vegetation

Map Features

- Project Boundary
- 250 ft. Buffer

Revised Vegetation

- California Sagebrush Scrub (Disturbed)
- Red Willow Tree
- San Juan Creek
- Ornamental Landscaping
- Disturbed
- Developed

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

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Location: N:\2017\2017-208 Ganahl Lumber SJC\MAPS\Vegetation\v2\GLSJC_Vegetation_v2.mxd (SAB) -mguidry 1/24/2019

2017-2008 Biological Technical Report - Ganahl Lumber Hardware Store and Lumber Yard

Scale in Feet
0 125 250

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Base Source: NAIP 2016

Map Date: 1/4/2019

Disturbed

Disturbed is not a vegetation classification, but rather a land cover type. Areas mapped as disturbed were largely devoid of native vegetation due to human disturbance and were dominated by open areas or nonnative weedy vegetation. Areas of dirt roads and bare dirt were also mapped as disturbed. The disturbed land cover type covered 27 percent of the project site and was present mostly around the perimeter of the project site. Plants present in this land cover type included nonnative weedy species such as tocalote, yellow star thistle, Russian thistle (*Salsola tragus*), and castor bean (*Ricinus communis*).

Developed

Developed is not a vegetation classification, but rather a land cover type. Areas mapped as developed were entirely devoid of vegetation due to human development and contained paved and/or gravel ground cover. The developed land cover type covered 35 percent of the project site and was primarily characterized by gravel parking lots located in the southern portion of the project site.

For the period from 1971 to 2000, annual average total precipitation at the Laguna Beach, California (044647) reporting station was 13.84 inches (California Data Exchange Center [CDEC] 2018a). Prior to the field survey, no rain was recorded during the month of December 2018 at the Laguna Beach reporting station (LGB), at 35 feet elevation and approximately 7.5 miles Northwest of the Project; prior to that, the last measureable rainfall was recorded in June, 2018 (CDEC 2018b).

4.1.2 National Wetland Inventory

There are no previously mapped aquatic features in the Project vicinity (Figure 5. *National Wetland Inventory (NWI)*. Aquatic resources within the San Juan Creek, just southwest of the project vicinity, are Fluvial Natural and Pond and associated vegetation.

4.1.3 Soils

According to the Web Soil Survey, five soil units have been mapped for the Project site (NRCS 2017). None of these soil units are considered hydric (NRCS 2018) (Figure 6. *Natural Resources Conservation Service Soil Types* and Table 2. *Natural Resources Conservation Service Soil Types*).

Table 2. Natural Resources Conservation Service Soil Types

Soil Unit	Hydric?	Hydric Components (NRCS 2018)
109—Anaheim clay loam, 30 to 50 percent slopes	No	None
139—Chino silty clay loam, 0 to 2 percent	No	Yes - Tidal flats, 2% of map unit
163—Metz loamy sand, 0 to 2 percent	No	Yes - Riverwash, 4% of Map unit
191—Riverwash, 0 to 5 percent	Yes	None
206—Sorrento loam, 0 to 2 percent slopes, warm MAAT, MLRA 19	No	None

Location: N:\2017\2017-208 Ganahl Lumber SJC\MAPS\Jurisdictional_Delineation\NWI\v1\GLSJC_NWI_V1.mxd (MAG)-mguidry 1/24/2019

Map Date: 1/24/2019
Photo Source: NAIP 2016

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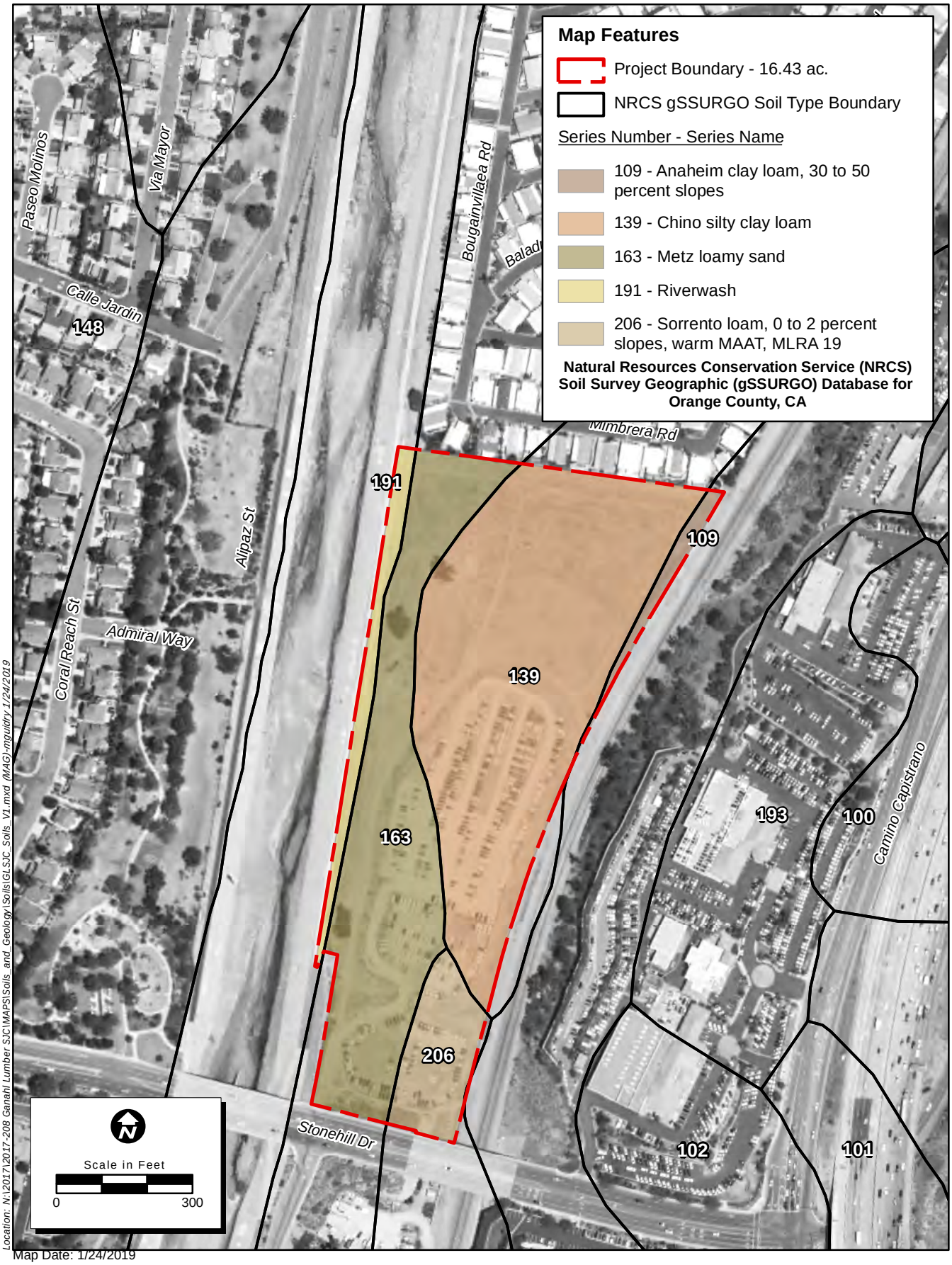
Figure 5. National Wetland Inventory Mapping

2017-208 Ganahl Lumber SJC



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Map Date: 1/24/2019
Photo Source: NAIP 2016

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Figure 6. NRCS Soils Mapping

4.2 Potential Waters of the U.S.

Based on the results of the delineation, no potential Waters of the U.S. have been mapped within the DA. There is a ditch located within the southern half of the DA that occasionally collects stormwater flows from the north and east of the site, but this is not considered to be a Water of the U.S. due to there being no suspected connectivity with downstream interstate waters and lack of OHWM indicators. This area may be intermittently inundated, primarily from runoff from the nearby parking areas, and support areas of open water associated with storm events, especially during the growing season.

Vegetation within the ditch consisted of mostly herbaceous weeds with some shrubs such as mule fat, Menzies' goldenbush, big saltbush (*Atriplex lentiformis*), and giant reed grass (*Arundo donax*). None of these plant species are typical of wetland vegetation. Although mule fat, saltbush, and giant reed can occur within wetland areas, other criteria such as wetland hydrology and wetland soils were considered to be absent.

Three four-foot diameter drainage culverts from the site were noted that enter Trabuco Creek to the west, with one in the north, a twin culvert in the central, and one more in the south. These culverts are all concrete lined and contain heavy steel flap-gates on the channel side. There were also two stand pipes located on the gravel parking areas of the site, both of which direct drainage flows into the ditch on site. Note that none of these features appear to be actively receiving flows, based on the indications (lack of OHWM, water-staining, and so on) observed in the field.

4.2.1 Potential CDFW Jurisdiction

Based on the results of the delineation, no CDFW jurisdictional areas have been mapped within the DA. There is a ditch located within the southern half of the DA that occasionally collects stormwater flows from the north and east of the site, but this is not considered to be under CDFW jurisdiction due to there being a lack of indicators of regular water flow through this area. However this area may be intermittently inundated, primarily from runoff from the nearby parking areas, and support areas of open water associated with storm events, especially during the growing season.

4.2.2 Potential CCC Jurisdiction

The California Coastal Commission (CCC) utilizes criteria for definition of wetlands that only requires one of the three federal wetland indicators to be present (vegetation, soils, or hydrology) for a positive determination for wetlands. However, the site is located outside of the coastal zone and would therefore not be subject to CCC review or authority.

5.0 JURISDICTIONAL ASSESSMENT

No features on the project site were considered to be jurisdictional.

The USACE has permitting authority over activities affecting waters of the United States. According to Regulatory Guidance Letter (08-02), an Applicant "may elect to use a preliminary [Jurisdictional Determination] JD to voluntarily waive or set aside questions regarding CWA/[Rivers and Harbors Act of 1899]RHA jurisdiction over a particular site, usually in the interest of allowing the landowner or

other "affected party" to move ahead expeditiously to obtain a Corps permit authorization where the party determines that it is in his or her best interest to do so" (USACE 2008c). A significant nexus evaluation is not necessary to obtain a preliminary JD. A preliminary JD is also not binding. An approved JD is an official Corps determination that jurisdictional "waters of the United States," or "navigable waters of the United States," or both, are either present or absent on a particular site.

6.0 CONCLUSION

No potential Waters of the U.S. or CDFW jurisdiction has been mapped on-site, and as such no permitting pursuant to the federal CWA or Section 1602 (SAA) of the California Fish and Game Code will be required in regard to project activities.

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LIST OF ATTACHMENTS

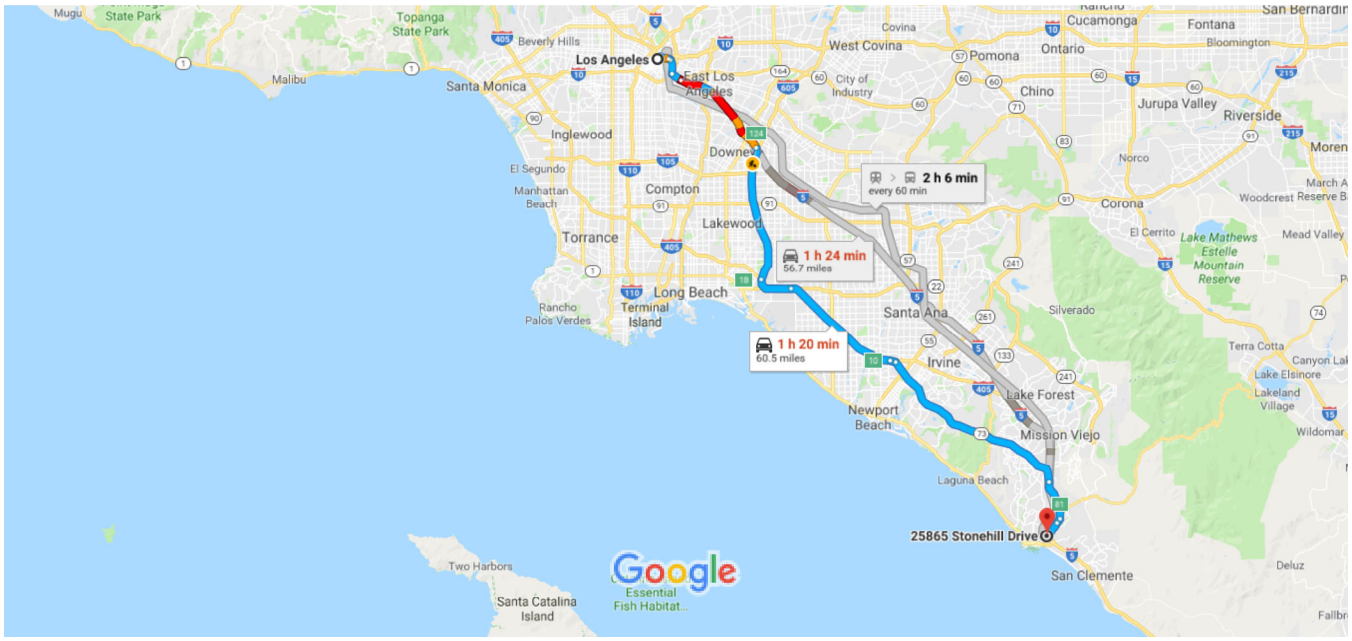
ATTACHMENT A

Driving Directions to the Project Site From Los Angeles

Google Maps

Los Angeles, CA to 25865 Stonehill Dr, San Juan Capistrano, CA 92675

Drive 60.5 miles, 1 h 20 min



Map data ©2019 Google 5 mi

via CA-73 S — 1 h 20 min

Fastest route now due to traffic conditions — 60.5 miles

⚠ This route has tolls.

via I-5 S — 1 h 24 min

Heavy traffic, as usual — 56.7 miles

2:58 PM—5:04 PM — 2 h 6 min

Pacific Surfliner 91

ATTACHMENT B

Representative Site Photos

Photograph 1 – Steel Corrugated pipe exiting into 4-foot Culvert in northwest portion of project site

Photograph 2 – 4-foot Culvert exiting site in northwest portion of site

Photograph 3 – 4-foot culvert in northwest project site exit into San Juan Creek

Photograph 4 – Double Culvert in Central-west portion of project site

Photograph 5 – Double Culvert exit into San Juan Creek

Photograph 6 – 4-foot Culvert in southwest portion of project site

Photograph 7 – Southwest culvert exit into San Juan Creek

Photograph 8 – Non-Jurisdictional Ditch within project site, facing east

Photograph 9 – Culvert in main ditch within project site, facing northwest

Photograph 10 – Culvert in main ditch within project site, facing east

Photograph 11 – Side Culvert to main ditch, draining parking lot

Photograph 12 – Graded portion of project rea near double Culvert (central west of project site)

Photograph 13 – One-foot diameter standing pipe within project site

Photograph 14 - One-foot diameter standing pipe within project site

ATTACHMENT C

Plant Species Observed On-Site

Attachment D - Plant Species Observed On-Site (December 18, 2018)

Scientific Name	**Common Name**	**Wetland Status (Arid West)**
Ricinus communis	Castorbean	FACU
Artemisia californica	California sagebrush	N/L
Baccharis salicifolia	Willow baccharis	FACW
Arundo donax	Giant reed	FACW
Ericameria sp.	Goldenbush	N/L
Atriplex lentiformis	Big saltbush	FAC
Brassica nigra	Black mustard	N/L
Heterotheca grandiflora	Telegraph weed	N/L
Hazardia squarrosa	Saw toothed goldenbush	N/L
Cortaderia sp.	Pampas Grass	FACU

Wetland Status Codes:
OBL - Obligate Wetland; Almost always occur in wetlands
FACW - Facultative Wetland; Usually occur in wetlands, but may occur in non-wetlands
FAC - Facultative; Occur in wetlands and non-wetlands
FACU - Facultative Upland; Usually occur in non-wetlands, but may occur in wetlands
UPL - Obligae Upland; Almost never occur in wetlands
N/L - Plants that are Not Listed; Does not occur in wetlands in any region

Biological Technical Report
Ganahl Lumber Hardware Store and Lumber Yard Project

San Juan Capistrano, Orange County, California

Prepared for:

GANAHL LUMBER COMPANY
1220 East Ball Road
Anaheim, California 92805

Prepared by:

ECORP CONSULTING, INC.
1801 Park Court Place, B-103
Santa Ana, California 92701

January 2019

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1.0 INTRODUCTION

ECORP Consulting, Inc. (ECORP) was retained by Ganahl Lumber Company to provide California Environmental Quality Act (CEQA) services for a proposed project site (project site) located in the City of San Juan Capistrano, Orange County, California (Figure 1). A reconnaissance-level biological survey was conducted in September 2017 to document the existing biological resources, to assess the habitat for its potential to support sensitive plant and wildlife species, and to determine whether impacts would occur to sensitive biological resources, as required under CEQA. An additional site visit was conducted in December 2018 to document any changes to site conditions from the previous survey. The project site is located in an area that is covered by the Orange County Southern Subregion Habitat Conservation Plan (OCSSHCP), which was finalized in 2007, and the proposed project will be subject to the requirements of the plan. The following report summarizes the results of the reconnaissance survey.

1.1 Project Location

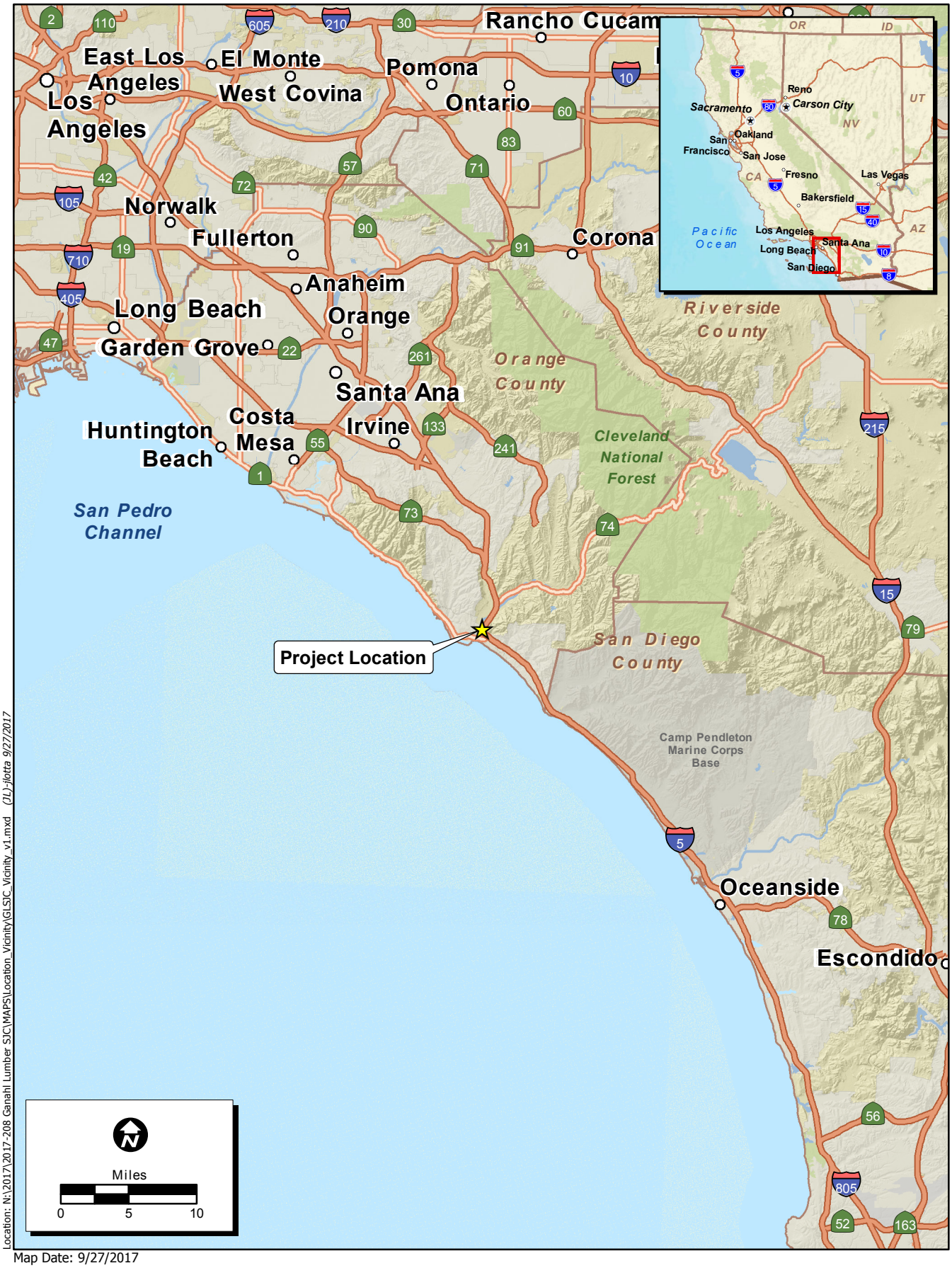
The project site encompasses approximately 16 acres and is located immediately north of Stonehill Drive between the San Juan Creek Trail and Camino Capistrano, less than 0.25 mile west of Interstate 5 (Figure 2). Surrounding areas include residential development to the north and west and commercial development to the south and east. The site is bordered to the west by San Juan Creek, the San Juan Creek Trail, and Creekside Park. The elevation of the site is approximately 40 feet (12 meters) above mean seal level (msl) and is depicted on the U.S. Geological Survey (USGS) Dana Point 7.5-minute topographical quadrangle.

1.2 Project Description

The proposed project includes the construction of a new Ganahl Lumber and Hardware Store and entitlement of a commercial development (restaurant) and automobile storage on approximately 16 acres. The project site is on Stonehill Drive in the City of San Juan Capistrano, and is surrounded by San Juan Creek to the west, a mobile home park to the north, a rail line and car dealerships/commercial development to the east, and industrial/commercial development across Stonehill Drive to the south.

The proposed new store and lumber yard would include approximately 129,000 square feet of improvements. The main Ganahl Lumber Hardware Store structure would consist of an approximately 43,000-square-foot building. The majority of this space would be the hardware store. Other project components include the Will Call storage and loading area, operations offices, and two mezzanines. The design would include storefront entrances, office/sales/meeting space, door and window department, showroom, and receiving docks. The remaining structures would include storage buildings of various sizes and configurations including sheds, an indoor drive-through lumber storage building, and perimeter storage buildings.

The other proposed uses on the site include approximately 2.2 acres for restaurant uses and a 4.4 acre vehicle storage area.



Location: N:\2017\2017-208 Ganahl Lumber SJC\MAPS\Location_Vicinity\GLSJC_Vicinity_v1.mxd (JL)-jlotta 9/27/2017

Map Date: 9/27/2017

Service Layer Credits: Sources: Esri, USGS, NOAA

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 1. Project Vicinity

2017-208 Ganahl Lumber SJC

Location: N:\2017\2017-208 Ganahl Lumber SJC\MAPS\Location_Vicinity\GLSJC_Location_v1.mxd (JL)-jlotta 9/27/2017

Map Date: 9/27/2017

Service Layer Credits:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 2. Project Location

2017-208 Ganahl Lumber SJC

2.0 REGULATORY REQUIREMENTS

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and animals that are listed as endangered or threatened by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Section 9 of FESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 USC 1538). Under Section 7 of FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of FESA provides for issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

2.1.3 Federal Clean Water Act

Tiering off of the Rivers and Harbors Act of 1899, which primarily pertains to discharge of fill into navigable waters, the federal Clean Water Act's (CWA) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA regulates the discharge of dredged or fill material into "Waters of the United States" through the U.S. Army Corps of Engineers (USACE) via a general or nationwide permit. The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water 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 7b). The U.S. Environmental Protection Agency (EPA) acts as a cooperating agency to set policy, guidance and criteria for use in evaluation permit applications and reviews USACE permit applications.

The USACE regulates "fill" or dredging of fill material within its jurisdictional features. "Fill material" means any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required in conjunction with any Section 404 permit actions; this certification or waiver is issued by the State Water Resources Control Board (SWRCB), administered by each of nine California Regional Water Quality Control Boards (RWQCBs). For this proposed project, the San Diego RWQCB has jurisdiction.

2.2 State and Local Regulations

2.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA, but unlike its federal counterpart, CESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

2.2.2 Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (Fish and Game Code Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (Fish and Game Code Sections 1900-1913) was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority

to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The CESA of 1984 (Fish and Game Code Section 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

2.2.4 California Fish and Game Code

Streambed Alteration Agreement

Section 1602 of the California Fish and Game Code requires that a Notification of Lake or Streambed Alteration be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Streambed Alteration Agreement. Often, projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

Migratory Birds

CDFW enforces the protection of non-game native birds in Sections 3503, 3503.5, and 3800 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California non-game native birds' nests and also make it unlawful to take these birds. All raptor species are protected from "take" pursuant to California Fish and Game Code Section 3503.5 and are also protected at the federal level by the MBTA of 1918.

2.2.5 City of San Juan Capistrano Tree Removal Permit

Section 9-2.349 of the City of San Juan Capistrano Municipal Code outlines the City's policy on the removal of mature trees within the City. A tree removal permit is required for any mature tree removals associated with a development project that is subject to other discretionary land use approvals. Mature trees are considered to be trees with a diameter greater than 6 inches at 3 feet above grade. Tree removal permit for non-heritage trees may be approved administratively by the City Planning Director or designee. Trees defined as "heritage trees" shall not be removed without review and approval of the City Planning Commission. A heritage tree is defined by the City Municipal Code as a tree that has

> "…a trunk diameter at breast height (dbh) of thirty-six (36) inches or greater, and is a specimen of the following species: *Schinus molle* (California pepper); *Quercus* spp. (oak); *Cedar* spp. (cedar); *Eucalyptus globulus* (blue gum eucalyptus); *Juglans* spp. (walnut); *Olea europaea* (olive); *Platanus* spp. (sycamore); *Populus* spp. (cottonwood); or as otherwise designated by the Planning Commission based on the tree's unique and intrinsic value to the community because of its size, age, historic association or ecological value."

2.2.6 Orange County Southern Subregion Habitat Conservation Plan

The Natural Community Conservation Plan (NCCP) Act was established in California 1991 (Fish and Game Code, Sections 2080-2835). The NCCP Act established the Natural Community Conservation Planning Program for the protection and preservation of biological diversity in the State of California. The program was established by CDFW to establish plans to identify and protect sensitive biological resources on a regional scale while allowing for compatible activities within the landscape.

The Southern California Coastal Sage Scrub NCCP Program was the pilot program under the NCCP Act that included a five-county study area. The Orange County Southern Subregion Habitat Conservation Plan (OCSSHCP) is part of the five-county NCCP study area (USFWS 2006). The OCSSHCP planning area encompasses 132,000 acres and includes all or large portions of the Cities of Mission Viejo, Rancho Santa Margarita, San Clemente, and San Juan Capistrano and was approved in 2007. The City of San Juan Capistrano adopted a resolution approving participation in the NCCP/HCP process but did not sign the Planning Agreement. The purpose of the OCSSHCP is to provide regulatory coverage and long-term protection for 32 listed and non-listed Covered Species, jurisdictional areas, and ten Conserved Vegetation Communities identified in the plan. The OCSSHCP provides protection for these species and communities through the establishment of the Habitat Reserve, which conserves approximately 33,000 acres in existing County regional and wilderness parks as well as private lands held by the community of Rancho Mission Viejo through the implementation of the Habitat Reserve Management Program.

2.2.7 CEQA Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;

- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and

- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

3.0 METHODS

3.1 Literature Search

Prior to conducting the biological reconnaissance survey in 2017, ECORP biologists performed a literature search to determine the special-status species that have been documented within the area covered by the Dana Point, Laguna Beach, San Juan Capistrano, Canada Gobernadora, San Clemente, and San Onofre Bluff 7.5-minute topographic quadrangles. The literature search was updated prior to conducting the biological reconnaissance survey in 2018. The literature search included the California Department of Fish and Wildlife California Natural Diversity Database (CNDDB; CDFW 2018a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2018). Additional information was gathered from the following sources:

- *CDFW CNDDB Special Animals List* (CDFW 2018b);
- *California Natural Diversity Database Special Vascular Plants, Bryophytes and Lichens List* (CDFW 2018c);
- *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012);
- Orange County Southern Subregion HCP (OCSSHCP; USFWS 2006);
- Documents published by the regulatory agencies and other scientific literature; and
- Various online websites (e.g., CalFlora 2018).

Using this information and observations in the field, a list of special-status plant and animal species that may have the potential to occur within the project site was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- Have been designated as either rare, threatened, or endangered by CDFW or the USFWS, and are protected under either the CESA or FESA;
- Are candidate species being considered or proposed for listing under these same acts;
- Are fully protected by the California Fish and Wildlife Code, Sections 3511, 4700, 5050, or 5515; and/or
- Are of expressed concern to resource and regulatory agencies, or local jurisdictions.

Sensitive species reported for the region in the literature search or for which suitable habitat occurs in the project site were assessed for potential to occur within the area based on the following guidelines:

Present: Species was observed within the project site during a site visit or focused survey.

High: Habitat (including soils and elevation factors) for the species occurs within the project site and a known occurrence has recently been recorded (within the last 20 years) within 5 miles (mi, 8 kilometers [km]) of the project site.

Moderate: Habitat (including soils and elevation factors) for the species occurs within the project site and a documented observation occurs within the

database search, but not within 5 mi (8 km) of the area; a historic documented observation (more than 20 years old) was recorded within 5 mi (8 km) of the project site; or a recently documented observation occurs within 5 mi (8 km) of the area and marginal or limited amounts of habitat occurs in the project site.

Low: Limited or marginal habitat for the species occurs within the project site and a recently documented observation occurs within the database search, but not within 5 mi (8 km) of the area; a historic documented observation (more than 20 years old) was recorded within 5 mi (8 km) of the project site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.

Presumed Absent: Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist on site; or the known geographic range of the species does not include the project site.

(Note: Location information on some sensitive species may be of questionable accuracy or unavailable; therefore, for survey purposes, environmental factors associated with species occurrence requirements may be considered sufficient reason to give a species a positive potential for occurrence).

Plant nomenclature follows that of The Jepson Manual: Vascular Plants of California (Baldwin et al. 2012). Wildlife nomenclature follows Check-list of North American Birds (AOU 2016), SSAR (2017) for reptiles and amphibians, and the Revised Checklist of North American Mammals North of Mexico (Bradley et al. 2014).

3.2 Field Survey

Field Survey – 2017

The reconnaissance survey in 2017 was performed throughout the entire project site so that 100 percent visual coverage of the project site and surrounding vicinity was achieved. The field survey included the following:

- Recording all plant and animal species observed on the project site and in immediately adjacent areas;
- Characterizing plant communities present on the project site;
- Searching for animal sign (e.g., detections of burrows, scat, tracks, vocalizations);
- Taking photographs at the project site; and

- Recording weather data including time, temperature, cloud cover, and wind speed at the beginning and end of the survey.

Plant species not recognized in the field were collected and identified using botanical references (e.g., Baldwin et al. 2012).

During the field survey, the property was checked for the presence of potential areas subject to USACE jurisdiction pursuant to Section 404 of the CWA and CDFW jurisdiction pursuant to Section 1602 of the FGC. A formal delineation was not conducted at the site during the field survey; however, the entire property was checked for the presence of Waters of the U.S., including wetlands, and Waters of the State. Waters of the U.S. were identified by the presence of Ordinary High Water Mark (OHWM). CDFW jurisdiction was identified by the presence of obvious streambeds and their associated hydrophytic vegetation. Areas considered potentially jurisdictional to either state or federal regulators were mapped in the field using GPS. Areas considered potentially jurisdictional to the USACE and/or CDFW are also subject to being considered as jurisdictional to the San Diego RWQCB.

Field Survey - 2018

The reconnaissance survey in 2018 was performed using the same methodology as was used in 2017, however potential jurisdictional areas were not recorded. Rather, a formal jurisdictional delineation was conducted in 2018 independent of the reconnaissance survey. The results of the formal jurisdictional delineation are presented under a separate cover (ECORP 2019).

4.0 RESULTS

4.1 Field Survey

ECORP biologist Lauren Simpson conducted the initial biological reconnaissance field survey on September 12, 2017 and the updated survey on December 14, 2018. Summarized below are the results of the literature searches and field surveys, including area characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors) found in both 2017 and 2018. Weather conditions during the surveys are summarized in Table 1.

Table 1. Weather Conditions during the Surveys

Date	Time		Temperature (˚F)		Cloud Cover (%)		Wind Speed (mph)	
	start	end	start	end	start	end	start	end
9/12/17	0715	0945	66	76	25	25	0-2	0-2
12/14/18	0935	1115	57	64	100	100	1-3	0-2

4.1.1 Site Characteristics and Land Use

Site Characteristics – 2017

In 2017, the project site and surrounding vicinity had been heavily disturbed and dominated by urban commercial development, residential development, railroads, a concrete channel, roads, and ornamental plants. The site primarily consisted of gravel parking lots used for vehicle storage that are fenced in with chain-link fence, and open nonnative grassland that was periodically mowed. An unpaved road ran along the perimeter of the project site and railroad tracks ran along the eastern edge of the project site. A channelized portion of San Juan Creek was just outside the western edge of the project site and a drainage that empties into San Juan Creek was identified in the center of the project site. A mobile home park bordered the project site to the north and Stonehill Drive borders the project site to the south. Representative site photographs are included in Appendix A.

Site Characteristics – 2018

Site characteristics at the project site were observed to be generally similar during the 2018 site visit as were observed in 2017. The primary change in site conditions observed in 2018 was the presence of a construction laydown yard in the northern portion of the site in an area that had previously been classified as California annual grassland (nonnative). The surrounding vicinity of the project site remained generally the same in 2018 as was observed in 2017. Representative site photographs displaying the differences between site conditions across the two surveys are included in Appendix A.

4.1.2 Soils

Soils – 2017

Soils types were determined using the Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2017). Soils within the project site consisted of five types: Anaheim clay loam, 30 to 50 percent slopes, Chino silty clay loam, Metz loamy sand, Riverwash, and Sorrento loam, zero to 2 percent slopes.

Soils – 2018

No changes in soil types at the project site were noted in 2018 (USDA 2018).

4.1.3 Plants

Plants – 2017

Plant species observed on the project site in 2017 were characteristic of disturbed urban areas. While the only tree species within the project site itself was the native red willow (*Salix laevigata*), much of the floristic diversity observed on site came from nonnative annual species and include nonnative bromes (*Bromus* sp.), black mustard (*Brassica nigra*), and yellow star thistle (*Centaurea solstitialis*). Of the 42 plant species observed on the project site, a total of 15 species were native and the other 27 were exotic species. A list of all plant species observed and identified during the reconnaissance surveys is included in Appendix B.

Plants – 2018

Plant species observed on the project site in 2018 were primarily the same as what was observed in 2017. Of the 42 plant species observed in 2017, 34 were also observed in 2018. No new plant species were observed in 2018.

4.1.4 Wildlife

Wildlife – 2017

The project site provided habitat for species adapted to high levels of disturbance and urban environments. Twenty-two wildlife species were observed in 2017 during the reconnaissance visit including one reptile, 19 birds, and two mammals. Common species observed included western fence lizard (*Sceloporus occidentalis*), house finch (*Haemorhous mexicanus*), and old burrows of Botta's pocket gopher (*Thomomys bottae*). A complete list of wildlife species observed or detected during the surveys on and adjacent to the project site is found in Appendix C.

Wildlife – 2018

Wildlife species observed in 2018 were similar to those species observed in 2017. In general, wildlife activity was observed to be lighter during the 2018 survey. Of the 22 wildlife species

observed in 2017, eight were also observed in 2018. An additional four bird species were also observed in 2018. A complete list of wildlife species observed or detected during the surveys on and adjacent to the project site is found in Appendix C.

4.2 Vegetation Communities/Habitats

Vegetation Communities/Habitats – 2017

The project site as observed in 2017 was subjected to repeated and ongoing disturbance from vehicular traffic, homeless occupancy, and periodic mowing of grassland areas. Small areas of disturbed California sagebrush scrub represented the only native vegetation community on site. A small patch of mulefat was present in disturbed habitat in a central portion of the project site but was not of sufficient size or composition to qualify as a riparian vegetation community. The other vegetation community present on the project site was California annual grassland. No sensitive vegetation communities were observed on the project site. In addition, two land cover types, disturbed areas and developed areas, were observed on the project site. The plant species observed within these cover types consisted of nonnative or invasive weedy species. Classification of the vegetation communities and land cover types within the project area are described in detail below, acreages are provided in Table 2, and those that occurred on the project site in 2017 are displayed in Figure 3.

Table 2. Vegetation Communities and Land Covers on Project Site – 2017 and 2018

Vegetation Community/Land Cover	Acreage 2017	Acreage 2018
Vegetation Community		
California Sagebrush Scrub	0.3	0.3
California Annual Grassland	5.9	0.0
Land Cover		
Disturbed	4.5	6.6
Developed	5.7	9.5
TOTAL	**16.4**	**16.4**

Figure 3. Vegetation - 2017

Map Features

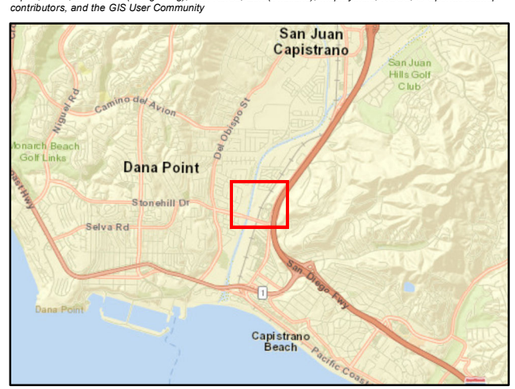
- Project Boundary - 16.43 ac.
- 250 ft. Buffer

Vegetation

- California Annual Grassland
- California Sagebrush Scrub (Disturbed)
- Developed
- Disturbed
- Red Willow Tree

Surrounding Land Uses

- California Annual Grassland
- California Sagebrush Scrub (Disturbed)
- Developed
- Ornamental Landscaping
- San Juan Creek



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2017-208 Ganahl Lumber SJC

Scale in Feet
0 200 400

Base Source: NAIP 2016

Map Date: 9/27/2017

Location: N:\2017\2017-208 Ganahl Lumber SJC\MAPS\Vegetation\Vegetation\v1\GLSJC_Vegetation_v1.mxd (JL)-jlotta 9/28/2017

California Sagebrush Scrub – Disturbed (*Artemesia Californica* Shrubland Alliance)

Artemesia Californica Shrubland Alliance (California sagebrush scrub) is a vegetation type characterized by low-growing shrubs where California sagebrush, a drought deciduous shrub, represents more than 60 percent of the relative cover in the shrub canopy. This community represented the only native vegetation community on the project site and covered approximately one percent of the project site in 2017. The small areas of California sagebrush scrub consisted of two small stands located in the southwestern corner of the project site along developed edges and may have been planted previously as opposed to naturally occurring. The California sagebrush scrub along the southwestern edge of the project site consisted mainly of California sagebrush, but included coyote brush (*Baccharis pilularis*) and Menzies' goldenbush (*Isocoma menziesii*), along with nonnative weedy plants interspersed throughout.

California Annual Grassland

California annual grassland was located in large patches in the northern portion of the project site and covered 36 percent of the project site in 2017. California annual grassland is a classification derived from the first edition of the Manual of California Vegetation (Sawyer and Keeler-Wolf 1995)]] that covers a wide range of herbaceous cover. The second edition (Sawyer et al. 2009) breaks this category down into a number of stands and the majority of the vegetation within the site could be classified as a combination of several of these stands. Dominant species within the California annual grassland areas of the site consisted of nonnative species such as brome grasses, nonnative mustards, and a variety of thistles that include tocalote (*Centaurea melitensis*). These areas would likely fall into the following classifications: *Bromus* (*diandrus, hordeaceus*) – Brachypodium distachyon [false brome] semi-natural stands, *Brassica* (*nigra*) and other mustards semi-natural stands, and Centaurea (*melitensis, solstitialis*) semi-natural stands, all of which are stands of herbaceous vegetation dominated by nonnative species. Further, much of the California annual grassland on the project site had been mowed recently, possibly for fire abatement purposes, which made it difficult to identify several of the plants to further classify the vegetation community.

Disturbed

Disturbed is not a vegetation classification, but rather a land cover type. Areas mapped as disturbed were largely devoid of native vegetation due to human disturbance and were dominated by open areas or nonnative weedy vegetation. Dirt roads and areas containing bare dirt were also mapped as disturbed. The disturbed land cover type covered 27 percent of the project site in 2017 and was present mostly around the perimeter of the project site. Plants present in this land cover type included nonnative weedy species such as tocalote, yellow star thistle, Russian thistle (*Salsola tragus*), and castor bean (*Ricinus communis*).

Developed

Developed is not a vegetation classification, but rather a land cover type. Areas mapped as developed were entirely devoid of vegetation due to human development and contained paved

and/or gravel ground cover. The developed land cover type covered 35 percent of the project site in 2017 and was primarily characterized by gravel parking lots located in the southern portion of the project site.

Vegetation Communities/Habitats – 2018

Much of the project site as observed in 2018 was generally similar to the site as observed in 2017. The primary change in conditions at the project site was the conversion of the California annual grassland habitat in the northern portion of the site to a construction laydown yard (classification in this area was changed to developed and disturbed). No California annual grassland habitat remained on the project site in 2018. The southern half of the project site appeared to be generally unchanged since the 2017 site visit with the exception of the removal of a single red willow tree in the southwest corner. No new vegetation communities or land cover types were observed on the project site during the 2018 visit.

The acreages of vegetation communities and land cover types observed within the project area in 2018 are provided in Table 2, and those that occurred on the project site in 2018 are displayed in Figure 4.

Figure 4. Vegetation - 2018

Map Features

- Project Boundary - 16.43 ac.
- 250 ft. Buffer

Revised Vegetation

- California Sagebrush Scrub (Disturbed)
- Red Willow Tree
- San Juan Creek
- Ornamental Landscaping
- Disturbed
- Developed

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

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Location: N:\2017\2017-208 Ganahl Lumber SJC\MAPS\Vegetation\v2\GLSJC_Vegetation_v2.mxd (SAB); sbohac 1/4/2019

2017-2208 Biological Technical Report - Ganahl Lumber Hardware Store and Lumber Yard

Scale in Feet
0 125 250

Base Source: NAIP 2016

Map Date: 1/4/2019

4.3 Special-Status Species

Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on the results of the literature searches and the site visit. Complete lists of special status plant and wildlife species that were evaluated for their potential to occur in the area are included as Appendices D and E, respectively. The project site does not fall into any designated critical habitat for federally listed plant or wildlife species. However, designated critical habitat for the coastal California gnatcatcher (*Polioptila californica californica*) is located approximately 0.25 mile east of the project site.

4.3.1 Special-Status Plants

Special-Status Plants 2017

The literature search conducted in 2017 documented 54 special-status plant species (three federally and/or state listed, seven covered by the OCSSHCP) in the project vicinity, 51 of which were presumed absent from the site. The remaining three species were determined to have a low potential to occur on site in the small patches of California sagebrush scrub, however none of these four species have been documented within five miles of the proposed project site. These species are discussed below. A complete list of the 54 special-status plant species, with details regarding blooming periods, habitat requirements, and potential for occurrence designations, is included as Appendix D.

Catalina mariposa lily

Catalina mariposa lily (*Calochortus catalinae*) is listed as CNPS 4.2, meaning that it has a limited distribution in California and is monitored regularly by the CNPS with 20 to 80 percent of occurrences considered threatened. Catalina mariposa lily is not a covered species under the OCSSHCP. Catalina mariposa lily occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats (CDFW 2017a). Marginally suitable habitat for Catalina mariposa lily was present in the small patches of California sagebrush scrub in the southwestern portion of the project site, but there are no recorded occurrences in the vicinity. As a result, this species was determined to have a low potential for occurrence within the project site.

Cliff malacothrix

Cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*) is listed as CNPS 4.2, meaning that it has a limited distribution in California and is monitored regularly by the CNPS with 20 to 80 percent of occurrences considered threatened. Cliff malacothrix is not a covered species under the OCSSHCP. Cliff malacothrix occurs in coastal bluff scrub and coastal scrub habitats (CDFW 2017a). Marginally suitable habitat for Cliff malacothrix was present in the small patches of California sagebrush scrub in the southwestern portion of the project site, but there are no recorded occurrences in the vicinity. As a result, this species was determined to have a low potential for occurrence within the project site.

Coulter's matilija poppy

Coutler's matilija poppy (*Romneya coulteri*) is listed as CNPS 4.2, meaning that it has a limited distribution in California and is monitored regularly by the CNPS with 20 to 80 percent of occurrences considered threatened. Coutler's matilija poppy is not a covered species under the OCSSHCP. Coutler's matilija poppy occurs in chaparral and coastal scrub habitats often in burns (CDFW 2017a). Marginally suitable habitat for Coutler's matilija poppy was present in the small patches of California sagebrush scrub in the southwestern portion of the project site, but there are no recorded occurrences in the vicinity. As a result, this species was determined to have a low potential for occurrence within the project site.

Special-Status Plants – 2018

No additional special-status plant species were identified as having a potential to occur on the project site during the 2018 literature search. Further, the designation of a low potential to occur for Catalina mariposa lily, cliff malacothrix, and Coulter's matilija poppy remained unchanged after the 2018 literature search and site visit.

4.3.2 Special-Status Wildlife

Special-Status Wildlife 2017

The literature search conducted in 2017 documented 40 special-status wildlife species (11 federally and/or state-listed species, 20 covered by the OCSSHCP) in the vicinity of the project site. The list of special-status wildlife includes species that are federally and state-listed, which are protected under FESA and/or CESA, and CDFW Species of Special Concern (SSC). Of these 40 species, six were determined to have a low to moderate potential to occur on the project site in 2017. The remaining 34 species were presumed to be absent from the project site in 2017. In addition to the sensitive species identified in the CNDDB search, mule deer (*Odocoileus hemionus*) was identified in the OCSSHCP list of covered species but was determined to have no potential to occur within the project site. Further, Cooper's hawk (*Accipiter cooperii*), a non-special-status species that is covered under the OCSSHCP was observed foraging above the project site during the 2017 survey. A complete list of the 40 special-status wildlife species, with details regarding habitat requirements and potential for occurrence designations, is included as Appendix E.

Each species and its occurrence designation are discussed separately below. The area was assumed to provide potential habitat for all of these species in 2017. None of the sensitive wildlife species with a potential to occur in the area were observed during the reconnaissance survey in 2017.

White-tailed kite

White-tailed kite (*Elanus leucurus*) is a CDFW Fully Protected species. White-tailed kite is also a covered species under the OCSSHCP. This species prefers grasslands, meadows, farmlands, and emergent wetlands for foraging (Zeiner et al. 1990a). The project site contained eucalyptus trees

immediately adjacent which provide suitable nesting habitat. However, the site did not support an abundant small mammal prey population. The literature search identified three observations of this species within 3.5 miles of the project site since 2008 (CDFW 2017a). Due to the lack of suitable foraging habitat and the proximity of previous observations, this species had a moderate potential to forage on the project site in 2017. White-tailed kites were not observed during the 2017 survey.

Burrowing owl

The burrowing owl (*Athene cunicularia*) is a CDFW SSC. Burrowing owl is also a covered species under the OCSSHCP. Burrowing owls historically occurred throughout much of California and the western United States; however, many former California populations have been extirpated. The burrowing owl is a small migratory owl that inhabits open habitats, primarily grasslands and deserts. Burrowing owls require burrows for roosting and nesting cover. Although they often nest in abandoned ground squirrel burrows, they will also use other small mammal burrows, pipes, culverts, and nest boxes, particularly where burrows are scarce (Zeiner et al. 1990a). The CNDDB documented three burrowing owl occurrences within 3.5 miles of the project site since 2005 (CDFW 2017a). The open field in the northern portion of the project site provided marginally suitable habitat for this species; however, no burrows or burrow structures were observed during the survey. Due to the lack of pre-existing burrow structures on the project site and the proximity of previous observations, this species had a moderate potential to occur on the project site in 2017. Burrowing owls were not observed during the 2017 survey.

California horned lark

The California horned lark (*Eremophila alpestris actia*) is a CDFW SSC. California horned lark is not a covered species under the OCSSHCP. California horned larks are found in coastal regions and typically occupy bare open areas that are dominated by low vegetation including plowed fields and grasslands (Zeiner et al. 1990a). The open field in the northern portion of the project site had low vegetation that provided marginally suitable habitat for the species, but there are no recorded records in the vicinity. As a result, this species had a low potential for occurrence on the project site in 2017. California horned larks were not observed during the 2017 survey.

Coastal California gnatcatcher

The coastal California gnatcatcher is listed as threatened under FESA and is a CDFW SSC. Coastal California gnatcatcher is also a covered species under the OCSSHCP. The coastal California gnatcatcher is an obligate permanent resident of coastal sage scrub habitats below 2,500 feet (762 meters) in elevation in southern California (USFWS 2010). This species is found in low growing coastal sage scrub particularly those dominated by California sagebrush (*Artemesia californica*). The two small patches of California sagebrush scrub habitat on the project site represented only 0.3 acre, were heavily disturbed by human activity, and had nonnative plants interspersed within the community. The patches of California sagebrush scrub were located immediately adjacent to Stonehill Drive, a heavily trafficked street, and were not contiguous with any larger more suitable patches of habitat nearby. Coastal California gnatcatcher may use this habitat for foraging

purposes but would not be expected to use this habitat for breeding purposes due to its small size and prevalent disturbances. However, the project site is within 0.25 mile of critical habitat for the coastal California gnatcatcher and the literature search revealed a record of a nesting pair of this species less than 0.5 mile from the project site in the vicinity of the critical habitat in 2001 (Occurrence Number 690; CDFW 2017a). Due to the presence of substantial amounts of available suitable habitat less than 0.25 miles east of the project site, the small size of the habitat patch on site, and the high amount of disturbances present, it is unlikely that coastal California gnatcatcher would use the project site in any substantial way. As a result, this species had a moderate potential for occurrence on the project site in 2017. Coastal California gnatcatchers were not observed during the 2017 survey.

Western red bat

The western red bat (*Lasiurus blossevillii*) is a CDFW SSC. Western red bat is not a covered species under the OCSSHCP. The western red bat is a species that roosts in tree foliage or large leafy shrubs. This species is strongly associated with riparian woodlands and forests (Zeiner et al. 1990b). The red willow trees present on the project site may have provided marginally suitable roosting habitat for this species, but there were no recorded records in the vicinity. As a result, this species had a low potential for occurrence within the project site in 2017. Western red bats were not observed during the 2017 survey.

San Diego desert woodrat

The San Diego desert woodrat (*Neotoma lepida intermedia*) is a CDFW SSC. San Diego desert woodrat is not a covered species under the OCSSHCP. The San Diego desert woodrat occupies coastal scrub habitats in California from San Diego to San Luis Obispo County (NatureServe 2017). Marginally suitable habitat for the San Diego desert woodrat was present in the California sagebrush scrub portions of the project site. The nearest record of this species was from 2002 and is approximately two miles from the project site (CDFW 2017a). As a result, this species had a moderate potential for occurrence within the project site in 2017. San Diego desert woodrats or woodrat middens were not observed during the 2017 survey.

Special-Status Wildlife – 2018

All of the 40 special-status wildlife species documented during the 2017 literature search were also documented in the 2018 literature search. Changes to the potential for occurrence designations were made based on 2018 project site conditions for three of the six species determined to have a low to moderate potential to occur in 2017. These changes are discussed below.

White-tailed kite was determined to have a moderate potential to occur on the project site in 2017. The potential to occur was changed from moderate to low after the 2018 site visit due to the conversion of the California annual grassland habitat to disturbed and developed land covers which no longer provide suitable foraging habitat for this species.

Burrowing owl was determined to have a moderate potential to occur on the project site in 2017. The potential to occur was changed from moderate to presumed absent after the 2018 site visit. The California annual grassland vegetation community that provided habitat for this species is no longer present on the project site. As such, the project site no longer has the potential to support this species.

California horned lark was determined to have a low potential to occur on the project site in 2017. The potential to occur was changed from low to presumed absent after the 2018 site visit. The California annual grassland vegetation community that provided habitat for this species is no longer present on the project site. As such, the project site no longer has the potential to support this species.

An additional three wildlife species were identified during the 2018 literature search that had not previously been evaluated for the project: southern California legless lizard (*Anniella stebbinsi*), yellow rail (*Coturnicops noveboracensis*), and Belding's savannah sparrow (*Passerculus sandwichensis beldingi*). All three species were presumed absent from the project site due to lack of habitat. A complete list of the special-status wildlife species, with details regarding habitat requirements and potential for occurrence designations in both 2017 and 2018, is included as Appendix E.

4.3.3 Raptors and Migratory Birds

Raptors and Migratory Birds – 2017

All raptor species are protected from "take" pursuant to California FGC Section 3503.5. Raptors and migratory birds are protected by the MBTA (USFWS 1918). Trees on the project site in 2017 were sparse and consisted of three mature red willow trees. Mature eucalyptus trees were present within the 250-foot buffer along the eastern border of the project site. These trees may provide hunting perches and nesting habitat for larger raptors. The project site and surrounding vicinity support meager population of small mammals, reptiles, and songbirds and provide marginal foraging habitat due to heavy levels of human disturbance and nonnative plant cover. The Stonehill Drive bridge over the railroad and San Juan Creek supported nesting birds such as swallows. Remnants of old cliff swallow (*Petrochelidon pyrrhonota*) nests were observed along the bridge and white-throated swifts (*Aeronautes saxatalis*), a species that often nests in holes along the underside of bridges, were observed in the vicinity of the bridge. Killdeer (*Charadrius vociferus*), a shorebird that typically nests in gravel bars or gravel in disturbed areas, were observed in the concrete channel adjacent the project site. The survey was conducted outside of nesting season, but it is likely that killdeer have constructed nests on or near the site previously. Raptors in the area typically breed between February and August while songbirds protected under the MBTA generally nest between March and August.

Raptors and Migratory Birds – 2018

The project site and its available nesting habitat for raptors and migratory bird species observed in 2018 was generally similar to the site as observed in 2017. One of the three red willow trees on the project site had been removed, but the other suitable nesting habitat on and in the vicinity of the project site remained generally unchanged. The project site still has the potential to support nesting raptor and migratory bird species.

4.4 Jurisdictional Waters

During the 2017 reconnaissance survey one feature considered potentially jurisdictional as a Water of the U.S. and under CDFW jurisdiction was identified on the property, but a formal jurisdictional delineation was not performed.

A formal jurisdictional delineation of the site was performed in December 2018, the results of which are presented under a separate cover (ECORP 2019). No potential Waters of the U.S. and no CDFW jurisdictional areas were mapped within the project site.

4.5 Wildlife Movement Corridors, Linkages, and Significant Ecological Areas

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor is varied, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges, for example. In general, a corridor is described as a linear habitat, embedded in a dissimilar matrix, which connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. Naturally, the nature of corridor use and wildlife movement patterns varies greatly among species.

Drainages generally serve as movement corridors because wildlife can move easily through these areas, and fresh water is available. Corridors also offer wildlife unobstructed terrain to forage in and for the dispersal of young individuals. Movement corridors are particularly important to larger terrestrial species, such as mountain lions (*Felis concolor*), coyotes (*Canis latrans*), bobcats (*Lynx rufus*), and mule deer (*Odocoileus hemionus*) due to the protective cover afforded by dense vegetation.

Wildlife Movement Corridors – 2017

In 2017, the project site was heavily disturbed and contained very little cover that would only allow for limited movement of smaller, resident populations of wildlife. Furthermore, the entire site is

cut off from any large blocks of habitat that would facilitate movement of wildlife species through the project site. Although the project site is within two miles of the San Juan Hills, there was no connective corridor between the two areas. The channelized San Juan Creek immediately west of the project site is not likely a heavily trafficked corridor for local native wildlife as it lacks any substantial vegetative cover.

Wildlife Movement Corridors – 2018

The conditions on the project site as they relate to wildlife corridors, linkages, and significant ecological areas were the same in 2018 as observed in 2017.

4.6 Local Policies and Ordinances

City of San Juan Capistrano Tree Removal Permit

City of San Juan Capistrano Municipal Code Section 9-2.349 provides for the recognition and preservation of heritage trees and for a "…functional and manageable process for permitting tree removal…". This section of the code requires a tree removal permit to remove trees as part of a development project that is subject to discretionary land use approvals. The Municipal Code also defines a "heritage tree" as "a tree that merits special protection measures due to its size and type. A tree shall be deemed a heritage tree and shall be protected from removal when such tree has a trunk diameter at breast height (dbh) of 36 (thirty-six) inches or greater, and is a specimen of the following species: *Schinus molle* (California pepper); *Quercus* spp. (oak); Cedar spp. (cedar); *Eucalyptus globulus* (blue gum eucalyptus); *Juglans* spp. (walnut); *Olea europaea* (olive); *Platanus* spp. (sycamore); *Populus* spp. (cottonwood); or as otherwise designated by the Planning Commission based on the tree's unique and intrinsic value to the community because of its size, age, historic association or ecological value". The project site is subject to the tree preservation ordinance in the City of San Juan Capistrano Municipal Code.

Local Policies and Ordinances – 2017

There were three red willow trees on the project site in 2017 that would require a tree removal permit from the City should they need to be removed during project construction; however, these trees did not meet the City definition of "heritage trees."

Local Policies and Ordinances – 2018

As of the 2018 site visit, there were two red willow trees on the project site that would require a tree removal permit from the City should they need to be removed during project construction. These trees did not meet the City definition of "heritage trees." The third red willow tree that was observed on site in 2017 appeared to have been removed from the project site between the 2017 and 2018 site visits. No other trees that would require a tree removal permit were observed the project site in 2018.

4.7 HCPs and NCCPs

Orange County Southern Subregion HCP

The project site is located within the planning area boundaries for the OCSSHCP in Subarea 4. Subarea 4 consists of 33,550 acres in the cities of Rancho Santa Margarita, Mission Viejo, San Juan Capistrano and San Clemente, of which only 106 acres remain undeveloped. While the project site is located within the boundaries of the OCSSHCP planning area, it is classified by the OCSSHCP as developed land and is not located within the boundaries of the Habitat Reserve system. Because the project site is located outside of the Habitat Reserve system, regulatory coverage through the OCSSHCP is not provided for activities conducted on the project site. Any activities associated with the proposed project that may result in the "take" of sensitive species and their habitats would be subject to the following regulatory approvals: FESA 4(d) or Section 10 permits, a Section 7 consultation, 1600 SAA, and/or a Section 2081 CESA permit.

The status of the project site as it pertains to the OCSSHCP was unchanged in 2018.

5.0 IMPACT ANALYSIS

5.1 Special-Status Species

Of the 54 special status plants identified in the literature search, three plant species (Catalina mariposa lily, cliff malacothrix, and Coulter's matilija poppy) were determined to have a low potential to occur on the project site (both in 2017 and 2018) within the 0.3-acre of marginal California sagebrush scrub located on the southeast portion of the project site. No special status plant species have a moderate to high potential to occur on the site. The removal of 0.3 acre of low quality habitat for these three CNPS 4.2 (Watch List) species would not be expected to contribute substantially to the overall decline of these species. As such, impacts to Catalina mariposa lily, cliff malacothrix, and Coulter's matilija poppy would be less than significant.

Of the 43 special status wildlife species identified in the literature search (40 identified in 2017 and three added in 2018), four wildlife species (white-tailed kite, coastal California gnatcatcher, western red bat, and San Diego desert woodrat) have a low to moderate potential to occur on the project site. No special-status wildlife species have a high potential to occur. Two species identified as having a low to moderate potential to occur in 2017 (burrowing owl and California horned lark) were determined to be presumed absent in 2018 due to a change in habitat on the project site. The majority of wildlife detected during the reconnaissance surveys included birds that are commonly found in disturbed and urban areas. In addition, birds and raptors protected by the MBTA may utilize the area for foraging and nest on the site and surrounding trees.

The proposed project would involve the grading of the entire project site and removal of all existing vegetation. As such, the proposed project would have the potential to have a substantial adverse effect, either directly or through habitat modifications, on special-status species identified by CDFW, and/or USFWS. Impacts to each special-status wildlife species identified as having a potential to occur are described below.

White-tailed kite was determined to have a low potential to occur and would not be expected to nest within the project site itself but may use the large trees within 500-feet of the project site for nesting. Indirect impacts to white-tailed kite may occur from construction noise and vibrations should the species nest within 500-feet of the project site. Impacts to white-tailed kite would be less than significant with the implementation of Mitigation Measure BIO-1.

Coastal California gnatcatcher may use the project site for foraging purposes but would not be expected to use this habitat for breeding purposes due to the habitat's small size and prevalent disturbances. The removal of 0.3 acre of low quality foraging habitat would not be expected to contribute substantially to the overall decline of coastal California gnatcatcher as high-quality habitat for this species exists within designated critical habitat less than 0.25 mile from the project site. However, construction noise and ground vibration from the vegetation removal activities may affect individual coastal California gnatcatchers. Once the California sagebrush scrub is removed from the project site, no further impacts to the coastal California gnatcatcher would be expected. Impacts to coastal California gnatcatcher would be less than significant with the implementation of Mitigation Measures BIO-2 and BIO-3.

Western red bats may use the red willow trees within the project site for roosting at any time throughout the year. While the removal of the willow trees during project construction may result in direct impacts to western red bat should they be actively using the trees for roosting, the loss of the trees from project construction would not be expected to substantially contribute to the overall decline of the species. As such, impacts to western red bat would be less than significant.

The 0.3 acre of California sagebrush scrub provides marginally suitable habitat for the San Diego desert woodrat. As such, direct impacts to San Diego desert woodrat through ground disturbance and indirect impacts from habitat loss may occur. The removal of 0.3 acre of low quality habitat would not be expected to contribute substantially to the overall decline of the species. As such, impacts to San Diego desert woodrat would be less than significant.

Further, if construction of the proposed project occurs during the bird breeding season, ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of habitat (including the red willow trees) and indirectly through increased noise. Impacts to nesting birds would be less than significant with the implementation of Mitigation Measure BIO-1.

5.2 Sensitive Natural Communities

The project site and surrounding vicinity consists of several parcels of land that are developed or highly disturbed and support nonnative vegetation communities and ornamental landscaping. In general, the project site consists of developed gravel parking lots, disturbed dirt lot areas with ruderal vegetation, and two small patches of disturbed California sagebrush scrub totaling approximately 0.3 acre. No riparian communities or sensitive vegetation communities were identified on the project site. The small patch of mulefat just outside of the concrete drainage in the center of the project site was not of sufficient size or composition to qualify as a riparian vegetation community. Therefore, no impact would occur.

5.3 Federally Protected Wetlands and Waters of the US

Any potential impacts to federally protected wetlands and waters of the US have been evaluated under a separate cover (ECORP 2019).

5.4 Wildlife Corridors and Nursery Sites

The project site is bordered by residential development to the north, commercial development to the east and south, and a channelized creek to the west. No migratory wildlife corridors or native wildlife nursery sites were identified within the project site. The channelized San Juan Creek immediately west of the project site is unlikely to serve as a substantial corridor for local wildlife due to the lack of vegetative cover. Therefore, no impact would occur.

5.5 Local Policies and Ordinances

There are no heritage trees as defined by the City of San Juan Capistrano present on the project site. Two mature red willow trees were present on the project site during the site visit conducted in 2018 (three were documented on the site in 2017). The removal of these trees would require the acquisition of the appropriate tree removal permit from the City of San Juan Capistrano per Municipal Code Section 9-2.349. Impacts would be less than significant with the implementation of Mitigation Measure BIO-4.

5.6 HCPs and NCCPs

The project site is located within the planning area for the OCSSHCP but is designated by the plan as a developed area and is located outside the boundaries of the Habitat Reserve system. Thus, the OCSSHCP does not have any requirements that apply to the proposed project. No impact would occur.

6.0 MITIGATION MEASURES

The following mitigation measures would reduce impacts to sensitive biological resources to a less than significant level.

BIO-1: Preconstruction Surveys for Nesting Birds: Any development activities within the Project site shall be conducted during the non-breeding season for birds (approximately September 1 through February 15). This will avoid violations of the MBTA and California FGC Sections 3503, 3503.5 and 3513. If activities with the potential to disrupt nesting birds are scheduled to occur during the bird breeding season (February through August for raptors and March through August for songbirds), a pre-construction nesting bird survey shall be conducted by a qualified biologist. The nest surveys shall include the Project site and adjacent areas where Project activities have the potential to cause nest failure. If no nesting birds are observed during the survey, site preparation and construction activities may begin. If nesting birds (including nesting raptors) are found to be present, then avoidance or minimization measures shall be undertaken in consultation with CDFW. Measures shall include establishment of an avoidance buffer until nesting has been completed. The width of the buffer will be determined by the Project biologist. Typically this is a minimum of 300 feet from the nest site in all directions (500 feet is typically recommended by CDFW for raptors), until the juveniles have fledged and there has been no evidence of a second attempt at nesting. The monitoring biologist will monitor the nest(s) during construction and document any findings.

BIO-2: Preconstruction Sensitive Wildlife Surveys: Pre-construction surveys shall be conducted for sensitive wildlife species within all areas of potential permanent and temporary disturbance. Pre-construction surveys shall take place a maximum of 14 days prior to the start of ground disturbing activities. The pre-construction surveys shall take place regardless of breeding season timing and shall focus on identifying the presence of coastal California gnatcatcher and other special-status wildlife species potentially occurring within the Project site. Should a special-status species be identified during pre-construction surveys, the monitoring biologist will stop the construction activities in the area where the special-status species is found and consultation to develop suitable avoidance and minimization measures with the appropriate agency (i.e., USFWS, CDFW) shall be undertaken.

If coastal California gnatcatcher are observed foraging during preconstruction surveys, a specific mitigation methodology shall be determined in consultation between the City/Applicant and USFWS. Mitigation measures for any foraging coastal California gnatcatchers present may include biological monitoring during vegetation clearing and construction activities to ensure that individual gnatcatchers are not present during vegetation removal. Once the vegetation removal has taken place, no additional impacts to coastal California gnatcatcher are anticipated and no further measures would be required.

BIO-3: Biological Monitoring: A biologist shall be present to monitor all vegetation clearing activities both during and outside of the breeding season. A biological monitor shall perform biological clearance surveys at the start of each work day that vegetation clearing takes place to minimize impacts on sensitive wildlife species, including the coastal California gnatcatcher. The monitor will be responsible for ensuring that impacts to sensitive species will be avoided to the

fullest extent possible. The biological monitor shall be present during the initiation of vegetation clearing activities and their presence should continue as necessary to maintain protective measures and to monitor for species in harm's way. These protection measures may include redirecting wildlife or capturing and relocating wildlife to areas outside the work area. Any captured species shall be relocated out of harm's way to adjacent appropriate habitat that is outside of Project impact areas. Biological monitoring shall take place until the project site has been completely cleared of any vegetation.

BIO-4: Tree Removal Permit: The removal of the red willow trees shall be avoided in project design where possible. If the red willow trees require removal during project construction, the appropriate tree removal permit shall be obtained from the City of San Juan Capistrano prior to the tree removal.

7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or the applicant's representative and that I have no financial interest in the project.

DATE: _____ SIGNED: January 18, 2019

Lauren Simpson
Staff Biologist

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Appendix A

Representative Site Photographs

Appendix A
Representative Site Photographs

Photo 1a. Project Site Overview Facing Northeast - 2017

Photo 1b. Project Site Overview Facing Northeast - 2018

Photo 2a. Project Site Overview Facing Southeast - 2017

Photo 2b. Project Site Overview Facing Southeast - 2018

Photo 3a. Disturbed Area in Southeast Corner of Project Site - 2017

Photo 3b. Disturbed Area in Southeast Corner of Project Site - 2018

Photo 4a. California Annual Grassland – Disturbed by Recent Mowing - 2017

Photo 4b. Disturbed/Developed area in Northwest Corner – Previously California Annual Grassland – 2018

Photo 5a. Patch of California Sagebrush Scrub on Southern End of Project Site – Disturbed - 2017

Photo 5b. Patch of California Sagebrush Scrub on Southern End of Project Site – Disturbed - 2018

Photo 6a. Solitary Red Willow Trees in Northwest End of Project Site - 2017

Photo 6b. Solitary Red Willow Trees in Northwest End of Project Site – Understory Disturbed - 2018

Photo 7a. San Juan Creek Channel West of the Project Site - 2017

Photo 7b. San Juan Creek Channel West of the Project Site - 2018

Photo 8a. Railroad Tracks and Large Ornamental Trees East of Project Site - 2017

Photo 8b. Railroad Tracks and Large Ornamental Trees East of Project Site - 2018

Photo 9a. California Sagebrush Scrub Along Southwestern Project Edge; Unpaved Road that Spans Project Perimeter – 2017

Photo 9b. California Sagebrush Scrub Along Southwestern Project Edge; Unpaved Road that Spans Project Perimeter – Red Willow Tree Along Western Edge No Longer Present – 2018

Appendix B

Plant Compendium

Appendix B
Plant Compendium

Scientific Name	Common Name
VASCULAR PLANTS	
ANGIOSPERMS (DICOTYLEDONS)	
ADOXACEAE	**ELDERBERRY FAMILY**
Sambucus Mexicana[+]	Mexican elderberry
AIZOACEAE	**ICEPLANT FAMILY**
Carpobrotus edulis[*+]	iceplant
AMARANTHACEAE	**AMARANTH FAMILY**
Amaranthus albus[*+]	tumbleweed
APIACEAE	**PARSLEY FAMILY**
Cyclospermum leptophyllum[*]	marsh parsley
ASTERACEAE	**SUNFLOWER FAMILY**
Ambrosia psilostachya[+]	ragweed
Artemesia californica[+]	California sagebrush
Baccharis pilularis[+]	coyote brush
Baccharis salicifolia[+]	mule fat
Centaurea melitensis[*+]	tocalote
Centaurea solstitialis[*+]	yellow star thistle
Conyza Canadensis[+]	horseweed
Cynara cardunculus[*+]	artichoke thistle
Deinandra kelloggii[+]	Kellogg's tarweed
Helminthotheca echioides[*+]	bristly oxtongue
Heterotheca grandiflora[+]	telegraph weed
Isocoma menziesii[+]	Menzie's goldenbush
Pulicaria paludosa[*]	Spanish false fleabane
Sonchus asper[*+]	spiny sowthistle
BORAGINACEAE	**BORAGE FAMILY**
Heliotropium curassavicum	salt heliotrope
BRASSICACEAE	**MUSTARD FAMILY**
Brassica nigra[*+]	black mustard
Sisymbrium irio[*+]	London rocket
CACTACEAE	**CACTUS FAMILY**
Opuntia littoralis[+]	coast prickly pear
CHENOPODIACEAE	**GOOSEFOOT FAMILY**
Atriplex lentiformis[+]	big saltbush

Scientific Name	Common Name
Salsola tragus+*	Russian thistle
CONVOLVULACEAE	**MORNING GLORY FAMILY**
Calystegia macrostegia ssp. tenuifolia	island false bindweed
Ipomoea indica+*	Oceanblue morning glory
EUPHORBIACEAE	**SPURGE FAMILY**
*Euphorbia maculate**	spotted spurge
Ricinus communis+*	castor bean
FABACEAE	**PEA FAMILY**
Acacia redolens+*	bank catclaw
LAMIACEAE	**MINT FAMILY**
Marrubium vulgare+*	white horehound
PLUMBAGINACEAE	**LEADWORT FAMILY**
Limonium sinuatum+*	wavyleaf sealavender
SALICACEAE	**WILLOW FAMILY**
Salix laevigata+*	red willow
SOLANACEAE	**NIGHTSHADE FAMILY**
Datura wrightii+*	Jimsonweed
Nicotiana glauca+*	tree tobacco
TAMARICACEAE	**TAMARISK FAMILY**
Tamarix sp.*	tamarisk sp.
ANGIOSPERMS (MONOCOTYLEDONS)	
CYPERACEAE	**SEDGE FAMILY**
*Carex spp**	sedge
MYRTACEAE	**MYRTLE FAMILY**
Eucalyptus globus+*	Eucalyptus
POACEAE	**GRASS FAMILY**
Arundo donax+*	giant reed
Avena spp+*	wild oat
Bromus spp+*	brome grass
Pennisetum setaceum+*	crimson fountaingrass
Polypogon monspeliensis+*	annual beard grass

***nonnative species**
+observed in both 2017 and 2018

Appendix C

Wildlife Compendium

Appendix C
Wildlife Compendium

Scientific Name	Common Name
REPTILES	
PHRYNOSOMATIDAE	**PHRYNOSOMATID LIZARDS**
Sceloporus occidentalis	western fence lizard
BIRDS	
ACCIPITRIDAE	**KITES, HAWKS, EAGLES, AND ALLIES**
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis[+]	red-tailed hawk
AEGITHALIDAE	**BUSHTITS**
Psaltriparus minimus	bushtit
ANATIDAE	**DUCKS, GEESE, AND SWANS**
Anas platyrhynchos	mallard
APODIDAE	**SWIFTS**
Aeronautes saxatalis	white-throated swift
ARDEIDAE	**HERONS**
Egretta thula	snowy egret
CHARADRIIDAE	**PLOVERS, LAPWINGS, AND ALLIES**
Charadrius vociferus[+]	killdeer
CORVIDAE	**JAYS, CROWS, AND THEIR ALLIES**
Corvus brachyrhynchos[+]	American crow
Corvus corax[~]	Common Raven
COLUMBIDAE	**DOVES AND PIDGEONS**
*Columba livia**	rock pigeon
Zenaida macroura[+]	mourning dove
EMBERIZIDAE	**NEW WORLD SPARROWS**
Melospiza melodia[+]	song sparrow
Zonotrichia leucophrys[~]	white-crowned sparrow
FRINGILLIDAE	**FINCHES AND THEIR ALLIES**
Haemorhous mexicanus[+]	house finch
Melozone crissalis	California towhee
HIRUNDINIDAE	**SWALLOWS**
Petrochelidon pyrrhonota	cliff swallow

Scientific Name	Common Name
PARULIDAE	**NEW WORLD WARBLERS**
Setophaga coronata~	yellow-rumped warbler
PICIDAE	**WOODPECKERS**
Picoides nuttallii	Nuttall's woodpecker
POLIOPTILIDAE	**GNATCATCHERS**
Poliptila caerulea~	blue-gray gnatcatcher
STURNIDAE	**STARLINGS**
Sturnus vulgaris	European starling
TROCHILIDAE	**HUMMINGBIRDS**
Calypte anna+	Anna's hummingbird
TYRANNIDAE	**FLYCATCHERS**
Sayornis nigricans+	black phoebe
Sayornis saya+	Say's phoebe
MAMMALS	
GEOMYIDAE	**GOPHERS**
Thomomys bottae	Botta's pocket gopher (burrow)
PROCYONIDAE	**PROCYONIDS**
Procyon lotor	North American raccoon (tracks)
***nonnative species** **+species observed in 2017 and 2018** **~species observed in 2018 only**	

Appendix D

Potential for Occurrence of Sensitive Plant Species

Appendix D
Potential for Occurrence of Sensitive Plant Species

Scientific Name Common Name	**Status**		**Flowering Period Elevation (meters)**	**Potential for Occurrence (2017); Habitat**	**Potential for Occurrence (2018)**
Aphanisma blitoides Aphanisma	Fed: Ca: CNPS: OCSSHCP:	none none 1B.2 none	February-June 1-305	**Presumed Absent;** Sandy soils in Coastal bluff scrub, Coastal dunes, Coastal scrub. No suitable sandy soil habitat occurs on the project site.	**Unchanged; Presumed Absent**
Artemisia palmeri San Diego sagewort	Fed: Ca: CNPS: OCSSHCP:	none none 3.1 none	(Feb)May-September 19-915	**Presumed Absent;** Occurs in sandy mesic soils in chaparral, coastal scrub, and riparian habitats. The project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Asplenium vespertinum western spleenwort	Fed: Ca: CNPS: OCSSHCP:	none none 4.2 none	February-June 180-1000	**Presumed Absent;** Occurs in rocky soils in chaparral, cismontane woodland, and coastal scrub habitats. The project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Atriplex coulteri Coulter's saltbush	Fed: Ca: CNPS: OCSSHCP:	none none 1B.2 COV	March-October 3-460	**Presumed Absent;** Alkaline or clay soils in Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland. No suitable alkaline or clay soil habitat occurs on the project site.	**Unchanged; Presumed Absent**
Atriplex pacifica south coast saltscale	Fed: Ca: CNPS: OCSSHCP:	none none 1B.2 none	March-October 0-140	**Presumed Absent;** Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas. No suitable coastal habitat occurs on the project site.	**Unchanged; Presumed Absent**
Atriplex parishii Parish's brittlescale	Fed: Ca: CNPS: OCSSHCP:	none none 1B.1 none	June-October 25-1900	**Presumed Absent;** Alkaline soils in Chenopod scrub, Playas, Vernal pools. The project site is outside of the elevation range for this species, no suitable habitat occurs on the project site and no records of occurrence within five miles.	**Unchanged; Presumed Absent**

Scientific Name Common Name	**Status**		**Flowering Period Elevation (meters)**	**Potential for Occurrence (2017); Habitat**	**Potential for Occurrence (2018)**
Atriplex serenana var. davidsonii Davidson's saltscale	Fed: Ca: CNPS: OCSSHCP:	none none 1B.2 none	April-October 10-200	**Presumed Absent;** Alkaline, Coastal bluff scrub, Coastal scrub. No suitable alkaline habitat occurs on the project site and no records of occurrence within five miles.	**Unchanged; Presumed Absent**
Brodiaea filifolia Thread-leaved Brodiea	Fed: Ca: CNPS: OCSSHCP:	**THR** **END** 1B.1 COV	March-June 25-1120	**Presumed Absent;** Occurs in openings within chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Often found in clay soils. No suitable clay soil habitat occurs on the project site and the project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Calochortus catalinae Catalina mariposa lily	Fed: Ca: CNPS: OCSSHCP:	none none 4.2 none	February-June 15-700	**Low;** Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats. Marginally suitable habitat occurs in the small patches of California sagebrush scrub on site but there are no records of occurrence in the vicinity.	**Unchanged; Low**
Calochortus weedii var. intermedius intermediate mariposa-lily	Fed: Ca: CNPS: OCSSHCP:	none none 1B.2 COV	May-July 105-855	**Presumed Absent;** Rocky, calcareous soils in Chaparral, Coastal scrub, Valley and foothill grassland. No suitable habitat occurs on the project site. The project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Caulanthus simulans Payson's jewelflower	Fed: Ca: CNPS: OCSSHCP:	none none 4.2 none	February-June 90-2200	**Presumed Absent;** Occurs in sandy granitic soils in chaparral and coastal scrub habitats. The project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Centromadia parryi ssp. australis southern tarplant	Fed: Ca: CNPS: OCSSHCP:	none none 1B.1 COV	May-November 0-480	**Presumed Absent;** Marshes and swamps, Valley and foothill grassland, Vernal pools.	**Unchanged; Presumed Absent**

Scientific Name Common Name	**Status**		**Flowering Period Elevation (meters)**	**Potential for Occurrence (2017); Habitat**	**Potential for Occurrence (2018)**
				No suitable habitat occurs on the project site and no records of occurrence within five miles.	
Chaenactis glabriuscula var. orcuttiana Orcutt's pincushion	Fed: none Ca: none CNPS: 1B.1 OCSSHCP: none		January-August 0-100	**Presumed Absent;** Coastal bluff scrub, Coastal dunes. No suitable habitat occurs on the project site.	**Unchanged; Presumed Absent**
Chorizanthe leptotheca Peninsular spineflower	Fed: none Ca: none CNPS: 4.2 OCSSHCP: none		May-August 300-1900	**Presumed Absent;** Occurs in granitic soils on alluvial fans in chaparral, coastal scrub, and lower montane coniferous forest habitat. The project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Chorizanthe polygonoides var. longispina Long-spined Spineflower	Fed: none Ca: none CNPS: 1B.2 OCSSHCP: none		April-July 30-1530	**Presumed Absent;** Occurs in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pool habitats, often found in clay soils. No suitable clay soil habitat occurs on the project site, the project site is outside of the elevation range for this species, and no records of occurrence within five miles.	**Unchanged; Presumed Absent**
Cistanthe maritima seaside cistanthe	Fed: none Ca: none CNPS: 4.2 OCSSHCP: none		February-August 5-300	**Presumed Absent;** Occurs in sandy soils in coastal bluff scrub, coastal scrub, and valley and foothill grassland habitats. There are no suitable sandy soil habitats on the project site.	**Unchanged; Presumed Absent**
Clinopodium chandleri San Miguel Savory	Fed: none Ca: none CNPS: 1B.2 OCSSHCP: none		March-July 120-1075	**Presumed Absent;** Occurs in chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland. Often found in rocky, gabbroic, or metavolcanic soils. The project site is outside of the elevation range for this species and no	**Unchanged; Presumed Absent**

Scientific Name Common Name	**Status**		**Flowering Period Elevation (meters)**	**Potential for Occurrence (2017); Habitat**	**Potential for Occurrence (2018)**
				records of occurrence within five miles.	
Comarostaphylis diversifolia ssp. diversifolia summer holly	Fed: none Ca: none CNPS: 1B.2 OCSSHCP: none		April-June 30-790	**Presumed Absent;** Chaparral, Cismontane woodland. No suitable habitat occurs on the project site and the project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Convolvulus simulans small-flowered morning-glory	Fed: none Ca: none CNPS: 4.2 OCSSHCP: none		March-July 30-740	**Presumed Absent;** Occurs in clay soils in serpentinite seeps in openings in chaparral habitat, coastal scrub, and valley and foothill grassland habitats. No suitable clay soils occur on the project site and the project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Deinandra paniculata paniculate tarplant	Fed: none Ca: none CNPS: 4.2 OCSSHCP: none		March-November 25-940	**Presumed Absent;** Usually occurs in vernally mesic soils, sometimes occurs in sandy soils in coastal scrub, valley and foothill grassland, and vernal pool habitats. The project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Dichondra occidentalis western dichondra	Fed: none Ca: none CNPS: 4.2 OCSSHCP: none		January-July 50-500	**Presumed Absent;** Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats. The project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Dudleya blochmaniae ssp. blochmaniae Blochman's Dudleya	Fed: none Ca: none CNPS: 1B.1 OCSSHCP: none		April-June 5-450	**Presumed Absent;** Occurs in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland. Found in rocky, often clay or serpentinite soils. No suitable clay or serpentinite habitat occurs on the project site.	**Unchanged; Presumed Absent**

Scientific Name Common Name	**Status**		**Flowering Period Elevation (meters)**	**Potential for Occurrence (2017); Habitat**	**Potential for Occurrence (2018)**
Dudleya multicaulis many-stemmed dudleya	Fed: Ca: CNPS: OCSSHCP:	none none 1B.2 COV	April-July 15-790	**Presumed Absent;** Often clay soils in Chaparral, Coastal scrub, Valley and foothill grassland. No suitable habitat occurs on the project site. No suitable clay soil habitat occurs on the project site.	**Unchanged; Presumed Absent**
Dudleya stolonifera Laguna Beach dudleya	Fed: Ca: CNPS: OCSSHCP:	**THR** **THR** 1B.1 none	May-July 10-260	**Presumed Absent;** Rocky soils in Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. No suitable rocky soil habitat occurs on the project site.	**Unchanged; Presumed Absent**
Dudleya viscida Sticky Dudleya	Fed: Ca: CNPS: OCSSHCP:	none none 1B.2 none	May-June 10-550	**Presumed Absent;** Occurs in coastal bluff scrub, chaparral, cismontane woodland, and coastal scrub in rocky soils. No suitable rocky soil habitat occurs on the project site and no records of occurrence within five miles.	**Unchanged; Presumed Absent**
Eryngium pendletonense Pendleton Button-Celery	Fed: Ca: CNPS: OCSSHCP:	none none 1B.1 none	April-July 15-110	**Presumed Absent;** Occurs in coastal bluff scrub, valley and foothill grassland, and vernal pools. Found in clay, vernally mesic soils. No suitable habitat occurs on the project site and no records of occurrence within five miles.	**Unchanged; Presumed Absent**
Euphorbia misera cliff spurge	Fed: Ca: CNPS: OCSSHCP:	none none 2B.2 none	December-October 10-500	**Presumed Absent;** Rocky soils in Coastal bluff scrub, Coastal scrub, Mojavean desert scrub. No suitable rocky soil habitat occurs on the project site.	**Unchanged; Presumed Absent**
Harpagonella palmeri Palmer's grapplinghook	Fed: Ca: CNPS: OCSSHCP:	none none 4.2 none	March-May 20-955	**Presumed Absent;** Occurs in chaparral, coastal scrub, and valley and foothill grassland in clay soils. Found in open grassy areas within shrubland. The project site is	**Unchanged; Presumed Absent**

Scientific Name Common Name	**Status**		**Flowering Period Elevation (meters)**	**Potential for Occurrence (2017); Habitat**	**Potential for Occurrence (2018)**
				outside of the elevation range for this species.	
Hordeum intercedens vernal barley	Fed: Ca: CNPS: OCSSHCP:	none none 3.2 none	March-June 5-1000	**Presumed Absent;** Occurs in coastal dunes, coastal scrub, saline flats and depressions in valley and foothill grassland, and vernal pools. No suitable vernal or saline habitats occur on the project site.	**Unchanged; Presumed Absent**
Horkelia cuneata var. puberula mesa horkelia	Fed: Ca: CNPS: OCSSHCP:	none none 1B.1 none	February-September 70-810	**Presumed Absent;** Sandy or gravelly soils in Chaparral, Cismontane woodland, Coastal scrub. No suitable habitat occurs on the project site. The project site is outside of the elevation range for this species and no records of occurrence within five miles.	**Unchanged; Presumed Absent**
Imperata brevifolia California Satintail	Fed: Ca: CNPS: OCSSHCP:	none none 2B.1 none	September-May 0-1215	**Presumed Absent;** Occurs in mesic soils in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkalai) and riparian scrub. No mesic habitats occur on site and no records of occurrence within five miles.	**Unchanged; Presumed Absent**
Isocoma menziesii var. decumbens decumbent goldenbush	Fed: Ca: CNPS: OCSSHCP:	none none 1B.2 none	April-November 10-135	**Presumed Absent;** Chaparral, Coastal scrub in sandy soils, often in disturbed areas. No suitable sandy soil habitat occurs on the project site and no records of occurrence within five miles. Goldenbush species identified on the project site was not this subspecies.	**Unchanged; Presumed Absent**
Lasthenia glabrata ssp. coulteri Coulter's goldfields	Fed: Ca: CNPS: OCSSHCP:	none none 1B.1 none	February-June 1-1220	**Presumed Absent;** Marshes and swamps, Playas, Vernal pools. No suitable habitat occurs on the project site and no records of occurrence within five miles.	**Unchanged; Presumed Absent**

Scientific Name Common Name	**Status**		**Flowering Period Elevation (meters)**	**Potential for Occurrence (2017); Habitat**	**Potential for Occurrence (2018)**
Lycium brevipes var. hassei Santa Catalina Island Desert-thorn	Fed: Ca: CNPS: OCSSHCP:	none none 1B.1 none	June-August 65-300	**Presumed Absent;** Occurs in coastal bluff scrub and coastal scrub. The project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Lycium californicum California box-thorn	Fed: Ca: CNPS: OCSSHCP:	none none 4.2 none	December-August 5-150	**Presumed Absent;** Occurs in coastal bluff scrub and coastal scrub habitats. Species is a perennial shrub that is identifiable at any time of year. Marginally suitable habitat occurs in the small patches of California sagebrush scrub on site but species was not observed during the site visit and there are no records of occurrence in the vicinity.	**Unchanged; Presumed Absent**
Malacothrix saxatilis var. saxatilis cliff malacothrix	Fed: Ca: CNPS: OCSSHCP:	none none 4.2 none	March-September 3-200	**Low;** Occurs in coastal bluff scrub and coastal scrub habitats. Marginally suitable habitat occurs in the small patches of California sagebrush scrub on site but there are no records of occurrence in the vicinity.	**Unchanged; Low**
Microseris douglasii ssp. platycarpha small-flowered microseris	Fed: Ca: CNPS: OCSSHCP:	none none 4.2 none	March-May 15-1070	**Presumed Absent;** Occurs in clay soils in cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools. No suitable clay soil habitat occurs on the project site.	**Unchanged; Presumed Absent**
Monardella hypoleuca ssp. intermedia Intermediate monardella	Fed: Ca: CNPS: OCSSHCP:	none none 1B.3 none	April-September 400-1250	**Presumed Absent;** Occurs in chaparral, cismontane woodland, and occasionally in lower montane coniferous forest. Known only from the Santa Ana and Palomar Mountains. The project site is outside of the elevation range for this species and no records of occurrence within five miles.	**Unchanged; Presumed Absent**

Scientific Name Common Name	**Status**		**Flowering Period Elevation (meters)**	**Potential for Occurrence (2017); Habitat**	**Potential for Occurrence (2018)**
Myosurus minimum* ssp. *apus little mousetail	Fed: none Ca: none CNPS: 3.1 OCSSHCP: none		March-June 20-640	**Presumed Absent;** Valley and foothill grassland and alkaline vernal pools. No suitable habitat occurs on the project site.	**Unchanged; Presumed Absent**
Nama stenocarpa mud nama	Fed: none Ca: none CNPS: 2B.2 OCSSHCP: COV		January-July 5-500	**Presumed Absent;** Marshes and swamps. No suitable habitat occurs on the project site and no records of occurrence within five miles.	**Unchanged; Presumed Absent**
Navarretia prostrata prostrate vernal pool navarretia	Fed: none Ca: none CNPS: 1B.1 OCSSHCP: none		April-July 3-1210	**Presumed Absent;** Mesic soils in Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools. No suitable habitat occurs on the project site and no records of occurrence within five miles.	**Unchanged; Presumed Absent**
Nolina cismontana Chaparral Nolina	Fed: none Ca: none CNPS: 1B.2 OCSSHCP: none		May-July 140-1275	**Presumed Absent;** Occurs in chaparral, coastal scrub, and areas with sandstone or gabbro. The project site is outside of the elevation range for this species and no records of occurrence within five miles.	**Unchanged; Presumed Absent**
Pentachaeta aurea ssp. allenii Allen's pentachaeta	Fed: none Ca: none CNPS: 1B.1 OCSSHCP: none		March-June 75-520	**Presumed Absent;** Coastal scrub, Valley and foothill grassland. No suitable habitat occurs on the project site. The project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**
Phacelia ramosissima var. austrolitoralis south coast branching phacelia	Fed: none Ca: none CNPS: 3.2 OCSSHCP: none		March-August 5-300	**Presumed Absent;** Sandy, sometimes rocky soils in chaparral, coastal dunes, coastal scrub, and coastal salt marshes and swamps. No suitable sandy or rocky soils habitat occurs on the project site.	**Unchanged; Presumed Absent**
Piperia cooperi chaparral rein orchid	Fed: none Ca: none CNPS: 4.2 OCSSHCP: none		March-June 15-1585	**Presumed Absent;** Occurs in chaparral, cismontane woodland, and valley and foothill	**Unchanged; Presumed Absent**

Scientific Name Common Name	**Status**		**Flowering Period Elevation (meters)**	**Potential for Occurrence (2017); Habitat**	**Potential for Occurrence (2018)**
				grassland habitats. No suitable habitat occurs on the project site.	
Pseudognaphalium leucocephalum white rabbit-tobacco	Fed: none Ca: none CNPS: 2B.2 OCSSHCP: none		July-December 0-2100	**Presumed Absent;** Occurs in sandy, gravelly soil in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. No suitable sandy or gravelly soil occurs on the project site.	**Unchanged; Presumed Absent**
Quercus dumosa Nuttall's scrub oak	Fed: none Ca: none CNPS: 1B.1 OCSSHCP: none		February-August 15-400	**Presumed Absent;** Sandy or clay loam soils in Closed-cone coniferous forest, Chaparral, Coastal scrub. No suitable sandy or clay habitat occurs on the project site.	**Unchanged; Presumed Absent**
Romneya coulteri Coulter's matilija poppy	Fed: none Ca: none CNPS: 4.2 OCSSHCP: none		March-July 20-1200	**Low;** Often occurs in burns in chaparral and coastal scrub habits. Marginally suitable habitat occurs in the small patches of California sagebrush scrub on site but there are no records of occurrence in the vicinity.	**Unchanged; Low**
Senecio aphanactis chaparral ragwort	Fed: none Ca: none CNPS: 2B.2 OCSSHCP: none		January-May 15-800	**Presumed Absent;** Sometimes alkaline soils in Chaparral, Cismontane woodland, Coastal scrub. No suitable alkaline habitat occurs on the project site.	**Unchanged; Presumed Absent**
Sidalcea neomexicana salt spring checkerbloom	Fed: none Ca: none CNPS: 2B.2 OCSSHCP: COV		March-June 15-1530	**Presumed Absent;** Alkaline, mesic soils in Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas. No suitable alkaline mesic habitat occurs on the project site.	**Unchanged; Presumed Absent**
Suaeda esteroa Estuary Seablite	Fed: none Ca: none CNPS: 1B.2 OCSSHCP: none		May-January 0-5	**Presumed Absent;** Occurs in coastal salt marshes and swamps. The project site is outside of the elevation	**Unchanged; Presumed Absent**

Scientific Name Common Name	**Status**		**Flowering Period Elevation (meters)**	**Potential for Occurrence (2017); Habitat**	**Potential for Occurrence (2018)**
				range for this species and no records of occurrence within five miles.	
Suaeda taxifolia woolly seablite	Fed: Ca: CNPS: OCSSHCP:	none none 4.2 none	January-December 0-50	**Presumed Absent;** Occurs in coastal bluff scrub, coastal dunes, and margins of coastal salt marshes and swamps. No suitable habitat occurs on the project site.	**Unchanged; Presumed Absent**
Tetracoccus dioicus Parry's tetracoccus	Fed: Ca: CNPS: OCSSHCP:	none none 1B.2 none	April-May 165-1000	**Presumed Absent;** Occurs in chaparral and coastal scrub habitats. The project site is outside of the elevation range for this species and no records of occurrence within five miles.	**Unchanged; Presumed Absent**
Verbesina dissita big-leaved crownbeard	Fed: Ca: CNPS: OCSSHCP:	**THR** **THR** 1B.1 none	March-July 45-205	**Presumed Absent;** Chaparral, Coastal scrub. This species is known only from occurrences near southern Laguna Beach in maritime habitats. The project site is outside of the elevation range for this species.	**Unchanged; Presumed Absent**

Federal Designations:
(Federal Endangered Species Act, United State Fish and Wildlife Service [USFWS])
END: Federally listed, endangered
THR: Federally listed, threatened

State Designations:
(California Endangered Species Act, California Department of Fish and Wildlife [CDFW])
END: State-listed, endangered
THR: State-listed, threatened

Local Designations:
(Orange County Southern Subregion Habitat Conservation Plan [OCSSHCP])
COV: Covered Species

California Rare Plant Ranks (CRPR):
1A: Presumed extirpated in California and rare or extinct elsewhere
1B: Rare, threatened, or endangered in California and elsewhere
2A: Presumed extirpated in California, but more common elsewhere
2B: Rare, threatened, or endangered in California, but more common elsewhere

California Native Plant Society (CNPS) Threat Code:
0.1: Seriously threatened in California
0.2: Moderately threatened in California
0.3: Not very threatened in California

Sources: California Natural Diversity Data Base (CDFW 2017, CDFW 2018) and California Native Plant Society Electronic Inventory (CNPS 2017) Dana Point, Laguna Beach, San Juan Capistrano, Canada Gobernadora, San Clemente, San Onofre Bluff 7.5- minute USGS topographic quadrangles.

Appendix E

Potential for Occurrence of Sensitive Wildlife Species

Appendix E
Potential for Occurrence of Sensitive Wildlife Species

Scientific Name Common Name	Status		Habitat	Potential to Occur (2017)	Potential to Occur (2018)
INVERTIBRATES					
BRANCHINECTIDAE (fairy shrimp)					
Branchinecta sandiegonesis San Diego fairy shrimp	Fed: Ca: OCSSHCP:	**END** none COV	Occurs in vernal pools and other ephemeral wetlands below 701 m elevation.	**Presumed Absent:** No ephemeral wetlands or vernal pools present on the project site.	**Unchanged; Presumed Absent**
Streptocephalus woottoni Riverside fairy shrimp	Fed: Ca: OCSSHCP:	**END** none COV	Occurs in vernal pools, tectonic swales, and earth slump basins in Riverside County.	**Presumed Absent:** No ephemeral wetlands or vernal pools present on the project site.	**Unchanged; Presumed Absent**
FISH					
SALMONIDAE (trouts and salmons)					
Oncorhynchus mykiss irideus steelhead - southern California DPS	Fed: Ca: OCSSHCP:	**END** none none	Occurs in aquatic, south coast flowing waters.	**Presumed Absent:** No open or running water present on the project site.	**Unchanged; Presumed Absent**
CYPRINDIAE (minnows & carp)					
Gila orcutti arroyo chub	Fed: Ca: OCSSHCP:	none SSC COV	Creeks, streams, and rivers with areas of slow moving water with sand or mud bottoms. Ranges from San Diego to San Luis Obispo county.	**Presumed Absent:** No open or running water present on the project site.	**Unchanged; Presumed Absent**
GOBIIDAE (gobies)					
Eucyclogobius newberryi tidewater goby	Fed: Ca: OCSSHCP:	**END** SSC none	Inhabits coastal lagoons, the uppermost portions of bays, and the lower reaches of streams.	**Presumed Absent:** No open or running water present on the project site.	**Unchanged; Presumed Absent**
AMPHIBIANS					
SALAMANDRIDAE (newts)					
Taricha torosa coast range newt	Fed: Ca: OCSSHCP:	none SSC none	Upland areas including grasslands, forests, and woodlands. Burrows in soil or wood debris.	**Presumed Absent:** No suitable habitat present on the project site.	**Unchanged; Presumed Absent**
SCAPHIOPODIDAE (spadefoot toads)					
Scaphiopus hammondii western spadefoot	Fed: Ca: OCSSHCP:	none SSC COV	Occurs in grassland, scrub, chaparral with nearby vernal pools or other seasonal waters	**Presumed Absent:** No suitable habitat present on the project site.	**Unchanged; Presumed Absent**

Scientific Name Common Name	Status		Habitat	Potential to Occur (2017)	Potential to Occur (2018)
			for breeding.		
BUFONIDAE (true toads)					
Anaxyrus californicus arroyo toad	Fed: Ca: OCSSHCP:	**END** SSC COV	Sandy banks of rivers, arroyos, and streams with shallow sandy pools. Also found in riparian woodlands or uplands adjacent to arroyos.	**Presumed Absent:** No suitable habitat present on the project site.	**Unchanged; Presumed Absent**
REPTILES					
EMYDIDAE (pond turtles)					
Actinemys marmorata western pond turtle	Fed: Ca: OCSSHCP:	none SSC COV	Inhabits rivers, creeks, small lakes, and ponds.	**Presumed Absent:** No open or running water present on the project site.	**Unchanged; Presumed Absent**
PHRYNOSOMATIDAE (spiny lizards)					
Phrynosoma blainvillii coast horned lizard	Fed: Ca: OCSSHCP:	none SSC COV	Occurs in sandy soils in scrubland, grassland, and chaparral.	**Presumed Absent:** No suitable soils or habitat present on the project site.	**Unchanged; Presumed Absent**
TEIIDAE (whiptails)					
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: Ca: OCSSHCP:	none SSC none	Arid habitats including desert, chaparral, woodlands, and dry riparian areas.	**Presumed Absent:** No suitable chaparral, desert, or woodland habitat is present on the project site.	**Unchanged; Presumed Absent**
ANNIELLIDAE (legless lizards)					
Anniella stebbinsi southern California legless lizard	Fed: Ca: OCSSHCP:	none SSC none	Occurs in broadleaved upland forest, chaparral, and coastal dunes in moist warm loose soil.	**Not Evaluated**	**Presumed Absent:** No suitable soils or habitat present on the project site.
COLUBRIDAE (egg-laying snakes)					
Arizona elegans occidentalis California glossy snake	Fed: Ca: OCSSHCP:	none SSC COV	Occurs in scrub and grassland habitats in loose or sandy soils.	**Presumed Absent:** No suitable soils or habitat present on the project site.	**Unchanged; Presumed Absent**
NATRICIDAE (live-bearing snakes)					
Thamnophis hammondii two-striped gartersnake	Fed: Ca: OCSSHCP:	none SSC none	Occurs along aquatic habitats such as creeks and pools with rocky areas in chaparral, brushland, oak woodlands, and conifer forests. Hunts in water.	**Presumed Absent:** No suitable aquatic habitat present on the project site.	**Unchanged; Presumed Absent**

Scientific Name Common Name	Status		Habitat	Potential to Occur (2017)	Potential to Occur (2018)
VIPERIDAE (vipers)					
Crotalus ruber red-diamond rattlesnake	Fed: Ca: OCSSHCP:	none SSC COV	Occurs in rocky outcrops in a variety of habitats including desert scrub, chaparral, dunes, grasslands, and cultivated areas.	**Presumed Absent:** No suitable rocky outcrop habitat present on the project site.	**Unchanged; Presumed Absent**
BIRDS					
ACCIPITRIDAE (kites, hawks and eagles)					
Aquila chrysaetos golden eagle (nesting & wintering)	Fed: Ca: OCSSHCP:	none **FP** COV	Open country including prairies, sagebrush, savannah or sparse woodlands, and barren hills or mountainous areas. Nests on rocky cliff edges or in large trees such as eucalyptus or oak.	**Presumed Absent:** No suitable foraging or nesting habitat present on the project site.	**Unchanged; Presumed Absent**
Elanus leucurus white-tailed kite	Fed: Ca: OCSSHCP:	none **FP** COV	Occurs in savannahs, open woodland, marshes, and cultivated fields.	**Moderate:** Eucalyptus trees immediately adjacent to the project site provide roosting habitat and project site provides marginal foraging habitat. Three observations of this species have been documented within 5 miles of the project site since 2008.	**Changed to Low;** roosting trees are still present but California Annual Grassland foraging habitat is no longer present.
LARIDAE (gulls and skimmers)					
Sternula antillarum browni California least tern	Fed: Ca: OCSSHCP:	**END** **END/FP** none	Occurs in bays, beaches, estuaries, lakes, rivers, and mudflats.	**Presumed Absent:** No suitable habitat present on project site.	**Unchanged; Presumed Absent**
RALLIDAE (rails, gallinules, and coots)					
Coturnicops noveboracensis yellow rail	Fed: Ca: OCSSHCP:	none SSC none	Occurs in freshwater marshes, meadows, and seeps	**Not Evaluated**	**Presumed Absent:** No suitable habitat present on project site.
STRIGIDAE (owls)					
Asio otus long-eared owl (nesting)	Fed: Ca: OCSSHCP:	none SSC none	Dense wooded areas such as deciduous and evergreen forests	**Presumed Absent:** No suitable habitat present on project site.	**Unchanged; Presumed Absent**

Scientific Name Common Name	Status		Habitat	Potential to Occur (2017)	Potential to Occur (2018)
			near water.		
Athene cunicularia burrowing owl (burrow & some wintering sites)	Fed: Ca: OCSSHCP:	none SSC COV	Open grasslands including prairies, plains, and savannah, or vacant lots and airports. Nests in abandoned dirt burrows.	**Moderate:** Suitable grassland habitat occurs on the project site but no suitable burrow locations were identified during the survey. Three occurrences of this species have been documented within 3.5 miles of the project site since 2005.	**Changed to Presumed Absent;** California Annual Grassland habitat is no longer present.
TYRANNIDAE (tyrant flycatchers)					
Empidonax traillii extimus southwestern willow flycatcher (nesting)	Fed: Ca: OCSSHCP:	**END** **END** COV	Riparian woodlands particularly with willow thickets. Nests in densest areas of shrubs and trees with low-density canopies.	**Presumed Absent:** No suitable willow thicket habitat present on project site.	**Unchanged; Presumed Absent**
VIRIONIDAE (vireos)					
Vireo bellii pusillus least Bell's vireo	Fed: Ca: OCSSHCP:	**END** **END** COV	Occurs near water in willow-cottonwood forests, thickets, and scrub oak woodland.	**Presumed Absent:** No suitable habitat and now flowing or open water present on the project site.	**Unchanged; Presumed Absent**
ALAUDIDAE (larks)					
Eremophila alpestris actia California horned lark	Fed: Ca: OCSSHCP:	none SSC none	Bare open areas dominated by low vegetation or widely scattered shrubs, includes prairies, deserts, and plowed fields. Nests in a hollow on the ground.	**Low:** Marginally suitable habitat occurs in the disturbed grassland habitats however no occurrences of this species have been documented within 5 miles of the project site.	**Changed to Presumed Absent;** California Annual Grassland habitat is no longer present.
TROGLODYTIDAE (wrens)					
Campylorhynchus brunneicapillus sandiegensis costal cactus wren	Fed: Ca: OCSSHCP:	none SSC COV	Occurs in coastal sage scrub habitat with tall cholla cactus.	**Presumed Absent:** No coastal sage scrub habitat with cactus is present on the project site.	**Unchanged; Presumed Absent**
POLIOPTIDAE (gnatcatchers)					
Polioptila californica californica coastal California gnatcatcher	Fed: Ca: OCSSHCP:	**THR** SSC COV	Occurs in coastal sage scrub habitat.	**Moderate:** The small patches of coastal sage brush on the project site	**Unchanged; Moderate**

Scientific Name Common Name	Status		Habitat	Potential to Occur (2017)	Potential to Occur (2018)
				provide limited low quality habitat that would not be expected to support nesting pairs. However a nesting pair was documented less than 0.1 mile from the project site in 2001.	
PARULIDAE (wood-warblers)					
Icteria virens yellow-breasted chat	Fed: Ca: OCSSHCP:	none SSC COV	Occurs in dense forests, thickets, and scrubland often near streams and ponds.	**Presumed Absent:** No suitable riparian thicket habitat and no flowing or open water are present on project site.	**Unchanged; Presumed Absent**
Dendroica petechia yellow warbler (nesting)	Fed: Ca: OCSSHCP:	none SSC COV	Riparian woodlands especially with willows, open scrub, gardens, and thickets often near water.	**Presumed Absent:** No suitable riparian woodland or thicket habitat and no flowing or open water are present on the project site.	**Unchanged; Presumed Absent**
ICTERIDAE (blackbirds and allies)					
Agelaius tricolor tricolored blackbird	Fed: Ca: OCSSHCP:	none SSC COV	Occurs in freshwater thickets and marshes near open water during breeding season. Will use open agricultural land in winter.	**Presumed Absent:** No open water present on project site.	**Unchanged; Presumed Absent**
PASSERELLIDAE (new world sparrows)					
Ammodramus savannarum grasshopper sparrow	Fed: Ca: OCSSHCP:	none SSC COV	Occurs in native grasslands, savannah, and old fields.	**Presumed Absent:** No native grassland habitats occur on the project site and no occurrences of this species have been documented within 5 miles of the project site.	**Unchanged; Presumed Absent**
Passerculus sandwichensis beldingi Belding's savannah sparrow	Fed: Ca: OCSSHCP:	none END none	Occurs in marsh, swamp, and wetland habitats in coastal salt marshes.	**Not Evaluated**	**Presumed Absent:** No suitable habitat present on project site.
MAMMALS					
PHYLLOSTOMIDAE (leaf-nosed bats)					

Scientific Name Common Name	Status		Habitat	Potential to Occur (2017)	Potential to Occur (2018)
Choeronycteris mexicana Mexican long-tongued bat	Fed: Ca: OCSSHCP:	none SSC none	Occurs in dense riparian vegetation. Roosts in caves, rock crevasses, mines, and occasionally buildings. Forages on nectar and pollen from night-blooming flowers such as Agave and Cacti.	**Presumed Absent:** No dense vegetation, rock crevices, or cave-like environments present on the project site. No food plants for foraging are present on the project site.	**Unchanged; Presumed Absent**
VESPERTILLIONIDAE (vesper bats)					
Antrozous pallidus pallid bat	Fed: Ca: OCSSHCP:	none SSC none	Cavity roosting species, roosts in rock crevices, caves, mines, buildings, bridges, and in trees. Generally in mountainous areas, lowland desert scrub, arid grasslands near water and rocky outcrops, and open woodlands.	**Presumed Absent:** No suitable roosting habitat for this species is present on the project site.	**Unchanged; Presumed Absent**
Lasiurus blossevillii western red bat	Fed: Ca: OCSSHCP:	none SSC none	Foliage roosting species, roosts in trees or large leafy shrubs and tend to avoid caves and buildings. Occurs in lowlands to mountains, in woodlands and forests and, especially along riparian habitats.	**Low:** Solitary red willow trees within the project site may provide marginal roosting habitat. Foraging habitat is present along the eastern edge of the project site adjacent to San Juan Creek. However, no records of this species have been recorded within five miles of the project site.	**Unchanged; Low**
MOLOSSIDAE (free-tailed bats)					
Eumops perotis californicus western mastiff bat	Fed: Ca: OCSSHCP:	none SSC none	Cliff roosting species. Occurs in open habitats including woodlands, coastal scrub, grasslands, chaparral, and rocky canyons with high cliffs and rock walls for roosting.	**Presumed Absent:** No suitable roosting habitat for this species is present on the project site.	**Unchanged; Presumed Absent**

Scientific Name Common Name	Status		Habitat	Potential to Occur (2017)	Potential to Occur (2018)
Nyctinomops femorosaccus pocketed free-tailed bat	Fed: Ca: OCSSHCP:	none SSC none	Cavity roosting species, Roosts in crevices of outcrops and cliffs, shallow caves, and buildings. Found along rugged canyons, high cliffs, and semiarid rock outcroppings.	**Presumed Absent:** No suitable roosting habitat for this species is present on the project site.	**Unchanged; Presumed Absent**
Nyctinomops macrotis big free-tailed bat	Fed: Ca: OCSSHCP:	none SSC none	Occurs in river floodplains, desert scrub, and woodlands. Roosts in rocky crevices, buildings, caves, and holes in trees.	**Presumed Absent:** No suitable roosting habitat for this species is present on the project site.	**Unchanged; Presumed Absent**
HETEROMYIDAE (kangaroo rats and pocket mice)					
Chaetodipus californicus femoralis Dulzura pocket mouse	Fed: Ca: OCSSHCP:	none SSC none	Chaparral, coastal scrub, and desert grasslands in San Diego county along the U.S.-Mexico border.	**Presumed Absent:** Project site is outside of the known range of this species. Only record of this species within five miles is historical (1932).	**Unchanged; Presumed Absent**
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: Ca: OCSSHCP:	none SSC none	Coastal scrub, chaparral, sagebrush, and grasslands in western San Diego county. Found in sandy, herbaceous areas with rocks or coarse gravel.	**Presumed Absent:** Project site is outside of western San Diego county and no sandy herbaceous areas occur on site. No records of this species occur within five miles of the project site.	**Unchanged; Presumed Absent**
Dipodomys stephensi Stephen's kangaroo rat	Fed: Ca: OCSSHCP:	**END** **THR** none	Annual grasslands, coastal sage scrub with sparsely spaced vegetation, loose friable soils, and flat or slightly rolling terrain.	**Presumed Absent:** Coastal sage scrub habitat on the project site is too dense and no suitable soils are present on the project site. No records of this species occur within five miles of the project site.	**Unchanged; Presumed Absent**

Scientific Name Common Name	Status		Habitat	Potential to Occur (2017)	Potential to Occur (2018)
Perognathus longimembris pacificus Pacific pocket mouse	Fed: Ca: OCSSHCP:	**END** None none	Occurs in habitats bordering the Pacific ocean including coastal dunes and coastal sage scrub with firm sandy soils.	**Presumed Absent:** Project site is too far inland to support this species. No suitable soils are present on the project site.	**Unchanged; Presumed Absent**
MURIDAE (mice, rats, and voles)					
Neotoma lepida intermedia San Diego desert woodrat	Fed: Ca: OCSSHCP:	none SSC none	Coastal chaparral, sagebrush scrub, sandy desert and boulder habitats. May also be found in woodlands of Joshua trees or pinyon-juniper pine.	**Moderate:** Marginally suitable habitat occurs in the small patches of California sagebrush scrub on the project site and an individual was documented within 2 miles of the project site in 2002.	**Unchanged; Moderate**
MUSTELIDAE (weasels and otters)					
Taxidea taxus American badger	Fed: Ca: OCSSHCP:	none SSC none	Occurs in open areas of a variety of habitats including shrub, forests, and other herbaceous habitats with friable soils.	**Presumed Absent:** Grassland habits on the project site do not contain sufficiently friable soil. No records of this species occur within five miles of the project site.	**Unchanged; Presumed Absent**

Federal Designations:

(Federal Endangered Species Act, United State Fish and Wildlife Service [USFWS] Bureau of Land Management [BLM], United States Forest Service [FS])

END: Federally listed, endangered

THR: Federally listed, threatened

CAN: Candidate for federal listing

State Designations:

(California Endangered Species Act, California Department of Fish and Wildlife [CDFW])

END: State-listed, endangered

THR: State-listed, threatened

SSC: Species of Special Concern

FP: Fully Protected species

Local Designations:

(Orange County Southern Subregion Habitat Conservation Plan [OCSSHCP])

COV: Covered Species

Sources: California Natural Diversity Data Base (CDFW 2018, CDFW 2017) Dana Point, Laguna Beach, San Juan Capistrano, Canada Gobernadora, San Clemente, San Onofre Bluff 7.5- minute USGS topographic quadrangles.

Jim Borer, Certified Arborist #496
Specimen tree preservation, conservation, and analysis

March 9, 2018

Ganahl Lumber
Attn: Patrick Ganahl

This page plus 8

Re: Existing Tree Inventory Report
Lower Rosan
Stonehill and Sand Juan Creek
SJC, Ca.

Dear Mr. Ganahl,

I am writing as a follow-up to my recent on-site inspection of the mature specimen trees that are growing within the referenced site. This inspection was performed to establish the presence and conditions of the existing mature specimen trees within the site.

Assignment
Travel to the site on March 6, 2018 and inventory the existing mature specimen trees. Document the tree types, their sizes (DBH, estimated heights, and widths), their existing conditions, their dispositions for long-term performance based upon their existing conditions and the existing site conditions. and their conservation potential. Prepare and submit this follow-up report documenting the trees' conditions at the time of the inspection and my opinions and recommendations related thereto.

Observations
I located two existing trees within the site at the time of my inspection. Both trees are specimen willows that are over-mature. The over-maturity is defined by the presence of small diameter twiggy branch die back as well as of very large diameter woody branches that have broken and fallen from the canopies or else broken and hinged, hanging from one portion of the locations from which they failed. In addition to the obvious branch failures I also observed the willows trunk and branch structures to possess very large and well-developed pockets of decay that expose branch failures to have been ongoing for many years if not decades.

Tree number 1
Salix species (willow) 52" DBH (multi trunk) 30' tall x 75' wide (estimated)

This specimen exhibits over-maturity in the form of the very substantially declining trunk and branch structure. The presence of live foliage indicates that the tree's systemic

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functions are viable even though the trunk and branch structure are in significant decline. Based upon the viability of at least some of the fibrous roots, some of the conductive tissues that translocate water and nutrients from the roots to the canopy and carbohydrates from the foliage to the roots, and photosynthesis in the foliage canopy this tree remains capable of supporting some viable growth even though the structure is in substantial decline.

Tree number 1

Tree number 1, Closeup of the lower branch structure.

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Tree number 1, Closeup of broken, hinged, large diameter woody branch.

Tree number 2
Salix species 82” DBH (multi trunk) 45’ tall x 60’ wide (estimated)

This specimen also exhibits over-maturity in the form of the very substantially declining trunk and branch structure. The presence of live foliage indicates that this tree’s systemic functions are viable even though the trunk and branch structure are in significant decline. Based upon the viability of at least some of the fibrous roots, some of the conductive tissues that translocate water and nutrients from the roots to the canopy and carbohydrates from the foliage to the roots, and photosynthesis in the foliage canopy this tree remains capable of supporting some viable growth even though the structure is in substantial decline.

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Tree number 2

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Tree number 2 exposing the die back within the inner canopy.

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Tree number 2, exposing the die back and crossing nature of the inner canopy branches.

Opinions

It is my opinion that the subject trees are over mature specimens that are in long-term structural decline. Regardless of the proposed development of this site their structures are in the process of experiencing ongoing failure that is destined to result in the decay that is present as a result of previous branch failures continuing to advance with additional branches expected to fail and collapse over time.

Based upon the proposed importation of fill soil where the existing trees are located they are incompatible within conservation in their existing locations. Based upon their extremely large sizes, over-mature structures, and the very woody nature of their root systems they are not viable candidates for relocation from their present locations to alternate locations within the site.

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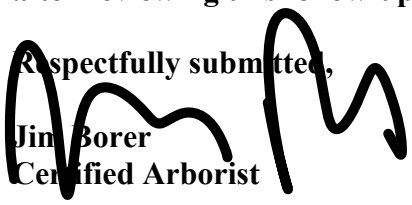
Please contact me if you have any questions or if you require additional information after reviewing this follow-up inspection report.

Respectfully submitted,



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