APPENDIX C1

BIOLOGICAL RESOURCES EVALUATION

BIOLOGICAL RESOURCES EVALUATION
FOR THE
ALLEN-CATARACT WAREHOUSE PROJECT

Located at 309 West Allen Avenue and 917 and 929 North Cataract Avenue
CITY OF SAN DIMAS, LOS ANGELES COUNTY, CALIFORNIA

Prepared for:

City of San Dimas
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1.0 INTRODUCTION

The City of San Dimas is processing a request to implement a series of discretionary actions that would ultimately allow for the development of the Allen Avenue Warehouse Project (hereby referred to as the "proposed project" or the "project" located at 309 West Allen Avenue, 917 North Cataract Avenue, and 929 North Cataract Avenue in the central part of the City of San Dimas, California. (APNs: 8392-016-008, 8392-016-048, and 8392-016-047).

1.1 PROJECT DESCRIPTION

The proposed project would construct a two-story 63,749 square-foot two-unit warehouse facility including 23,193 square feet of warehouse space and 1,000 square feet of office space with a 2,000 square-foot mezzanine; Unit Two would include 34,556 square feet of warehouse space and 1,000 square feet of office space with a 2,000 square-foot mezzanine. The project site is approximately 2.58 gross acres and would provide 56 automotive parking spaces, four (4) motorcycle parking spaces, and six (6) bicycle parking spaces. The project also would provide six (6) truck parking spaces in a truck well with six (6) dock doors, and one (1) grade-level truck door. Refer to **Appendix B,** *Site Plans*, for engineering drawings of the proposed development.

1.2 PROJECT LOCATION

The project site is located in eastern Los Angeles County in the City of San Dimas (City), California and lies within the United States Geological Survey (USGS) 7.5-Minute Topographic Map *San Dimas* Quadrangle in Township 1 South, Range 9 West Section 3 North (see **Appendix A**, Figure 1, *Project Vicinity*; Figure 2, *USGS Topographic Map San Dimas Quadrangle*). The project site is directly northwest of the intersection of North Cataract Avenue and West Allen Avenue (see **Appendix A**, Figure 3, *Project Boundary and Biological Study Area [BSA]*). The BSA's elevation ranges from approximately 956 to 968 feet above mean sea level (amsl) (Google Earth, 2022).

1.3 PURPOSE OF REPORT

This report identifies and analyzes the potential biological significance of site construction and development in view of federal, state, and local laws, regulations, policies, orders, ordinances and/or management plans. Finally, it recommends, as appropriate, mitigation measures (best management practices [BMPs], avoidance and protection measures, and mitigation measures) to avoid, eliminate or reduce potential environmental impacts to less than significant levels.

Plant and wildlife species listed under the federal Endangered Species Act (ESA) or under the California Endangered Species Act (CESA) as endangered, threatened or as a candidate for listing will be referred to collectively as "listed species" in this document. Plant and wildlife species not listed under ESA or CESA but still protected by federal agencies, state agencies, local or regional plans, and/or conservation organizations such as the California Native Plant Society (CNPS), are collectively referred to as "sensitive species" in this document. The term "special-status species" will be used when collectively referring to both listed and sensitive species. Some of these plant and wildlife species are afforded special legal or management protection because they are limited in population size, and typically have a limited geographic range and/or limited habitat.

A literature review and reconnaissance-level field survey were conducted to evaluate the potential impacts of construction of the project on the existing biological resources within the project site and

of areas within a 500-foot zone around the project site (referred to as the Biological Study Area [BSA]). This BRE presents the results of the analysis in the following sections: Regulatory Context, Methods, Results, Potential Impacts, and Mitigation Measures.

The study of biological resources associated with the BSA was conducted to comply with the California Environmental Quality Act (CEQA) requirements for a biological evaluation of projects that would potentially impact natural resources. CEQA is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. This report is intended to satisfy the biological resource needs of the CEQA process. This report will also assist federal and state resource agencies in their review of the project and support permits required for the project from federal, state, and local resource agencies.

The project site is located in the jurisdiction of the following resource agency field offices:

- **United States Fish and Wildlife Service (USFWS)**
  Palm Springs Fish and Wildlife Office
  777 E. Tahquitz Canyon Way, Suite 208
  Palm Springs, CA 92262
  Phone: (760) 322-2070

- **California Department of Fish and Wildlife (CDFW**
  South Coast Region 5
  3883 Ruffin Rd
  San Diego, CA 92123
  Phone: (858) 467-4201

- **United States Army Corps of Engineers (USACE)**
  Los Angeles District
  915 Wilshire Boulevard, Suite 980
  Los Angeles, CA 90017
  Phone: (213) 452-3908/3333

- **Regional Water Quality Control Board (RWQCB**
  Los Angeles Region (Region 4)
  320 W 4th St STE 200
  Los Angeles, CA 90013
  Phone: (213) 576-6600

- **City of San Dimas Planning Division**
  245 E Bonita Ave, San Dimas, CA 91773
  Phone: (909) 394-6250

2.0 REGULATORY CONTEXT

2.1 FEDERAL STATUTES, REGULATIONS, AND EXECUTIVE ORDERS

2.1.1 Section 401 Clean Water Act (CWA)

Although the Clean Water Act (CWA) is a federal law, the U.S. Environmental Protection Agency (USEPA) has authorized some states, including California, to have the primary authority and responsibility for setting surface- and groundwater water quality standards.

Section 401 is implemented through the Water Quality Certification (WQC) process. In the State of California, the USEPA has given responsibility for issuing Section 401 WQCs to the State Water Quality Resources Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs), unless a discharge of dredged or fill material is proposed within more than one region. In the event that a project proposes discharges of dredged or fill material in more than one region, responsibility for issuance of a Section 401 WQC will lie either with the SWRCB, or, upon agreement of the RWQCBs for the affected regions, with the RWQCB chosen in the discretion of the RWQCBs (Cal. Water Code, § 13160; Cal. Code Regs., tit. 23, § 3838). Certification must be based on a finding that the proposed discharge will comply with water quality standards, which include numeric and narrative water quality objectives applicable to identified surface waters in the Water Quality Control Plan for the region (Basin Plan) in which a discharge of fill is proposed. The proposed project would be under the jurisdiction of the Los Angeles Regional Water Quality Control Board (Region 4).

2.1.2 Section 404 Clean Water Act

Section 404 CWA requires authorization from the Secretary of the Army, acting through the U.S. Army Corps of Engineers (USACE), for the discharge of dredged or fill material into all waters of the United States, including wetlands. Authorizations are conducted through the issuance of Nationwide (or General) Permits for activities that would cause only minimal permanent (between 0.1 and 0.5 acre) and cumulative impacts; through Individual (or Standard) Permits for activities that are likely to have more than a minimal permanent (greater than 0.5 acre) or cumulative impact on waters of the U.S.; and through Letters of Permission (LOPs) which are a type of permit issued through an abbreviated process that includes coordination with federal and state fish and wildlife agencies and a public interest evaluation, but without the 30-day permit notice period that is required for Individual Permits. The Los Angeles District of the USACE would provide review and permitting services for this project.

Wetlands and other waters that do not meet the definition of waters of the U.S. are not covered by the CWA; however, they are regulated by the State of California through the Porter-Cologne Water Quality Control Act (Porter-Cologne) and SWRCB Resolution No. 2019-0015 for California (see **Sections 2.2.5 and 2.2.6**).

2.1.3 Endangered Species Act (ESA)

The federal Endangered Species Act of 1973 (ESA; Title 16, United States Code [U.S.C.] Sections [§§] 1531-1543), as amended, designates and provides for protection of listed, threatened and endangered plant and animal species, and their critical habitat. The United States Fish and Wildlife Service (USFWS), in the Department of the Interior, and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS), in the Department of Commerce, share

responsibility for administration of the ESA. These responsibilities include listing and delisting species, designating critical habitat, and formulating recovery plans. The ESA is divided into 18 sections that work together to prevent species from going extinct by helping to stabilize populations, reduce the threats to their survival, and to help species recover to the point that they no longer require federal protection.

Section 4 (Determination of Endangered Species and Threatened Species):

Section 4 of the ESA addresses listing of species in need of the ESA's protection. Species are listed as either endangered or threatened under Section 4 of the ESA. A federally-endangered species is one that is facing extinction throughout all or a significant portion of its range. A federally-threatened species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Under Section 4, actions needed to recover those species and conserve their habitats are also identified, along with a process for reaching recovery goals that allow for a species' removal from federal protection. The presence on a project site of any fish or wildlife species that is federally listed as endangered or threatened generally imposes constraints on development to the extent that development is likely to result in a prohibited "take" of the species or substantial adverse modification of its habitat as described in **Section 9 (Prohibited Acts)**, below.

Section 7 (Interagency Cooperation):

Two sections of the ESA (§§ 7 and 10) authorize incidental take. Section 7 of the ESA regulates take associated with federal projects or projects that require a federal permit. It also requires federal agencies to use their authority to carry out conservation programs to benefit endangered and threatened species. Under § 7, federal agencies are required to consult with the USFWS or the NMFS to ensure that any action they carry out, including those they fund or authorize (such as through a permit) will not likely jeopardize the continued existence of listed species, or result in the destruction or adverse modification of proposed or designated critical habitat of such species. Under § 7, consultations can either be informal or formal.

Section 9 (Prohibited Acts):

Once a species is listed, Section 9 of the ESA makes it unlawful for any person, including private and public entities, to "take" species listed as endangered or without a permit issued pursuant to Section 10 or an incidental take statement issued pursuant to Section 7. Section 9 defines "take" as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." The term "harm" is defined as "an act which actually kills or injures wildlife. Such an act may include substantial habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering."

ESA Section 9's take prohibitions apply to listed wildlife and fish species, but not to plants. Endangered plants are not protected from take, although it is unlawful to remove, possess, or maliciously damage or destroy them on federal lands. Removing or damaging listed plants on state and private lands in knowing violation of state law, or in the course of violating a state criminal trespass law, also is illegal under the ESA.

Section 10 (Incidental Take Permits and Habitat Conservation Plans):

An incidental take permit pursuant to Section 10(a)(1)(B) is required when non-Federal, otherwise lawful activities, including lawful project development, will result in take of threatened or

endangered wildlife. Under this provision, the USFWS and/or NMFS may, where appropriate, authorize the taking of federally listed wildlife or fish if such taking occurs incidentally during otherwise legal activities. Section 10(a)(2)(B) requires an application for an incidental take permit to include a Habitat Conservation Plan (HCP). The purpose of the habitat conservation planning process associated with the permit is to ensure there is adequate avoidance, minimization and mitigation measures to address the effects of the authorized incidental take. Section 10 provides a clear regulatory mechanism to permit the incidental take of federally listed fish and wildlife species by private interests and non-Federal governmental agencies.

2.1.4 Migratory Bird Treaty Act (MBTA)

The Migratory Bird Treaty Act (MBTA) of 1918 (Title 16, U.S.C. Sections 703 - 712), as amended, implements various treaties and conventions between the United States (U.S.) and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. The MBTA makes it unlawful to pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg or any such bird, unless authorized under a permit issued by the Secretary of the Interior. Some regulatory exceptions apply. Take is defined in regulations implementing the MBTA as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to carry out these activities." The MBTA prohibits the collection and destruction of a migratory bird, its nest, and birds or eggs contained in the nest. The USFWS' Migratory Bird Permit Memorandum (MBPM-2) dated April 15, 2003, clarifies that destruction of most unoccupied bird nests is permissible under the MBTA; exceptions include nests of federally listed threatened or endangered migratory birds, bald eagles, and golden eagles. Take under the MBTA does not include habitat destruction or alteration, as long as there is not a direct taking of birds, nests, eggs, or parts thereof. The USFWS has statutory authority and responsibility for enforcing the MBTA

2.2 STATE STATUTES AND REGULATIONS

2.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) of 1970 (Title 14, California Code of Regulations, §§ 15002-15387) is California's broadest environmental law. CEQA applies to certain activities of state and local public agencies. It requires lead agencies (i.e., those agencies making land use decisions) as well as any other responsible state agencies issuing discretionary permits, to evaluate and disclose the significance of all potential environmental impacts of a project. The lead agency is also responsible for identifying, negotiating and implementing feasible impacts avoidance, minimization, or mitigation measures that reduce and compensate for significant environmental impacts with the goal of reducing those impacts to less than significant levels. Lead agencies determine significance on a project-by-project basis because they must consider all potential risk, including cumulative impacts, within a local and regional context, as well as evaluate unique factors particular to the project area when exercising their discretion to approve or disapprove a project.

The CEQA Guidelines specify that a project has a significant impact on the environment if, among other things, it has the potential to "substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or an animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species…." (CEQA Guidelines § 15065[a])[1]).

The purpose of CEQA is to:

- Disclose to the public the significant environmental impacts of a proposed discretionary project, through the preparation of an Initial Study, Negative Declaration, or Environmental Impact Report.
- Prevent or minimize damage to the environment through development of project alternatives, mitigation measures, and mitigation monitoring.
- Disclose to the public the agency decision making process utilized to approve discretionary projects through findings and statements of overriding consideration.
- Enhance public participation in the environmental review process through scoping meetings, public notice, public review, hearings, and the judicial process.
- Improve interagency coordination through early consultations, scoping meetings, notices of preparation, and State Clearinghouse review.

2.2.2 California Endangered Species Act (CESA)

The California Endangered Species Act (CESA) (California Fish and Game Code §§ 2050-2089) was enacted in 1984 to parallel the federal ESA and allows the Fish and Game Commission to designate species, including plants, as threatened or endangered (California Legislative Information, 2021c). CESA states that all native species of fishes, amphibians, reptiles, birds, mammals, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. Unlike the ESA, CESA does not include listing provisions for invertebrate species.

CESA makes it illegal to import, export, take, possess, purchase, sell, or attempt to do any of those actions to species that are designated as threatened, endangered, or candidates for listing, unless permitted by the California Department of Fish and Wildlife (CDFW). Section 2080 of the California Fish and Game Code prohibits take of any species that the commission determines to be an endangered species or a threatened species. “Take” is defined in § 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Under CESA, CDFW may permit take or possession of threatened, endangered, or candidate species for scientific, educational, or management purposes, and may also permit take of these species that is incidental to otherwise lawful activities if certain conditions are met. Some of the conditions for incidental take are that the take is minimized and fully mitigated, adequate funding is ensured for this mitigation, and that the activity will not jeopardize the continued existence of the species. CESA emphasizes early consultation to avoid potential impacts on rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project caused losses of listed species populations and their essential habitats.

2.2.3 Bird Nests and Eggs - California Fish and Game Code § 3503

California Fish and Game Code § 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered take. Avoidance measures sufficient to prevent incidental take of bird nests and eggs protected by this statute must be incorporated into project design, and construction plans and operations.

2.2.4 Migratory Birds – California Fish and Game Code § 3513

California Fish and Game Code § 3513 protects California's migratory birds by making it unlawful to take or possess any migratory non-game bird as designated by the MBTA, except as authorized in regulations adopted by the federal government under provisions of the MBTA. Except as permitted by USFWS, avoidance measures sufficient to prevent incidental take of these species, their eggs and their nests protected by this statute must be incorporated into project design, and construction plans and operations.

2.2.5 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne) defines water quality objectives as the allowable "limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisances within a specific area." Thus, water quality objectives are intended to protect the public health and welfare, and to maintain or enhance water quality in relation to the existing and/or potential beneficial uses of the water. Water quality objectives apply to both waters of the U.S. and waters of the State. In the State of California, Porter-Cologne is administered by the SWRCB and the RWQCBs in concurrence with § 401 CWA WQC.

2.2.6 State Water Resources Control Board Resolution No. 2019-0015

The California Code of Regulations, Title 23, Section 3831(w) states that "[a]*ll waters of the United States are also 'waters of the state.'*" This regulation has remained in effect despite Supreme Court decisions such as *Rapanos* and *SWANCC*, which added limitations to what could be considered a water of the U.S. Because the interpretation of waters of the U.S. in place at the time § 3831(w) was adopted was broader than any post-*Rapanos* or post-*SWANCC* regulatory definitions that incorporated more limitations into the scope of federal jurisdiction, it is consistent with the Water Boards' intent to include both historic and current definitions of waters of the U.S. into the SWRCBs wetland jurisdictional framework.

As set forth in Resolution No. 2009-0026, although the state of California has historically relied primarily on requirements in the Clean Water Act to protect wetlands, U.S. Supreme Court rulings reducing the jurisdiction of the Clean Water Act over wetland areas by limiting the definition of "waters of the United States" necessitated the use of California's independent authorities under the Porter-Cologne Act to protect these vital resources.

The inclusion of both current and historic definitions of "waters of the U.S." ensures some regulatory stability in an area that has otherwise been in flux. The status of a water of the U. S. may only be used to establish that a wetland or water qualifies as a water of the State; it cannot be used to exclude a wetland or water from qualifying as a water of the State. In other words, wetlands that are categorically excluded from qualifying as a water of the U.S. may nevertheless qualify as waters of the State under another jurisdictional category. Examples of waters of the State include (but are not limited to) ephemeral streams and isolated wetlands.

On April 2, 2019, the SWRCB adopted Resolution No. 2019-0015, Amendment to the Water Quality Control Plan for Ocean Waters of California and the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California to Establish a State Wetland Definition and Procedures for Discharges of Discharges of Dredged or Fill Material to Waters of the State (Procedures). for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters

and Enclosed Bays and Estuaries and Ocean Waters of California. As they apply to this project, the Procedures provide the SWRCB and its nine RWQCBs to approve a project only if the applicant has demonstrated certain requirement.

On April 6, 2021, the SWRCB issued Resolution No. 2021-0012 confirming that the "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State" (1) are in effect as state policy for water quality control for all waters of the State and (2) shall be applied via the inland surface waters and enclosed bays and estuaries plan to only waters of the United States.

When a discharge is proposed to waters outside of federal jurisdiction, the SWRCB and the RWQCBs regulate the discharge under Porter-Cologne through the issuance of Water Discharge Requirements (WDRs). WDRs and waivers of WDRs are referred to as orders or permits. The SWRCB and its nine RWQCBs have the authority to regulate the discharge of dredged or fill material under Resolution Nos. 2019-0015 and 2021-0012. Dischargers that do not require a federal permit or license that authorizes impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as § 404 CWA and § 10 of the Safe Rivers and Harbors Act, must obtain a WDR or a waiver of a WDR from the SWRCB or RWQCB to ensure that the discharge does not violate state water quality standards or any other appropriate requirement of State law.

Basin Plans:

The SWRCB requires its nine RWQCBs to develop water quality control plans (Basin Plans) designed to preserve and enhance water quality and protect the beneficial uses of all Regional waters. Specifically, Basin Plans designate beneficial uses for surface waters and groundwater, set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State antidegradation policy, and describe implementation programs to protect all waters in the Regions. In addition, Basin Plans incorporate by reference all applicable State and Regional Board plans and policies, and other pertinent water quality policies and regulations. This project is under the jurisdiction of the Los Angeles RWQCB and the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.

Construction Stormwater Program:

The SWRCB implements water quality regulations under the CWA and Porter-Cologne and requires compliance with the National Pollutant Discharge Elimination System (NPDES) for discharges of stormwater runoff associated with a construction activity.

Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-009-DWQ, as amended). Construction Activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns. The SWRCB will provide Construction General Permit review and permitting services for this project.

2.2.7 Lake or Streambed Alteration Agreement.

Sections 1600-1617 FGC of the California Fish and Game Code (FGC) protect the natural flow and the bed, channel, and bank of any river, stream, or lake designated by the CDFW which is at any time an existing fish or wildlife resource, or a waterbody from which these resources derive benefit. General project plans must be submitted to CDFW in sufficient detail to indicate the nature of the project proposed for construction, if the project would:

- Divert, obstruct, or change a streambed;
- Use material from the streambeds;
- Result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a stream.

The South Coast Region (Region 5) of the CDFW serves Los Angeles County and would provide LSA Notification Review and Agreement services for this project.

2.2.8 Natural Community Conservation Planning Act of 2003 (NCCP Act)

The California Natural Community Conservation Planning Act (NCCP Act) was enacted to encourage broad-based planning to provide for effective protection and conservation of the State's wildlife resources while continuing to allow appropriate development and growth (California Fish and Game Code §§ 2800 to 2835). Natural Community Conservation Plans (NCCPs) may be implemented, which identify measures necessary to conserve and manage natural biological diversity within the planning area, while allowing compatible and appropriate economic development, growth, and other human uses. An approved NCCP enables the California Department of Fish and Wildlife to authorize take of species consistent with the NCCP Act and California Fish and Game Code § 2835.

2.3 LOCAL POLICIES AND ORDINANCES

2.3.1 Chapter 18.162 Tree Preservation

Chapter 18.162 *Tree Preservation* (hereafter, tree preservation ordinance) of the San Dimas Municipal Code states the goal of protecting and preserving mature significant trees, as well as "other trees which are determined to be desirable" (City of San Dimas, 2006). The tree preservation ordinance defines a mature significant tree as follows:

> *"any tree within the city of an oak genus which measures eight inches or more in trunk diameter, and/or any other species of tree that measures ten inches or more in trunk diameter, and/or any multi-trunk tree(s) having a total circumference of thirty-eight inches or more; the multi-trunk tree shall include at least one trunk with a diameter of a minimum of four inches"*

The tree preservation ordinance requires that the trunk diameter must be measured at a point thirty-six inches above the ground at the base of the tree. The ordinance also requires that no significant trees shall be removed or relocated on an undeveloped property without first submitting an arborist report and obtaining a tree removal permit from the city's Development Services, Planning Division.

Removal or relocation of mature significant trees must be approved by the director of development services or the development plan review board. This approval is subject to conditions as deemed necessary to implement this chapter's provisions. Section 18.162.060 *Conditions Imposed* of the tree

preservation ordinance establishes the following as conditions of approval for tree relocation or removal:

> *1. Tree relocation and/or two for one replacement with minimum fifteen-gallon box tree(s), or other replacement of equivalent value and size, within the subject property. The two for one replacement ratio may be reduced as determined by the final decision making body, if a minimum of one of the following additional findings are made: (1) The reduced replacement requirement is consistent with the purposes of this chapter, (2) the tree(s) in question are located where the impact of the tree removal on the community is limited (such as trees in a generally flat portion of the rear yard of a single-family house that are deemed to have less public benefit).*
>
> *2. When on-site features, project constraints, and/or other considerations exist which prevent reasonable on-site relocation, relocation to an approved off-site location shall be permitted.*
>
> *3. If said conditions are imposed, the owner will be responsible for all replacement and relocated trees for a minimum period of two years. If during this time the tree(s) is (are) declared unhealthy by a certified arborist as set forth in Section 18.162.090, the diseased trees shall be removed and replaced at the cost of the applicant, as set forth in Section 18.162.100.*
>
> *4. A maintenance agreement shall be submitted by the applicant and established for each replaced and relocated tree. The maintenance agreement and maintenance responsibility shall be transferred with the sale of the property if title to the property is transferred within the specified maintenance period. (Ord. 1165 § 4, 2006).*

In addition, the tree preservation ordinance states in Section 18.162.070 *Required Findings* that mature significant trees can be removed if the preservation of those trees would constrain development of the project.

3.0 METHODS

3.1 LITERATURE REVIEW

Prior to the field survey, UltraSystems biologists conducted a literature review to identify habitats, special-status plant and wildlife species, critical habitats, and wildlife movement corridors potentially associated with the project site. Biologists reviewed relevant literature, databases, agency web sites, reports and management plans, Geographic Information System (GIS) data, maps, and aerial imagery obtained from public domain sources. The review also helped to determine which biological surveys may be required prior to site construction and development.

3.1.1 Sensitive Plant Communities and Special-Status Species

The data sources described below were reviewed to generate a list of special-status plants and wildlife with reported occurrences within the vicinity of the BSA. The literature review and query of the databases for reported locations of sensitive plant communities and special-status species helped to identify the known locations of these resources in the project region and assisted in identifying the potential for onsite occurrence of such species.

- CDFW's *California Natural Diversity Database* (CNDDB) was used to identify sensitive plant communities and special-status species documented within a ten-mile radius of the project site (CNDBB, 2022a)
- The USFWS' *Information, Planning, and Conservation* (IPaC) system was used to identify listed plant and wildlife species reported within the vicinity of the BSA (USFWS, 2022a, b).
- Previous studies and reports near the project site and project vicinity were reviewed to gain a sense of the existing conditions at the time the studies were conducted.
- Google Earth Pro satellite imagery of the project site and vicinity (Google Earth Pro, 2022)
- The *Natural Resources Conservation Service's* (NRCS's) Custom Soil Resource Report for the BSA downloaded from the Web Soil Survey (Soil Survey Staff, 2022)
- USGS 7.5-Minute Topographic Map *San Dimas* Quadrangle (USGS 2022).

Sensitive Plant Communities

CDFW defines sensitive plant communities as "*communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental impacts of projects*" (CDFW, 2018). These communities are a valuable biological resource due to their rarity and/or their provision of habitat for special-status species. The most current version of CDFW's California Sensitive Natural Community List indicates which natural communities are sensitive given the current state of the California classification (CDFW, 2022a). The California Natural Community List includes alliance rankings according to their degree of imperilment. For this BRE, plant communities are considered sensitive if they meet any of the following criteria:

- Recognized and considered sensitive by CDFW, USFWS, and/or special interest groups such as the CNPS, or local municipalities such as the City.
- Habitat is under the jurisdiction of the USACE pursuant to Section 404 of the CWA and/or is under the jurisdiction of the CDFW pursuant to §§ 1600-1612 of the California Fish and Game Code.
- Known or believed to be of high priority for inventory in the CNDDB.
- Considered to be regionally rare.

- Has undergone a large-scale reduction due to increased encroachment and development.
- Supports special-status plant and/or wildlife species.
- Functions as an important corridor for wildlife movement.

Special Status Plants

Based on a literature review and query from publicly available databases (USFWS, 2022a; CNDDB, 2022a, and CNPS, 2022a; see **Appendix A** Figure 4 *CNDDB Known Occurrences Plant Species and Habitats*) for reported occurrences within a ten-mile radius of the project site (plant inventory), 22 special-status plant species have the potential to occur within the BSA. Of these 21 species, 4 are listed and 17 are sensitive. The following resources were used to analyze plant species potential to occur within the BSA:

- CNPS (California Native Plant Society) Rare Plant Program, Inventory of Rare and Endangered Plants (CNPS, 2022a);
- Jepson Flora Project (eFlora, 2022);
- Information on California Plants (Calflora, 2022);
- CNDDB (California Natural Diversity Database) Recent Occurrences Data, RareFind 5 (CNDDB, 2022a);
- IPaC (Information for Planning and Consultation) Resources and Species List (USFWS, 2021a, b); and
- Cal-IPC (California Invasive Plant Council). California Invasive Plant Inventory (Cal-IPC, 2006).

Special-Status Wildlife:

Based on a literature review and query from publicly available databases (USFWS, 2022a, b; CNDDB, 2022; see **Appendix A** Figure 5 *CNDDB Known Occurrences Wildlife Species*) for reported occurrences within a ten-mile radius of the project site, 43 special-status wildlife species, 11 listed and 31 sensitive, were reported as recent occurrences (<20 years) The following resources were used to analyze wildlife species potential to occur within the BSA:

- eBird - All About Birds (Cornell Lab of Ornithology), an online database of bird distribution and abundance (eBird, 2022);
- USFWS (United States Fish and Wildlife Service) ECOS species profiles (USFWS, 2022c);
- CDFW California Wildlife Habitat Relationships Life History Accounts and Habitat Range Maps (CDFW, 2022b);
- CNDDB Recent Occurrences Data, RareFind 5 (CNDDB, 2022a); and
- IPaC (Information for Planning and Consultation) Resources and Species List (USFWS, 2021a, b).

3.1.2 Waters of the U.S. or State (Jurisdictional Waters/Wetlands)

Aerial imagery was reviewed to identify natural and man-made drainages, open water (lakes, ponds, etc.), wetlands and other features that may be subject to federal or state jurisdictional authority within the BSA. The USGS 7.5-Minute Topographic Map *San Dimas* Quadrangle was reviewed to identify potential presence or absence of onsite and offsite watercourses, and topographic features than may be indicative of water features. Topographic maps do not show all drainages that may exist.

The National Wetlands Inventory (NWI) database and maps developed by the USFWS were used as preliminary indicators of potential wetland areas based on changes in vegetation patterns as observed from satellite imagery (USFWS, 2021d). The NWI data were viewed in GIS platforms (Google Earth Pro, 2022), including the USFWS Wetlands Mapper (USFWS 2021d) to identify potentially jurisdictional features within the project area as indicated from topographic changes or visible stream patterns. The digital wetland data for the project vicinity was later ground-truthed during biological surveys.

he USGS National Hydrography Dataset (NHD) was also used to identify hydrologic features such as rivers, streams, canals, lakes, and ponds. (USGS, 2022).

Additionally, the watershed boundary data set containing the most current 10-digit and 12-digit HUCs was obtained in geodatabase form from the USGS to aid with assessing USACE jurisdiction of waters draining the project site (USGS, 2022)

The following were also reviewed and consulted:

- *Corps of Engineers Wetlands Delineation Manual (i.e.,1987 Manual; Environmental Laboratory, 1987).*
- *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Arid West Supplement; USACE, 2008)
- *The National Wetland Plant List 2020 List* (USACE, 2020).
- *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar and McColley, 2008).*
- *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Curtis and Lichvar, 2010).*
- *United States Department of Agriculture National Resources Conservation Service Hydric Soils List (USDA-NRCS, 2022).*
- EPA Waters Geoviewer, (USEPA, 2022)

The USACE published the 1987 Manual for the identification and delineation of wetlands which have since been superseded and presented in regional supplements. In 2008, the USACE published the Arid West Supplement, which is a supplement to the 1987 Manual that describes wetland indicators, delineation guidance, and other information that is specific to the Arid West Region (USACE, 2008).

3.1.3 Critical Habitat

When a species is listed as federally endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. Under the ESA, the federal government is required to designate "critical habitat" for each species it lists under the ESA. Federal agencies are prohibited from authorizing, funding or carrying out actions that "destroy or adversely modify" critical habitats. Section 3 of the ESA defines critical habitat for a threatened or endangered species as (ESA § 3[5][A]):

- *The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of § 4 of the ESA, on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection*; and

- *Specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of § 4 of the ESA, upon a determination by the Secretary that such areas are essential for the conservation of the species*.

Designated critical habitats are described in 50 CFR Parts 17 and 226. Critical habitat may include areas that are not currently occupied by the species, but that will be needed for its recovery. In addition, the USFWS normally excludes developed areas within mapped critical habitat boundaries as critical habitat. Within areas occupied by a listed species, the following factors indicate that species critical habitat (USFWS, 2022e):

- *space for individual and population growth and for normal behavior*;
- *cover or shelter*;
- *food, water, air, light, minerals, or other nutritional or physiological requirements*;
- *sites for breeding and rearing offspring*; and
- *habitats that are protected from disturbances or are representative of the historical geographical and ecological distributions of a species*.

The USFWS' Critical Habitat Portal and IPaC were reviewed to identify federal threatened and endangered species designated final and proposed critical habitat designations within ten miles of the project site (USFWS, 2022a,b, e).

3.1.4 Wildlife Corridors

To determine the potential for the BSA to contain wildlife corridors, UltraSystems biologists reviewed the USGS 7.5-Minute Topographic Map *San Dimas* Quadrangle and viewed aerial imagery to search for physical features that might serve as a wildlife corridor. Biologists also used the BIOS Habitat Connectivity Viewer to search for CDFW Essential Connectivity Areas, and Natural Landscape Blocks within the vicinity of the BSA (CDFW, 2022c). In addition, biologists used GIS software (Google Earth, 2022) to determine the project site's location in relation to areas that could serve as wildlife corridors. Finally, the literature review also included maps and reports on wildlife home ranges and migration and dispersal patterns (CDFW, 2022b).

3.1.5 Local Policies and Ordinances

The City's municipal ordinances, general plan and other documents were reviewed. The purpose of reviewing these documents was to determine if any City regulations protected resources not covered by federal or state regulatory agencies, or if City regulations had more stringent protections of biological resources protected by state or federal regulatory agencies.

3.2 FIELD SURVEY METHODS

This section describes the field survey methods used by biologists within the BSA during the reconnaissance-level biological survey conducted by UltraSystems biologist, Mr. Matthew Sutton, an International Society of Arboriculture (ISA) Certified Arborist (WE-12790A), on January 7, 2022. Mr. Sutton visited the BSA to conduct the following assessments during the survey:

- Habitat assessment and land cover type mapping;
- General plant survey;
- General wildlife survey;

- Jurisdictional waters/wetlands assessment;
- Wildlife movement evaluation; and
- Tree survey.

The purposes of the field work were to evaluate the initial results of the literature review and to collect additional data on existing site conditions. The general biological survey covered all accessible areas of the BSA, including all areas that will be impacted by the project. The surveys were conducted during the daytime on foot by walking slowly across each habitat type, where accessible. Biologists used binoculars from strategic vantage points whenever direct access was not possible, due to private property with no access rights, chain-linked fences, and locked gates. Observations were also made with aerial imagery for inaccessible areas.

During the survey, Mr. Sutton used topographic and aerial maps to help him navigate in the field and pertinent regional flora and fauna field guides to identify and record special-status species and to assist with identifying plant communities, wildlife habitats, and physical features. Digital color photographs were taken during the field surveys to record site conditions at the time of the field surveys. Specific methods for each type of biological assessment is described in the sections below.

Areas within the project site were surveyed using a meandering search pattern pedestrian survey to obtain 100 percent coverage of the site. Weather conditions consisted of 20% cloud cover with temperatures ranging from 54 to 56 degrees Fahrenheit and average wind speed of 2 miles per hour. The general biological surveys covered all accessible areas of the BSA, including all areas that will be impacted by the project. The surveys were conducted during the daytime on foot by walking slowly and methodically across each habitat type.

3.2.1 Habitat Assessment and Land Cover Type Mapping

The purpose of the habitat assessment was to identify and map habitat areas such as plant communities and other land cover types and to ascertain whether existing site conditions could be suitable for special-status plant and wildlife species. Mr. Sutton characterized the existing land cover types including plant communities during the habitat assessment. He also identified and recorded observed plant and wildlife species, evaluated the potential for wildlife corridors, and determined if waters of the U.S. or State, including wetlands (collectively referred to as jurisdictional waters), were present within the BSA. Topography, soil characteristics, substrates, and the mapping of disturbed and developed areas were also components of the habitat assessment in order to assist the search for special-status plants and wildlife.

Plant communities and other land cover types observed by Mr. Sutton were identified and mapped in the field by marking their limits on a color aerial map. Descriptions of plant communities, within the BSA were based on the dominant identified perennial plant species. Generally, classifications of habitat types or plant communities were based on *A Manual of California Vegetation, Second Edition* (Sawyer et al., 2009) and *Preliminary Descriptions of the Terrestrial Communities of California* (Holland, 1986), with modifications to better represent existing site conditions. The classifications were then checked against CDFW's California Natural Community List (CDFW, 2022a) to determine if any of the plant communities were designated as sensitive by the CDFW.

Following the field mapping, UltraSystems' GIS staff took the habitat boundaries from the aerial map and digitized the boundaries into an ArcGIS file. Once the boundaries were in the ArcGIS, the acreage of each land cover present within the project site and BSA was then calculated.

3.2.2 Waters of the U.S. or State (Jurisdictional Waters/Wetlands) Assessment

Mr. Sutton investigated the project site for jurisdictional waters, including wetlands, on January 7, 2022. Jurisdictional waters may be identified by the presence of streams or drainages with a definable bed, bank, or channel or evidence of an ordinary high water mark. areas of standing water, or depressions that had evidence of containing standing water for part of the year. Finally, Mr. Sutton assessed whether the site supported additional wetland indicators such as wetland hydrology, hydric soils or hydrophytic vegetation. Areas of the BSA which are developed and did not contain unpaved areas were not surveyed.

3.2.3 Tree Survey

A tree survey was conducted at the project site on January 7, 2022 by UltraSystems biologist Mr. Matthew Sutton, who is an International Society of Arboriculture (ISA) certified arborist (WE-12790-A). During the survey visit, Mr. Sutton performed various tasks associated with surveying, mapping, photographing, inventorying, and evaluating the condition of the property's trees. Mr. Sutton surveyed every tree that met the criterion of a mature significant tree as determined by the City's tree preservation ordinance. Refer to **Appendix C**, *Arborist Report*, for a detailed account of the methods used during the tree survey.

4.0 RESULTS

This section describes the results of the literature review and the existing conditions within the BSA at the time the reconnaissance-level biological survey was conducted (environmental baseline). Field observations and photographs of the BSA collected during the field surveys can be found in **Appendix D**, *Field Data Sheets* and **Appendix E**, *Site Photographs*.

4.1 ENVIRONMENTAL SETTING

Topography of the project site is relatively level. Elevation ranges from approximately 956 to 968 feet amsl. The project site is south of Interstate 210 (I-210), northwest of the intersection of West Allen Avenue and North Cataract Avenue (see **Appendix A**, Figure 1, *Project Vicinity***;** Figure 3, *Project Boundary and Biological Study Area [BSA]*). The San Gabriel Mountains begin approximately one mile north of the project site; Puddingstone Reservoir is located approximately two miles south, and the South Hills are approximately 1.25 miles west of the project site, west of the I-210 and State Route 57 (SR 57) interchange.

The City of San Dimas has a mild climate that is generally warm and temperate. A weather station operated by the California Department of Water Resources, California Irrigation Management Information System (CIMIS) located on the grounds of California State Polytechnic University, Pomona (CIMIS Station 78), approximately four miles south of the project site, provides climate data for the project vicinity since 1989. During the period of record between January 1, 1990 and January 1, 2022, the average annual precipitation for the City of San Dimas is 1.27 inches (minimum precipitation of 0.00 inches, maximum precipitation of 14.65 inches). The average temperature was 62.5 degrees Fahrenheit.

4.2 SOILS

The USDA NRCS Soil Survey for Los Angeles County, California, Southeastern Part, has mapped the soil unit within the BSA as *Urban land-Palmview-Tujunga, gravelly complex, 2 to 9 percent slopes* (Soil Survey Staff, 2022). This soil unit occurs in alluvial fans, with granite-derived alluvium as the parent material (Soil Survey Staff, 2022). This soil map unit is not listed on the National Hydric Soils List as hydric (USDA NRCS, 2022). The onsite soils are gravelly with some relatively small rocks (<6 inches in diameter). Refer to **Appendix A**, Figure 6, *Soils Map* and **Appendix F**, *Soils Report* for a soils figure and **Appendix F,** *Custom Soil Resource Report for the BSA*.

4.3 PLANT COMMUNITIES AND LAND COVER TYPES

4.3.1 Urban/Developed/Ornamental

Urban/Developed lands are non-vegetated features within the BSA that describe areas occupied by manmade structures, paving and other impermeable surfaces that cannot support vegetation. Ornamental land cover that occurs in urbanized areas consists of ornamental vegetation (e.g., trees, turf lawns, shrubs, etc.) that is planted along the borders of buildings, residences, roadway margins, and other developed structures. Urban/developed/ornamental land cover on the project site consists of paved access areas, nine residential homes, other permanent structures, storage containers, and other related developments, and landscaped ornamental vegetation (e.g., turf lawns, flowering plants, and trees). These urban/developed/ornamental areas provide limited habitat for wildlife species; however, birds could use the ornamental trees for foraging and nesting. Developed/ornamental land cover does not have a global or state rank and is not considered a

sensitive plant community. This land cover composes approximately 1.49 acres of the project site and approximately 34.98 acres of the BSA (see **Table 4.3-1** and **Appendix A**, Figure 7, *Land Cover Types*).

4.3.2 Wild oats and annual brome grasslands (*Bromus diandrus – Avena* spp. Semi-Natural Alliance)

Wild oats and annual brome grasslands (*Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance) is composed of cool-season, annual grasses mostly introduced from Europe, and often intermixed with native and annual forbs, and occasional shrub species. The composition of non-native grass species in this alliance varies widely, including slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), *Brassica* spp., ripgut grass (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), foxtail chess (*Bromus madritensis*), and others. This land cover occurs in an open field in the northern section of the project site and covers approximately 0.71 acre. Two non-native grass species, ripgut grass and foxtail chess, are co-dominant on the project site and various grasses and forbs also occur at lower cover, including London rocket (*Sisymbrium irio*), cheeseweed (*Malva parviflora*), greenstem filaree (*Erodium moschatum*), Russian thistle (*Salsola tragus*), and telegraph weed (*Heterotheca grandiflora*). Other plants associated with this alliance that were observed on-site include white horehound (*Marrubium vulgare*), prickly lettuce (*Lactuca serriola*), lamb's quarters (*Chenopodium album*), annual blue grass (*Poa annua*), smilo grass (*Stipa miliacea* var. *miliacea*), needle grass (*Stipa* sp.), and common chickweed (*Stellaria media*). There are on-site occurrences of groups of common oleander (*Nerium oleander*) and Carolina ash (*Fraxinus caroliniana*) saplings, particularly in the northeastern part of this land cover.

4.3.3 Pepper tree or myoporum groves (*Schinus* (*molle, terebinthifolius*) - *Myoporum laetum* Forest & Woodland Semi-Natural Alliance)

Pepper tree or myoporum groves (*Schinus* [*molle, terebinthifolius*] - *Myoporum laetum* Forest & Woodland Semi-Natural Alliance) land cover is characterized by one or more of the following species being dominant in the tree canopy: pepper tree (*Schinus molle*), Brazilian pepper tree (*Schinus terebinthifolius*), or myoporum (*Myoporum laetum*). The understory and intercanopy areas of this alliance typically include forbs, grasses and shrubs. On the project site, this natural community consists of twelve pepper trees (*Schinus molle*), which are distributed around the relative center of the project site. This land cover exclusively occurs within the project site and composes approximately 0.40 acre.

Table 4.3-1

LAND COVER TYPES OBSERVED

Land Cover Type	Project Boundary (acres)	BSA (acres)
Urban/Developed/Ornamental	1.49	34.98
Wild oats and annual brome grasslands	0.71	0.71
Pepper tree or myoporum groves	0.40	0.40

TOTAL	**2.60**	**36.09**

4.4 PLANTS

4.4.1 Plant Species Recorded During Surveys

Vegetation of the project site primarily consists of non-native ornamental and weedy species with low cover of native species (see **Appendix G**, *Plant and Wildlife Species Observed During the Field Survey*). Approximately 31 plant species from 22 plant families were observed within the BSA. Twenty five of the 31 plant species recorded are non-native, and are either incorporated into landscaped areas or occur within the undeveloped landscape of the project site (CDFW, 2018; CNPS, 2022b). Areas of the BSA outside of the project site consist of developed areas containing commercial spaces, paved roadways and other related structures, residential developments, and ornamental vegetation for landscaping purposes. Refer to **Appendix G**, *Plant and Wildlife Species Observed During the Field Survey* for a complete list of species observed during the survey.

A mix of native and non-native plant species were observed on the project site. The on-site open field is dominated by non-native annual grasses mixed with occasional occurrences of forbs such as London rocket and Russian thistle.

The following non-native shrub, forb and grass species observed on the project site include: common oleander, prickly lettuce, London rocket, white horehound, lamb's quarters, nettle leaf goosefoot (*Chenopodium murale*), matted sandmat (*Euphorbia serpens*), ripgut grass, foxtail chess, annual blue grass, smilo grass, Bermuda buttercup (*Oxalis pes-caprae*), agave species (*Agave* sp.), common chickweed, cheeseweed, greenstem filaree, stinging nettle (*Urtica dioica*), and Russian thistle.

The following native shrub, forb and grass species were observed on the project site: telegraph weed (*Heterotheca grandiflora*), chilicothe (*Marah macrocarpa*), Douglas' nightshade (*Solanum douglasii*), needle grass (*Stipa* sp.), and cape leadwort (*Plumbago auriculata*).

Tree species on the project site were surveyed during the tree survey, the results of which are provided in **Appendix C,** *Arborist Report*. The following trees were observed during the tree survey: pepper tree, carrotwood (*Cupaniopsis anacardioides*), Mexican fan palm (*Washingtonia robusta*), bishop pine (*Pinus muricata*), pomegranate (*Punica granatum*), white ash (*Fraxinus americana*), Carolina ash (*Fraxinus caroliniana*), weeping fig (*Ficus benjamina*), and tree of heaven (*Ailanthus altissima*). Bishop pine was the only native tree observed onsite.

California Invasive Plant Council (Cal-IPC) Inventory

California Invasive Plant Council (Cal-IPC) is a nonprofit organization that is dedicated to protecting California's lands and waters from ecologically-damaging invasive plants through science, education and policy. It maintains the Cal-IPC Inventory (Inventory) that categorizes non-native invasive plants that threaten the state's wildlands.

Non-native vegetation with a Cal-IPC moderate rating in the Inventory "*has substantial and apparent (but generally not severe) ecological effects on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread*" (Cal-IPC, 2006).

Non-native vegetation species with a Cal-IPC limited rating in the Inventory are "*invasive, but their ecological effects are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic*" (Cal-IPC, 2006).

The following non-native species observed on the project site hold a California Invasive Plant Council (Cal-IPC) rating in the Inventory: tree of heaven, Mexican fan palm, Bermuda buttercup, and ripgut grass have a moderate rating, and London rocket, Russian thistle, white horehound, smilo grass, and pepper tree have a limited rating in the Cal-IPC Inventory (Cal-IPC, 2006).

4.4.2 Special-Status Plant Species with Potential to Occur in the BSA

Based on a literature review and query from publicly available databases (USFWS, 2022a, b; CNDDB, 2022a) for reported occurrences within a ten-mile radius of the project site, there were 4 listed and 17 sensitive plant species identified by one of the following means: reported in the plant inventory, recognized as occurring based on previous surveys or knowledge of the area, or observed during the habitat assessment survey. Of the 21 total special-status species in the plant inventory, it was determined that two sensitive and no listed plant species have the potential to occur in the BSA (see **Table 4.4-1**).

Table 4.4-1
SPECIAL-STATUS PLANTS WITH A POTENTIAL TO OCCUR IN THE BSA

Scientific Name (=Synonym)	Common Name (=Synonym)	Status	General Habitat Description in California	Plant Elevation Range (feet amsl)	BSA Contains Potential Suitable Habitats	BSA is Located Within the Plant Species' Known:		Potential For Occurrence in the BSA
						Elevation Range	General Distribution	
Sensitive Plants: These plants have no official status under the ESA, the CESA, and/or the NPPA; however, they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations.								
Chorizanthe parryi var. parryi	Parry's spineflower	CRPR: 1B.1	Lifeform: annual herb Habitats: coastal scrub, chaparral, cismontane woodlands, and valley and foothill grasslands Soils: sandy or rocky soils Bloom Period: April to June	902 – 4,002	Yes	Yes	Yes	**Low potential to occur.** The BSA does contain gravellly soils, however the soils have experienced high levels of disturbance due to development and other related human activities. The BSA contains primarily urbanized land, therefore degrading the quality of available habitat. This species does have recent reported occurrences (<15 years) within a 10-mile radius of the BSA, however the occurrences are concentrated in areas greater than six miles away.
Horkelia cuneata var. puberula (=Horkelia cuneata ssp. puperula)	mesa horkelia	CRPR: 1B.1	Lifeform: perennial herb Habitats: maritime chaparral, coastal scrub, and cismontane woodlands Soils: sandy or gravelly sites Bloom Period: February to September	230 – 2,657	Yes	Yes	Yes	**Low potential to occur.** There are recent reported occurrences (<15 years) of this plant within 10 miles of the project site (CNDDB, 2022), specifically concentrated along San Dimas Wash, which is located approximately 0.3 miles north of the BSA The project site contains gravelly soil that creates suitable habitat for this species, however the soil has experienced high levels of disturbance due to urbanization of the area.

Legend and Notes
California Rare Plant Ranks (Formerly known as CNPS Lists): the CNPS is a statewide, nonprofit organization that maintains, with CDFW, an Inventory of Rare and Endangered Plants of California. In the spring of 2011, CNPS and CDFW officially changed the name "CNPS List" or "CNPS Ranks" to "California Rare Plant Rank" (or CPRP). This was done to reduce confusion over the fact that CNPS and CDFW jointly manage the Rare Plant Status Review Groups and the rank assignments are the product of a collaborative effort and not solely a CNPS assignment. •**CRPR 1B = California Rare Plant Rank 1B** - plants rare, threatened, or endangered in California and elsewhere: plants with a CRPR of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. All of the plants constituting CRPR 1B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
California Native Plant Society (CNPS) Threat Ranks: *The CNPS Threat Rank is an extension added onto the California Rare Plant Rank (CRPR) (as a decimal code) and designates the level of threats by a 1 to 3 ranking with 1 being the most threatened and 3 being the least threatened. A Threat Rank is present for all CRPR 1B's, 2B's, 4's, and the majority of CRPR 3's. CRPR 4 plants are seldom assigned a Threat Rank of .1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a CRPR. In addition, all CRPR 1A and 2A (presumed extirpated in California), and some CRPR 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.* • ***.1 =*** *seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)*

Notes:

The BSA contains approximate elevations of 956 to 968 feet amsl (GoogleEarth, 2022).
Low = low potential to occur within the BSA. The BSA is located within the plant species' known distribution, elevation range, and/or the BSA contains some low-quality but suitable habitats and/or soils to potentially support the plant species.

Based on an analysis of the biological, physical and environmental conditions necessary for each special-status plant species identified in the plant inventory, it was determined that 19 of those species have no potential to occur in the BSA (Calflora, 2022; CNDDB, 2022; CNPS, 2022a, b; Google Earth Pro, 2022; Jepson Flora Project, 2022; Sawyer et al., 2009; Soil Survey Staff, 2022; USEPA, 2022; USFWS, 2022a, b, c, d, e). In many cases, species were determined to have no potential to occur because the project site lacks suitable habitat or is outside of a particular species geographic or elevation range.

It was determined that the BSA does not provide quality habitat to support a diversity of species. Several species were determined to not have a potential to occur for the following reasons: (1) There is evidence of soil compaction and/or disturbance on the project site, and many plant species cannot establish in compacted soils; (2) The project site is adjacent to urbanized and residential developments, which thus reduces the nearby propagule sources of special-status plant species that could colonize the BSA; and (3) The areas of project site that do not already support buildings and other impermeable areas contain a high coverage of non-native annual grasses and weedy species, therefore limiting the likelihood that a diverse array of native species can establish on the site.

The following plant species, listed with their respective statuses, were determined to have no potential to occur within the BSA for the abovementioned reasons (see **Appendix H,** *Special-Status Species Potential Occurrence Determination*, for a description of the species status ranking notations):

- Nevin's barberry (*Berberis nevinii*) FE, SE, CRPR: 1B.1,
- Mt. Gleason paintbrush (*Castilleja gleasoni*) SR, CRPR: 1B.2
- slender-horned spineflower (*Dodecahema leptoceras*) FE, SE, CRPR: 1B.1
- thread-leaved brodiaea (*Brodiaea filifolia*) FT, SE, CRPR: 1B.1
- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*)
- white-rabbit tobacco (*Pseudognaphalium leucocephalum*) CRPR: 2B.2
- chaparral ragwort (*Senecio aphanactis*) CRPR: 2B.2
- San Bernardino aster (*Symphyotrichum defoliatum*) CRPR: 1B.2
- Greata's aster (*Symphyotrichum greatae*) CRPR: 1B.3
- Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*) CRPR: 4.3
- rigid fringepod (*Thysanocarpus rigidus*) CRPR: 1B.2
- Coulter's saltbush (*Atriplex coulteri*) CRPR: 1B.2
- many-stemmed dudleya (*Dudleya multicaulis*)CRPR: 1B.2
- salt spring checkerblood (*Sidalcea neomexicana*) CRPR: 2B.2
- Rock Creek broomrape (*Orobanche valida* ssp. *valida*) CRPR: 1B.2
- hot springs fimbristylis (*Fimbristylis thermalis*) CRPR: 2B.2
- intermediate mariposa Lily (*Calochortus weedii* var. *intermedius*) CRPR: 1B.2
- slender mariposa lily (*Calochortus clavatus* var*. gracilis*) CRPR: 1B.2
- Hall's monardella (*Monardella macrantha* ssp*. hallii*) CRPR: 1B.3

4.4.3 Listed Endangered, Threatened, Candidate, and State Rare Plants

No listed, endangered, threatened, candidate, or rare plants were observed during the field survey.

4.4.4 Sensitive Plants

No sensitive plants were observed during the field survey.

4.5 WILDLIFE

4.5.1 Wildlife Species Recorded During the Field Surveys

A total of six distinct wildlife species were observed during the January 7 2021 field survey, one mammal species and five bird species (see **Appendix G**, *Plant and Wildlife Species Recorded During the Field Surveys*). Gopher mounds and burrow openings of Botta's pocket gopher *(Thomomys bottae*) were observed. The birds observed were red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), herring gull (*Larus argentatus*), and black phoebe (*Sayornis nigricans*). All of the birds observed on-site are migratory bird species protected under the MBTA and California Fish and Game Code § 3513.

4.5.2 Special-Status Wildlife Species with Potential to Occur in the BSA

Based on a literature review and query from publicly available databases (USFWS, 2022a, b; CNDDB, 2022a) for reported occurrences within a 10-mile radius of the project site, there were 43 special-status wildlife species, 12 listed and 31 sensitive, identified by one or more of the following means: reported in the wildlife inventory, recognized as occurring based on previous surveys or knowledge of the area, or observed during the habitat assessment survey. Of those 43 total species, 7 sensitive and zero listed wildlife species were determined to have at least a low potential to occur in the BSA (see **Table 4.5-1**).

Table 4.5-1
SPECIAL-STATUS WILDLIFE WITH A POTENTIAL TO OCCUR IN THE BSA

Scientific Name (=Synonym)	Common Name (=Synonym)	Status	General Habitat Descriptions in California	The BSA:		Potential For Occurrence in the BSA
				Located Within Species' Distribution and/or Elevation Range (if known)	Contains Suitable Foraging, Roosting, and/or Breeding Habitats	
Sensitive Wildlife: These animals have no official status under the ESA and/or the CESA; however, they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations						
Sensitive Birds						
Accipiter cooperii	Cooper's hawk	WL, Season of concern: nesting	Habitats: broken woodland and habitat edges Characteristics: tolerant of human activities near the nest and is seen more often nesting in urban/residential areas	Yes	Yes	**Moderate potential to occur.** This species is well-adapted to a variety of urbanized environments. The project site is within this hawk's range of recent occurrences (CNDDB, 2022a).
Selasphorus sasin	Allen's hummingbird	BCC	Habitats: sparse to dense scrub habitats and sparse to open woodlands Characteristics: nest on twig or fork of tree or shrub	Yes	Yes	**Low potential to occur.** The BSA does not contain scrub habitats or open woodlands that this species prefers; however, this species could visit this site to forage nectar from flowering plants and insects that occur within the BSA.
Dryobates nuttallii (= Picoides nuttallii)	Nuttall's woodpecker	BCC	Habitats: low-elevation oak (any species) woodlands, especially where mixed with California sycamore (Platanus racemosa) and deciduous riparian habitats Characteristics: nests are located mostly in riparian habitat	Yes	Yes	**Low potential to occur.** The BSA does not contain deciduous riparian habitats that this species prefers; however, this species is adapted to urbanized areas and could visit this site to forage within the pepper tree grove. The majority of the BSA is urbanized areas including commercial and residential spaces, paved structures, and associated development that provides limited foraging habitat and would deter this woodpecker from breeding within the BSA.
Sensitive Mammals						
Lasiurus cinereus	hoary bat	CDFW: Special Animals List WBWG: M	Habitats: near open grassy areas in coniferous and deciduous forest or near lakes, open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding Characteristics: winter roosts include sides of buildings and tree trunks	Yes	Yes	**Low potential to occur.** There are CNDDB-reported occurrences of this species within a two-mile radius of the project site, but none more recent than 1956. (CNDDB, 2022a) The BSA does contain buildings and tree trunks that could be used for roosting; however, there is not enough potential prey such as moths to sustain a bat colony. This species may forage in the BSA but is not anticipated to roost in it.
Antrozous pallidus	pallid bat	SSC	Habitats: variety of habitats is occupied by pallid bats, including deserts, grasslands, shrublands, woodlands, and forests form sea level up through mixed conifer forests	Yes	Yes	**Low potential to occur.** There are CNDDB-reported occurrences of this species within a two-mile radius of the project site, but none more recent than 1951 (CNDDB, 2022a). This species is

Scientific Name (=Synonym)	Common Name (=Synonym)	Status	General Habitat Descriptions in California	The BSA:		Potential For Occurrence in the BSA
				Located Within Species' Distribution and/or Elevation Range (if known)	Contains Suitable Foraging, Roosting, and/or Breeding Habitats	
			Characteristics: night roosts may be in more open sites, such as porches and open buildings			well-adapted to a variety of urbanized environments; however, it is unlikely to roost or form maternity colony within the BSA due to lack of available foraging habitat.
Eumops perotis californicus	western mastiff bat	SSC, WBWG:H,	Habitats: low-lying desert areas of southern California, desert riparian, desert wash, desert scrub, desert succulent shrub, alkali desert scrub, palm oasis, conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, chaparral, urban. Roosts in crevices in cliff faces, high buildings, trees, and tunnels Characteristics: bats often are found in large groups	Yes	Yes	**Low potential to occur**. The BSA does provide native and ornamental trees as well as buildings that could serve as suitable roosting habitat for this bat. However, many of the habitats in which this species is found such as palm oasis, oak conifer, deciduous woodlands, and coastal scrub are not found in the BSA.
Taxidea taxus	American badger	SSC	Habitats: alpine meadows to elevations as low as Death Valley Characteristics: requirements - sufficient food, friable soils, and relatively open, uncultivated ground	Yes	No	**Low potential to occur.** This species has been recently observed (<15 years) within 1 mile of the project site (CNDDB, 2022a). The project site does contain some open areas with friable soils; however, there is not sufficient prey source within the BSA for this species to establish a den. The availability of open ground in the BSA is limited as most areas have undergone some disturbances primarily associated with development.

Legend and Notes

Western Bat Working Group (WBWG) Designations: The WBWG is composed of agencies, organizations, and individuals interested in bat research, management, and conservation from 13 western states and provinces. Species are ranked as High, Medium, or Low Priority in each of 10 regions in western North America.

- **H =** High Priority: These species are considered the highest priority for funding, planning, and conservation actions, Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.
- **M =** Medium Priority: These species warrant closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.

California Department of Fish and Wildlife (CDFW) Designations:

For some wildlife species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nesting colonies. For many species of birds, the primary emphasis is on the breeding population in California. For some species which do not breed in California but winter here, emphasis is on wintering range. The SSC designation thus may include a comment regarding the specific protection provided such as nesting or wintering

- **SSC = species of special concern**: a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.
- **WL = watch list:** this list includes birds identified in the California Bird Species of Special Concern (Shuford and Gardali, 2008) report and are not on the current CDFW species of special concern list, but were on previous lists and they have not been state-listed under CESA; were previously state or federally listed and now are on neither list; or are on the list of fully protected species.

Notes

The BSA contains approximate elevations of 956 to 968 feet amsl.

Yes = the BSA is located within the wildlife species' known distribution, elevation range, and/or the BSA contains suitable habitats or conditions to support the species. The wildlife species has a potential to occur within the BSA. Further evaluation is needed.

No = the BSA is located outside the wildlife species' known distribution, elevation range, and/or the BSA lacks suitable habitats or conditions to support the species. It is highly unlikely for the wildlife species to have a potential to occur within the BSA. No further evaluation is needed.

Scientific Name (=Synonym)	Common Name (=Synonym)	Status	General Habitat Descriptions in California	The BSA:		Potential For Occurrence in the BSA
				Located Within Species' Distribution and/or Elevation Range (if known)	Contains Suitable Foraging, Roosting, and/or Breeding Habitats	
Low = low potential to occur within the BSA **Moderate** = moderate potential to occur within the BSA						

Based on an analysis of the biological, physical and environmental conditions necessary for each special-status wildlife species identified in the wildlife inventory, it was determined that 36 of those 43 species have no potential to occur in the BSA (Bolster, 1998; CNDDB, 2022a, b; CDFW 2022b; Google Earth Pro, 2022; eBird 2022; Howell, 1980; Jameson and Peeters, 1988; USFWS, 2022a, b, c, d, e; WBWG, 2005; Zener et al., 1988 - 1990). In most cases, species were determined to have no potential to occur because the project site lacks suitable habitat or is outside of a particular species geographic or elevation range.

Some species for which there is suitable habitat in the BSA were determined to not have a potential to occur for the following reasons: (1) The project site is adjacent to urbanized and residential developments, and hazards such as traffic reduce the likelihood that certain species would visit the BSA; (2) Soil disturbance would decrease the likelihood of fossorial mammal species or bird or reptile species that utilize burrows establishing onsite; and, (3) Higher levels of street lights and traffic noise may cause certain species to avoid the BSA. The following wildlife species, listed with their respective statuses, were determined to have no potential to occur based on the abovementioned reasons (see **Appendix H,** *Special-Status Species Potential Occurrence Determination*, for a description of the species status ranking notations):

- California condor (*Gymnogyps californianus*) FE, SE, fully protected;
- bald eagle (*Haliaeetus leucocephalus*) SE, fully protected, BCC, Season of Concern: nesting wintering
- coastal California gnatcatcher (*Polioptila californica californica*) FT, SSC
- Swainson's hawk (*Buteo swainsoni*) ST, BCC, Season of Concern: nesting
- Santa Ana sucker (*Catostomus santaanae*) FT
- arroyo toad (*Anaxyrus californicus*) FE
- southern mountain yellow-legged frog (*Rana muscosa*) FE, SE
- southwestern willow flycatcher (*Empidonax traillii extimus*) FE, SE
- least Bell's vireo (*Vireo bellii pusillus*) FE, SE
- tricolored blackbird (*Agelaius tricolor*) ST, SSC , BCC, Season of Concern: nesting colony;
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*) FE, SSC;
- Crotch's bumble bee (*Bombus crotchii*) formerly listed;
- monarch butterfly (*Danaus plexippus*) candidate;
- Blainville's horned lizard (*Phrynosoma blainvilli*) SSC;
- coast-range newt (*Taricha torosa*) SSC (Monterey County and south);
- two-striped garter snake (*Thamnophis hammondii*) SSC;
- white-tailed kite (*Elanus leucurus*) fully protected, Season of Concern: nesting;
- Cassin's finch (*Carpodacus cassinii*) BCC;
- Allen's hummingbird (*Selasphorus sasin*) BCC;
- golden eagle (*Aquila chrysaetos*) fully protected, WL, BLMS, BCC, CDF:S, Season of Concern: nesting and wintering;
- burrowing owl (*Athene cunicularia*) SSC;
- black tern (*Chlidonias niger*) SSC, Season of Concern: nesting colony;
- Nuttall's woodpecker (*Dryobates nuttallii*) (=*Picoides nuttallii*) BCC;
- black swift (*Cypseloides niger*) SSC, BCC, Season of Concern: nesting;
- Clark's grebe (*Aechmophorus clarkii*) BCC;
- olive-sided flycatcher (Contopus cooperi) SSC, BCC, Season of concern: nesting;
- merlin (*Falco columbarius*) WL, Season of concern: nesting;

- wrentit (*Chamaea fasciata*) BCC;
- oak titmouse (*Baeolophus inornatus*) BCC;
- California thrasher (*Toxostoma redivivum*) BCC;
- saltmarsh common yellowthroat (=San Francisco common yellowthroat) (*Geothlypis trichas sinuosa*) SSC, BCC;
- black-chinned sparrow (*Spinus lawrencei*) BCC;
- Lawrence's goldfinch (Spinus lawrencei) BCC;
- northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) SSC;
- pocketed free-tailed bat (*Nyctinomops femorosaccus*) SSC;
- big free-tailed bat (*Nyctinomops macrotis*) SSC, WBWG:MH;
- western yellow bat (*Lasiurus xanthinus*) SSC, WBWG:H; and
- desert bighorn sheep (*Ovis canadensis nelsoni*) fully protected.

4.5.3 Listed Endangered, Threatened, and Candidate Wildlife

No federally listed endangered, threatened, or candidate wildlife species were observed during the field survey.

4.5.4 Sensitive Wildlife

No sensitive wildlife species were observed during the field survey. One sensitive wildlife species, Cooper's hawk, was determined to have moderate potential to occur in the BSA. This species is discussed below.

Cooper's Hawk

Cooper's hawk (*Accipiter cooperii*) is a_medium-sized hawk that prefers to inhabit the edges of woodlands. These raptors are commonly sighted in parks, neighborhoods, over fields, and even along busy streets if there are large trees nearby for perching and adequate prey species such as other birds and small mammals. They prefer to breed in more densely wooded areas than occur in the BSA, such as woodland openings and edges of riparian and oak habitat (Cornell Lab of Ornithology, 2022). Cooper's hawks build nests in pines, oaks, Douglas-firs, beeches, spruces, and other trees. Males typically build the nest over a period of about two weeks, with some help from the female. Nests are piles of sticks roughly 27 inches in diameter and 6 to 17 inches high, with a cup-shaped depression in the middle, that is approximately eight inches in diameter and four inches deep. The cup is lined with bark flakes and, sometimes, green twigs (Cornell Lab of Ornithology, 2022).

Cooper's hawk has a status of Watch List with the CDFW (CNDDB, 2022b). The CDFW Watch List includes birds identified in the California Bird Species of Special Concern (Shuford and Gardali, 2008) report and have or have had one of the following statuses: they are not on the current CDFW species of special concern list, but were on previous lists. Similarly, although this species has been listed under CESA; it was previously state or federally listed and has since been delisted; or, they are on the list of fully protected species. The report identifies species, subspecies, and populations of all migratory and non-migratory bird species (beyond those already designated as federal threatened or endangered) that, without additional conservation actions, are likely to become candidates for listing under CESA.

It was determined that Cooper's hawk has a moderate potential to occur within the BSA because the BSA contains suitable nesting, breeding and foraging habitat. There are several large trees on the

project site. The project site also contains homes and other manmade structures that can be utilized for hunting or, perching. This species is urban-adapted and could still occupy the BSA despite high levels of vehicle traffic and construction that would be associated with construction of the project. This raptor is anticipated to forage onsite and pass through the area frequently, but is unlikely to utilize the project site for nesting due to the high level of disturbance and development the BSA has undergone. The grasslands and shrubs present in the on-site field may provide suitable habitat for some prey species including small mammals. Construction of the project is not anticipated to impact foraging of Cooper's because this species is able to successfully adapt to urbanized areas, and there is some foraging habitat available in the southern portion of the BSA and in other surrounding areas. However, because construction of the project involves the removal of all on-site trees (see **Appendix C**, *Arborist Report*), and because Cooper's hawk could potentially use the larger on-site trees for nesting habitat, there is potential for Cooper's hawk nesting habitat to be impacted.

4.6 WATERS OF THE U.S. OR STATE (JURISDICTIONAL WATERS/WETLANDS)

The BSA does not contain jurisdictional waters of the United States (waters of the U.S.) or waters of the State. The project is in the San Dimas Creek watershed (HUC [hydrologic unit code] 180701060402). The nearest stream channel is San Dimas Wash, located approximately 0.4 mile north from the BSA. (USGS, 2022; USEPA, 2022).

4.7 CRITICAL HABITAT

The BSA is not located within any designated critical habitat. The nearest USFWS-designated critical habitat to the BSA is for coastal California gnatcatcher (*Polioptila californica californica*), which is located approximately 1.3 miles south of the BSA (USFWS, 2022a, b, e; CDFW, 2022c).

4.8 WILDLIFE CORRIDORS

A wildlife corridor is a connection of habitat, generally native vegetation, which joins two or more larger areas of similar habitat that are otherwise separated by natural barriers, changes in vegetation composition, or land permanently altered for human activities (e.g., farms); and infrastructure, including roads, railroads, residential development, or fencing. When native vegetation is cleared, fragmented patches of open space or isolated "islands" of wildlife habitat are created. Fragmentation and habitat loss are the two main contributors to continuing biodiversity decline. The main goal of corridors is to facilitate movement of individuals, through dispersal, seasonal migration, and movement for foraging, breeding, cover, etc. Corridors allow for physical and genetic exchange between isolated wildlife populations and are critical for the maintenance of ecological processes, including allowing for the movement of animals and the continuation of viable populations and higher species diversity.

Wildlife corridors may either be contiguous strips of vegetation and habitat, such as ridgelines or riverbeds, or intermittent patches of habitat or physical features spaced closely enough to allow safe travel. Corridors can be natural, such as a riparian corridor, or man-made, such as culverts, tunnels, drainage pipes, walls, underpasses, overpasses, or streets. Man-made corridors are often referred to as "wildlife crossings" and they allow wildlife to pass over, under, or through physical barriers that otherwise hinder movement. Wildlife corridors also vary greatly in size, shape, and composition.

The BSA does not overlap with CDFW Essential Connectivity Areas, Natural Landscape Blocks, or other wildlife corridors. The nearest Essential Connectivity Area is approximately 0.54 mile north of the BSA (CDFW, 2022c; see **Appendix A**, Figure 8, *Wildlife Corridors*). There are Natural Landscape

Blocks located approximately 0.52 mile north of the BSA and The Angeles National Forest is approximately 1.45 miles north of the BSA (Google Earth, 2022; CDFW, 2022c).

Due to the urbanization of the region, movement of mammals that require larger home-range areas, dispersal distances, and dense vegetative cover would likely be deterred. Species that are less restricted in movement and/or are well-adapted to urbanized areas such as raccoon, skunk, coyote, and birds likely move through areas of the BSA. The project area and a portion of the BSA support habitat, including movement habitat, for species on a local scale (limited habitat for reptile, bird, and mammal species), but it likely provides little function to facilitate wildlife movement for wildlife species on a regional scale.

Predators (e.g., coyotes) and smaller mammals (e.g., raccoons [*Procyon lotor*] and striped skunks [*Mephitis mephitis*]) are known to use medium- to low-density residential neighborhoods, golf courses, and washes for hunting and foraging, using washes (natural and channelized), culverts, underpasses, and city streets for travelling, often but not necessarily limited to overnight hours when human activity decreases (Baker and Timm, 1998; Grubbs and Krausman, 2009; Ng et. al., 2004). Urban areas provide a unique ecosystem with ecological opportunity in the form of anthropogenic food sources such as discarded human food, pet food, human-associated fruits, and domestic animals (Larson et. al., 2020). Observations recorded during the biological surveys and examination of aerial imagery indicate that the BSA may act as a hunting, foraging, and movement area and the BSA and surrounding areas are suitable wildlife movement corridors.

4.9 LOCAL POLICIES AND ORDINANCES

Several large trees were observed on-site during the habitat assessment survey conducted by Mr. Sutton on January 7, 2021, and as a result, a tree survey was conducted to survey the trees protected under the City's tree preservation ordinance. All of the trees that met the criterion of a mature significant tree in the City's tree preservation ordinance were identified to species, mapped and surveyed for several characteristics as detailed in **Appendix C**, *Arborist Report*.

Tree Survey

UltraSystems arborist Mr. Sutton surveyed 24 onsite trees and several saplings (i.e., trunk diameter of less than three inches), none of which is of the oak genus, and all of which are proposed for removal by the project proponent (see **Appendix C**, *Arborist Report*). Of the 24 onsite trees, 19 meet the criteria for mature significant trees. The 19 surveyed mature significant trees consist of the following: species and number per species: two native bishop pine (*Pinus muricata*), three white ash (*Fraxinus americana*), twelve pepper trees (*Schinus molle*), one carrotwood (*Cupaniopsis anacardioides*), and one Mexican fan palm (*Washingtonia robusta*) (SelecTree, 2022). Two of the 19 mature significant trees, Tree MST1, a bishop pine, and Tree MST11, a pepper tree, will be protected in place, and the other 17 are proposed for removal (see **Appendix C**, *Arborist Report*). The remaining five small, non-significant on-site trees and several saplings that were observed during the survey do not meet the criterion of a mature significant tree as described in the City's tree preservation ordinance. Refer to **Appendix C**, *Arborist Report*, for a detailed account of the results of the tree survey.

5.0 POTENTIAL IMPACTS

This section discusses potential significant effects or impacts, if any, to the environmental baseline and sensitive biological resources that could result from project construction and development. This is an important step in the CEQA process. Biological resources may be either "directly" or "indirectly" impacted by a project (defined by CEQA § 15358). Direct and indirect impacts may be either "permanent" or "temporary" in nature. These impact categories are defined below:

- **Direct impact**: Direct impacts are those that may cause an immediate effect on the species or its habitat and occur at the same time and place. Any loss, alteration, disturbance or destruction of biological resources that could result from project-related activities is a direct impact. Examples include vegetation clearing and loss of habitat, encroaching into wetlands, diverting natural surface water flows, and the loss of individual species.
- **Indirect impact**: As a result of project-related activities, biological resources may also be affected in a manner that is not direct. Indirect impacts are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems. Indirect impacts can affect biological resources within the project site, adjacent to the project site, or away from the project site. Examples of indirect impacts include increased human activity, elevated noise, light, and dust levels, decreased water quality, soil compaction, erosion created by the removal of vegetation, and the introduction of invasive plants and unnatural predators. Indirect impacts may be both short term and long-term in their extent. Indirect impacts are also referred to as "edge effects".
- **Permanent impacts** (long term): All impacts that result in the long-term or irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources. Permanent impacts cannot be mitigated in-place
- **Temporary impacts (short term**): Impacts considered to have reversible impacts to biological resources can be viewed as temporary. Examples include short-term increased vehicle traffic and noise and the generation of fugitive dust during construction; or removing vegetation and either allowing the natural vegetation to recolonize or actively revegetating the impact area. Temporary impacts can be reversed with the implementation of in-place mitigation measures.

As mentioned in the CEQA Guidelines (§ 15064.7[a]), each public agency is encouraged to develop and publish thresholds of significance (significance criteria) that it uses to determine the significance of environmental impacts. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental impact, non-compliance with which means the impact will normally be determined to be significant by the agency and compliance with which means the impact normally will be determined to be less than significant.

Significance criteria serve as benchmarks for determining if a project would result in a significant adverse environmental impact when evaluated against the baseline. CEQA Guidelines § 15065(a) states that a project may have a "significant impact" on the environment if the project has the potential to:

- Substantially degrade the quality of the environment;

- Substantially reduce the habitat of a fish or wildlife species;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a plant or animal community; or
- Substantially reduce the number or restrict the range of an endangered, rare or threatened species.

The Environmental Checklist Form in Appendix G of the CEQA Statute and Guidelines (2022) was reviewed in order to determine the level of significance of project related impacts to biological resources. Under CEQA Guidelines, impacts to biological resources are considered potentially "significant" if one or more of the following thresholds are exceeded with construction and operation of the project.

Threshold 1: 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 and USFWS.

Threshold 2: The project would 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 and USFWS.

Threshold 3: The project would have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Threshold 4: The project would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Threshold 5: The project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Threshold 6: The project would conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

Significant impacts can be reduced to less than significant levels by incorporating off-setting measures, including BMPs, avoidance and protection measures, and/or mitigation measures. Less than significant impacts are those in which impacts would occur, but are not expected to be substantial. Impacts to biological resources that are considered less than significant include impacts to biological resources that are reasonably widespread or exist in a degraded or disturbed state, rendering them less valuable as habitat to support wildlife diversity or special-status species, or impacts that do not meet or exceed the significance thresholds defined above. These less than significant impacts do not require such measures.

5.1 POTENTIAL IMPACTS TO PLANT COMMUNITIES

Based on the results of a literature review that included reviewing historical aerial photographs, the plant inventory, and other documents, and the results of the reconnaissance level survey, it was determined that the plant communities within the BSA do not consist of either riparian habitat or sensitive natural communities. Development of the project will not result in direct impacts (permanent loss of vegetation) to any riparian habitat or sensitive plant communities. Although there

will be direct impacts to the two plant communities that occur on-site, Pepper tree or myoporum groves and Wild oats and annual brome grasslands, neither of these plant communities occur in riparian habitat or are considered sensitive per CDFW's *California Natural Community List* (CDFW, 2022a). Therefore, there is no mitigation is proposed for impacts to riparian habitat or sensitive natural communities.

Significance criterion

Impacts would be considered significant if the project were to 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.

As there are no sensitive plant communities within the BSA, there are no anticipated direct impacts to sensitive plant communities as a result of construction of the project.

No Impact.

5.2 POTENTIAL IMPACTS TO SPECIAL STATUS PLANTS

No special-status plant species were observed within the BSA during the field survey. In addition, the literature review and field survey concluded that the plant species in the plant inventory do not have greater than a low potential to occur within the BSA due to a lack of suitable habitat, soils, and/or other factors to support them.

No direct or indirect impacts to special-status plant species are anticipated as a result of construction of the project. Because no special-status plant species were observed or determined to have greater than a low potential to occur within the BSA, the project is not anticipated to have direct or indirect impacts on them.

Significance criterion

Impacts would be considered significant if the project were to 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.

The literature review and field survey determined that the BSA is not likely to contain special-status plant species; therefore, the project is not anticipated to have direct or indirect impacts to listed or sensitive plants. In regard to the significance criterion, the project is anticipated to have no substantial adverse effect, either directly or through habitat modifications, to any species identified as a special-status species in federal, state, local or regional plans, policies, or regulations, or by CDFW or USFWS: **Less Than Significant Impact**.

5.3 POTENTIAL IMPACTS TO SPECIAL-STATUS WILDLIFE

5.3.1 Direct Impacts

Potential direct impacts to wildlife occupying the project site could occur from construction related mortality, injury, or harassment of individuals as a result of permanent development of the project site and from the removal and direct loss of breeding, foraging, and/or sheltering habitat. These impacts could be considered significant and potentially significant. Project development could

diminish the habitat available for common and special-status wildlife species from utilizing the onsite habitat. Direct permanent impacts include all areas within the limits of grading in the project footprint.

Ground disturbing and habitat altering activities could involve significant disturbance to common and special-status ground-dwelling animals or nesting birds. Examples include grading, clearing, disking, grubbing, excavation, trenching, paving, mowing, heavy equipment compacting or driving over habitat to access the construction work sites, vegetation management activities, and use of herbicides and pesticides. Direct impacts to less mobile fossorial (burrowing) animals that are underground during most of the day or year (e.g., small mammals or lizards) or have a life stage in the soil or on plants (e.g., amphibians, nesting birds, insects) could occur from encounters with vehicles or heavy equipment as many of these animals do not run away from construction vehicles/equipment and would most likely be killed. These species could be expected to experience direct mortality, injury, harassment, and displacement from increased human activity and vehicle/equipment travel if they are present onsite within the project footprint at the time of construction. Individual losses are more likely, especially during clearing and grubbing activities. Individuals could also be injured, disturbed, or killed from encounters with workers' or visitors' pets. Birds and bats could be injured or killed by electric lines and structures. Birds and bats could be injured or killed by electrocution from electric lines and structures. The loss of these animals could also affect other common and special-status wildlife that depend on them as prey. Construction-related direct impacts are considered a significant impact.

No special-status wildlife species were observed within the BSA during the biological surveys. However, the literature review and field surveys concluded that the following seven sensitive wildlife species have at least a low potential to occur within the BSA: American badger (*Taxidea taxus*), hoary bat (*Lasiurus cinereus*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), Nuttall's woodpecker (*Dryobates nuttallii*), Allen's hummingbird (*Selasphorus sasin*), and Cooper's hawk (see **Table 4.5-1**). Refer to **Appendix H**, *Special-Status Species Potential Occurrence Determination*, for a full analysis of the results of the wildlife inventory.

Listed Endangered, Threatened, and Candidate Wildlife:

There were no listed wildlife species that were either observed during the field survey or determined to have a potential to occur within the BSA. The BSA lacks suitable habitat to support any of the listed species that appeared in the literature search, and/or the BSA is outside of the geographic and elevational range of these species.

Sensitive Wildlife

Seven sensitive wildlife species were determined to have at least a low potential to occur in the BSA because of the BSA supports suitable habitat and/or the species has been documented recently (<20 years) within a 2-miles radius of the project site, according to CNDDB known occurrences data (CNDDB, 2022a). On the project site itself, there is suitable foraging habitat for Cooper's hawk and the other six sensitive wildlife species that have a low potential to occur in the BSA. In addition, there is suitable nesting, breeding and sheltering habitat for Cooper's hawk. Tree removal operations related to the project would destroy potential roosting and nesting habitat for Cooper's hawk; therefore it is anticipated that construction of the project could have a significant impact on Cooper's hawk and the other six sensitive wildlife species that have a low potential to occur in the BSA.

5.3.2 Indirect Impacts

Indirect impacts could occur within areas located adjacent to the limits of construction in the project footprint. Indirect impacts are more subtle than direct ones. Impacts may either be short-term related to construction or long-term and may affect populations and habitat quality over an extended period of time, long after construction activities have been completed. Examples of indirect impacts, such as mortality, injury, or harassment of common and special-status wildlife species that could potentially occur from the project include the following:

- The permanent loss of habitat and physical features that would occur from clearing and grading could indirectly impact wildlife species through the loss of foraging, roosting, denning, and/or breeding habitat available. Habitat loss could displace species from existing territories and reduce the home range of those species and impact nearby populations of similar species. Displaced species would then have to compete for and/or find new territories and compete for food with resident species. This could result in delayed nest building, fewer nest attempts, reduced clutch size, and an overall reduction in reproductive output.
- Project construction could result in temporary increased ambient noise levels, dust, vibration, lighting and/or human intrusion in and near habitat. This could disrupt natural foraging, roosting, denning, and/or breeding behavior of wildlife species. Wildlife species stressed by these factors may disperse from habitat in the project site and project vicinity. In addition, increased noise levels could interfere with territorial and mating vocalizations, thereby interfering with wildlife reproduction.
- Project construction could increase fugitive dust, pollution, runoff, siltation, sedimentation, and erosion. This could result in degradation and alteration of habitat and soils. Consequently, the ability of onsite and adjacent plant communities to support wildlife populations may decrease.
- Nighttime construction work and use of artificial lighting could disrupt natural foraging and breeding behaviors and/or alter wildlife movement patterns and migratory routes of nocturnally active species such as mammals and snakes. Most animals would attempt to avoid moving in or near the lighting; however, some animals such as insects, migratory birds, and bats might be attracted to the lighting, increasing construction-related mortalities. Artificial lighting could also indirectly affect wildlife by increasing detection by predators. The new development could also provide an increase in artificial lighting and glare which could disrupt nocturnal wildlife behavior.
- An increase of human activities within and adjacent to the project site could lead to mortality, injury, or harassment of wildlife species by providing food in the form of trash and litter or water which attracts predators such as the common raven (*Corvus corax*), northern raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), and coyote (*Canis latrans*).

Listed Endangered, Threatened, and Candidate Wildlife:

No indirect impacts to endangered, threatened, or candidate wildlife species are anticipated as a result of construction of the project.

Sensitive Wildlife

There are potential indirect impacts of construction of the project on foraging and/or nesting behavior of sensitive wildlife species that have a potential to occur throughout the BSA such as Cooper's hawk, Nuttall's woodpecker, pallid bat, western mastiff bat, and hoary bat. These species

would likely lose foraging habitat as a result of construction of the project. However, these species are highly mobile and have access to suitable foraging habitat near the site and thus neither species would experience significant impacts from this loss of foraging habitat.

5.3.3 Mitigation Measures

Listed Endangered, Threatened, and Candidate Wildlife:

Listed wildlife are not anticipated to be impacted; therefore, no mitigation measures are required.

Sensitive Wildlife

Cooper's hawk, a sensitive wildlife species, could potentially be directly impacted by construction and project development by loss of potential nesting habitat; therefore, mitigation is recommended. In order to avoid removal of an active Cooper's hawk nest during tree removal operations, a nesting pre-construction nesting bird survey needs to be implemented to identify and protect any such nests. Mitigation measure **BIO-1** (**MM BIO-1**) detailed in **Section 6**, *Mitigation Measures*. Implementing **MM BIO-1** will help to minimize or avoid impacts to sensitive wildlife that could potentially occur within the BSA.

Significance criterion: *impacts would be considered significant if the project were to 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.*

Listed Endangered, Threatened, and Candidate Wildlife:

The project is not anticipated to have direct or indirect impacts to listed wildlife. In regard to the significance criterion, the project is anticipated to have no substantial adverse effect, either directly or through habitat modifications, on any species identified as an endangered, threatened, or candidate endangered or threatened species under either ESA or CESA.

No Impact.

Sensitive Wildlife:

Construction of the project, including tree removal operations, would potentially have a substantial adverse effect on Cooper's hawk by potentially removing nesting habitat. Implementing **MM BIO-1**, which requires a pre-construction nesting bird survey and protections of any active nests of Cooper's hawk or other protected bird species observed during such a survey, will help to avoid, eliminate or reduce impacts to sensitive wildlife to a less than significant level.

Less than Significant Impact with Mitigation Incorporated.

5.4 POTENTIAL IMPACTS TO BREEDING BIRDS

The BSA supports large trees or other physical features that could potentially provide foraging, nesting, and cover habitat to support some bird species (year-round residents, seasonal residents, and migrants). Although no nesting behavior or nests were observed during the field survey, it is possible that some of the birds observed during the surveys such as Anna's hummingbird and red-

tailed hawk could potentially breed within the BSA are protected by the MBTA and Fish and Game Code § 3503, § 3503.5, and § 3513. The statutes make it unlawful to take native breeding birds, and their nests, eggs, and young.

5.4.1 Direct Impacts

Activities which are most likely to result in take of migratory birds during the breeding bird season when eggs or young are likely to be present include, but are not limited to clearing or grubbing of bird nesting habitat, structure demolition, or vegetation trimming or clearing. The project has a potential to directly take individual breeding birds, their nests, young, or eggs; therefore, mitigation is required.

5.4.2 Indirect Impacts

Indirect impacts to breeding birds could occur from increased noise, vibration, lighting and dust during construction, which could adversely affect the breeding behavior of some birds and lead to the loss (take) of eggs and chicks, or nest abandonment. The project has a potential to indirectly affect individual breeding birds, their nests, young, or eggs; therefore, mitigation is required.

5.4.3 Mitigation Measures

Implementing **MM BIO-1**, which requires a pre-construction nesting bird survey and the resulting protection of any active nest of protected breeding bird species discovered during the survey, would help to avoid, eliminate or reduce potential impacts to breeding birds, their nests, young, or eggs. This mitigation measure is detailed in **Section 6**. Implementation of **MM BIO-1** will minimize the risk of nest loss during tree removal and ground-disturbing activities.

5.4.4 Impact Determination

Project construction is not expected to cause impacts to bird species that only forage at the site or occur as transient visitors. Direct and indirect impacts to breeding birds, their nests, young, or eggs could potentially occur as a result of construction of the project. Implementing **MM BIO-1** will help to avoid, eliminate or reduce significant impacts to breeding birds, their nests, young, or eggs to less than significant levels; therefore, it is anticipated that the project may impact breeding birds, their nests, young, or eggs, but the impacts will be less than significant with implementation of **MM BIO-1.**

Less than Significant Impact with Mitigation Incorporated.

5.5 POTENTIAL IMPACTS TO WATERS OF THE U.S. OR STATE (JURISDICTIONAL WATERS/WETLANDS)

The literature review and reconnaissance-level biological survey determined that there are no waters of the U.S. or State (i.e., jurisdictional waters/wetlands) in the BSA.

5.5.1 Direct or Indirect Impacts

No direct or indirect impacts to waters of the U.S. or State are anticipated as a result of construction of the project.

5.5.2 Mitigation Measures

Waters of the U.S. or State are not anticipated to be impacted by construction of the project; therefore, no mitigation measures are required.

5.5.3 Impact Determination

Significance criterion: *impacts would be considered significant if the project were to have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

The project is not anticipated to have direct or indirect impacts to Waters of the U.S. or State. **No Impact**.

5.6 POTENTIAL IMPACTS TO CRITICAL HABITAT

The BSA is not located within any designated critical habitat. The nearest USFWS-designated critical habitat to the BSA is for coastal California gnatcatcher (*Polioptila californica californica*), which is located approximately 1.3 miles south of the BSA (USFWS, 2022a, b, e; CDFW, 2022c).

5.6.1 Direct and Indirect Impacts

No direct or indirect impacts to designated critical habitats are anticipated as a result of construction of the project.

5.6.2 Mitigation Measures

Critical habitats are not anticipated to be impacted; therefore, no mitigation measures are required.

5.6.3 Impact Determination

Significance criterion: *impacts would be considered significant if the project were to 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.*

No critical habitat occurs within the BSA. **No Impact**.

5.7 POTENTIAL IMPACTS TO WILDLIFE CORRIDORS OR NATIVE WILDLIFE NURSERY SITES

The literature review and field surveys determined that the project site does not contain regional wildlife corridors or native wildlife nursery sites.

5.7.1 Direct and Indirect Impacts

Species that are less restricted in movement and/or are well-adapted to urbanized areas such as raccoon, skunk, coyote, and birds likely move through areas in the BSA. The project area and a portion of the BSA support habitat, including movement habitat, are suitable wildlife movement corridors for species on a local scale.

The literature review and field survey determined that the BSA likely functions as hunting and foraging area for several native wildlife species, as well as a movement corridor.

5.7.2 Direct and Indirect Impacts

No direct or indirect impacts to native wildlife nursery sites are anticipated as a result of construction of the project.

The project would result in direct and indirect impacts to local wildlife movement within the BSA; however, because the BSA and surrounding areas are also suitable hunting, foraging, and movement corridors, species adapted to urban areas (e.g., coyote, raccoon, skunk) would be expected to persist in the project area following construction.

5.7.3 Mitigation Measures

Potential impacts to wildlife corridors and native wildlife nursery sites are anticipated to be less than significant due to the adaptability of the species most likely to use the area; therefore, no mitigation measures are required.

5.7.4 Impact Determination

Significance criterion: *impacts would be considered significant if the project were to 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.*

The literature review and field survey determined that the BSA does not contain a large, recognized wildlife corridor such as a CDFW Essential Connectivity Area, Natural Landscape Block, or Small Natural Area (CDFW, 2022c). Moreover, the BSA does not support resident or migratory fish species; however, it may provide breeding habitat for several native migratory bird, mammal and reptile species.

Predators (e.g., coyotes) and smaller mammals (e.g., raccoons [*Procyon lotor*] and striped skunks [*Mephitis mephitis*]) are known to use medium- to low-density residential neighborhoods, golf courses, and washes for hunting and foraging, using washes (natural and channelized), culverts, underpasses, and city streets for travelling, often but not necessarily limited to overnight hours when human activity decreases (Baker and Timm 1998, Grubbs and Krausman 2009, Ng et. al. 2004). Urban areas provide a unique ecosystem with ecological opportunity in the form of anthropogenic food sources such as discarded human food, pet food, human-associated fruits, and domestic animals (Larson et. al. 2020). Observations recorded during the biological surveys and examination of aerial imagery indicate that the BSA acts as a hunting and foraging area and the BSA and surrounding areas are suitable movement corridors. **Less Than Significant Impact**.

5.8 POTENTIAL IMPACTS TO LOCAL POLICIES OR ORDINANCES

Construction of the project will cause impact to on-site trees, which are a biological resource protected under Chapter 18.162 *Tree Preservation* (tree preservation ordinance) of the City's municipal code (City of San Dimas, 2006). These trees are not already protected by more stringent federal or state regulations. Refer to **Appendix C**, *Arborist Report*, for a complete summary of the results and findings of the tree survey.

5.8.1 Direct and Indirect Impacts

Because the removal of all on-site trees is proposed by the project proponent to accommodate the construction of the proposed warehouse, it is anticipated that there will be direct impacts to all of the on-site trees, including the 17 mature significant trees proposed for removal, and protected under the City's tree preservation ordinance.

5.8.2 Mitigation Measures

In accordance with the City's tree preservation ordinance, every mature significant tree that is removed must be replaced with two 15-gallon box trees; the replacement trees need to be planted on-site. **Table 5.8-1** indicates the number of existing mature significant trees occur on site and the corresponding number per species of replacement trees that need to be planted on site to meet the requirements of the City's tree preservation ordinance.

Table 5.8-1

TREE REPLACEMENT REQUIREMENTS FOR REMOVAL TREES

Common Name	Botanical Name	Number of Mature Significant Trees Proposed for Removal	Number of Replacement Trees (15-gallon box minimum)
Bishop pine	*Pinus muricata*	1	2
Pepper tree	*Schinus molle*	11	22
Mexican fan palm	*Washingtonia robusta*	1	2
Carrotwood	*Cupaniopsis anacardioides*	1	2
White ash	*Fraxinus americana*	3	6
Total		17	34

5.8.3 Impact Determination

Significance criterion: *Impacts would be considered significant if the project were to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

The literature review and tree survey determined that construction of the project is anticipated to have significant impact on mature significant trees protected by the City's municipal ordinance, the impacts to mature significant trees will be reduced to less than significant with the implementation of mitigation measure **BIO-2** detailed in **Section 6.2**: **Less Than Significant With Mitigation Incorporated.**

5.9 POTENTIAL IMPACTS TO HABITAT CONSERVATION PLANS

The BSA is not within the jurisdiction of an HCP or NCCP.

5.9.1 Direct and Indirect Impacts

There are no anticipated conflicts to HCPs or NCCPs as a result of construction of the project.

5.9.2 Mitigation Measures

Because there are no conflicts with any HCP, NCCP, other approved local, regional, or state habitat conservation plan; no mitigation measures are required.

5.9.3 Impact Determination

Significance criterion: *impacts would be considered significant if the project were to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

In regard to the significance criterion, the project is not anticipated to conflict with HCPs, NCCPs, or other approved local, regional, or state habitat conservation plan : **No Impact.**

6.0 MITIGATION MEASURES

CEQA states that "mitigation measures are not required for effects which are not found to be significant" (§ 15126.4[a][3]). Therefore, no mitigation measures are proposed for impacts to biological resources that are less than significant. However; if significant impacts to biological resources are identified, then possible mitigation measures are recommended to minimize or avoid the level of the impacts to less than significant levels. There are several forms of mitigation. Under CEQA (§ 15370), "mitigation" includes all of the following:

- "Avoiding" the impact altogether by not taking a certain action or parts of an action.
- "Minimizing" impacts by limiting the degree or magnitude of the action and its implementation.
- "Rectifying" the impact by repairing, rehabilitating, or restoring the impacted environment.
- "Reducing" or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- "Compensating" for the impact by replacing or providing substitute resources or environments.

The following mitigation measures would help to avoid, eliminate or reduce direct or indirect impacts to biological resources to less than significant levels and to comply with all appropriate environmental laws, ordinances, policies, regulations, and management plans.

6.1 BIO 1: PRE-CONSTRUCTION BREEDING BIRD SURVEY

To comply with the MBTA and Fish and Game Code, and to avoid impacts or take of migratory non-game breeding birds, their nests, young, and eggs, the following measures will be implemented. The measures below will help to reduce direct and indirect impacts caused by construction on migratory non-game breeding birds to less than significant levels.

- Project activities that will remove or disturb potential nest sites, such as open ground, trees, shrubs, grasses, burrows, during the breeding season would be a potential significant impact if migratory non-game breeding birds are present. Project activities that will remove or disturb potential nest sites will be scheduled outside the breeding bird season to avoid potential direct impacts to migratory non-game breeding birds protected by the MBTA and Fish and Game Code. The breeding bird nesting season is typically from February 15 through September 15, but can vary slightly from year to year, usually depending on weather conditions. Removing all physical features that could potentially serve as nest sites will also help to prevent birds from nesting within the project site during the breeding season and during construction activities.
- If project activities cannot be avoided during February 15 through September 15, a qualified biologist will conduct a pre-construction breeding bird survey for breeding birds and active nests or potential nesting sites within the limits of project disturbance. The survey will be conducted at least seven days prior to the onset of scheduled activities, such as mobilization and staging. It will end no more than three days prior to vegetation, substrate, and structure removal and/or disturbance.

- If no breeding birds or active nests are observed during the pre-construction survey or they are observed and will not be impacted, project activities may begin and no further mitigation will be required.

- If a breeding bird territory or an active bird nest is located during the pre-construction survey and will potentially be impacted, the site will be mapped on engineering drawings and a no activity buffer zone will be marked (fencing, stakes, flagging, orange snow fencing, etc.) a minimum of 100 feet in all directions or 500 feet in all directions for listed bird species and all raptors. The biologist will determine the appropriate buffer size based on the type of activities planned near the nest and the type of bird that created the nest. Some bird species are more tolerant than others of noise and activities occurring near their nest. The buffer zone will not be disturbed by construction or other activity until a qualified biologist has determined that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by project activities. Periodic monitoring by a biologist will be performed to determine when nesting is complete. Once the nesting cycle has finished, project activities may begin within the buffer zone.

- If listed bird species are observed within the project site during the pre-construction survey, the biologist will immediately map the area and notify the appropriate resource agency to determine suitable protection measures and/or mitigation measures and to determine if additional surveys or focused protocol surveys are necessary. Project activities may begin within the area only when concurrence is received from the appropriate resource agency.

- Birds or their active nests will not be disturbed, captured, handled or moved. Active nests cannot be removed or disturbed; however, nests can be removed or disturbed if determined inactive by a qualified biologist.

6.2 BIO 2: MATURE SIGNIFICANT TREE REPLACEMENT MEASURES

There are 19 trees on the project site that are designated as mature significant trees as per the City's tree preservation ordinance (City of San Dimas, 2006), 17 of which are proposed for removal. The following species and number per species of mature significant trees are proposed for removal: one bishop pine, eleven pepper tree, three white ash, one Mexican fan palm, and one carrotwood.

Section 18.162.060 *Conditions Imposed* of the tree preservation ordinance states that mature significant trees must be replaced using a two-to-one ratio with trees that are 15-gallon box trees, or other replacement of equivalent value and size, or as the City deems appropriate. It further states that the replacement trees will be planted within the project site, unless the City approves off-site planting. Thus, to replace the 17 mature significant trees that will be removed during construction of the project, the project proponent will plant 34 fifteen-gallon box trees on the project site. All replacement trees need to be maintained by the project proponent for two years and all other monitoring and maintenance requirements of this section of the tree preservation ordinance must be followed. Furthermore, granting of the tree removal permit is contingent upon meeting the conditions of Section 18.162. 070 *Required Findings*, of the tree preservation ordinance.

All trees will be planted after ground-disturbing activities such as grading, clearing, disking, grubbing, excavation, trenching, paving, mowing, heavy equipment compacting, and most of the construction activities have finished in the planting areas. Trees will be irrigated and maintained following BMPs for tree planting and care. A qualified landscape supervisor will observe the tree

planting activities and document the tree health and survivorship during the planting period and the following two-year establishment period. If any replacement trees die or are declared unhealthy by a certified arborist during the period of two years following their initial planting, the dead or diseased trees shall consequently be removed and replaced at the cost of the project proponent as per the guidelines set forth in Section 18.162.100 *Tree Maintenance* of the tree preservation ordinance.

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7.0 PERMITS AND APPROVALS

The City's tree preservation ordinance requires that no mature significant trees shall be removed or relocated on an undeveloped property without first submitting an arborist report and obtaining a tree removal permit from the city's Development Services, Planning Division. Prior to the commencement of ground-disturbing activities such as excavation and grading, the project proponent will submit a Tree Removal Permit Application which will include all of the required reporting and documentation specified in the tree preservation ordinance. No ground-disturbing activities will commence until final approval of the removal permit has been granted by the City.

8.0 REFERENCES

Baker, R. O, & Timm, R. M. 1998. Management of conflicts between urban coyotes and humans in Southern California. Proceedings of the Vertebrate Pest Conference, 18. http://dx.doi.org/10.5070/V418110164. Retrieved from https://escholarship.org/uc/item/5064c0n7.

Bolster, B.C., 1998. Terrestrial Mammal Species of Special Concern in California.

Calflora, 2022. Information on California plants for education, research and conservation. Observation Search. Available at https://www.calflora.org/entry/observ.html.

Cal-IPC (California Invasive Plant Council). 2006. California Invasive Plant Inventory. Cal-IPC Publication 2006-02. California Invasive Plant Council: Berkeley, CA.

City of San Dimas, 1991. San Dimas, California, Municipal Code Title 18, Zoning, Chapter 18.128 *Industrial Zones*. Available at http://file.lacounty.gov/SDSInter/acwm/216023_SanDimasMC.pdf. Accessed on January 7, 2022.

City of San Dimas, 2006. San Dimas, California, Municipal Code Title 18, Zoning, Chapter 18.162 *Tree Preservation*. Available at http://file.lacounty.gov/SDSInter/acwm/216023_SanDimasMC.pdf. Accessed on January 7, 2022.

CDFW (California Department of Fish and Wildlife). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. California Natural Resources Agency, CDFW. March 20, 2018.

CDFW. 2022a. California Natural Community List. Accessed on January 11, 2022. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline

CDFW. 2022b. California Wildlife Habitat Relationships Life History Accounts and Range Maps. Retrieved from https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range. Retrieved on January 20, 2022.

CDFW. 2022c. BIOS Habitat Connectivity Viewer. Accessed at ftp://ftp.dfg.ca.gov/BDB/GIS/BIOS/Habitat_Connectivity/. Accessed on January 20, 2022.

CIMIS (California Irrigation Management Information System). 2022. Monthly Report for Station 78 (January 1, 1990 – January 1, 2022). Available at https://cimis.water.ca.gov/Default.aspx. Downloaded on September 6, 2022.

CNDDB (California Natural Diversity Database), 2022a. RareFind 5 (internet) California Department of Fish and Wildlife (5.2.14). Available at https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed on January 5, 2022.

CNDDB (California Natural Diversity Database), 2022b. Natural Diversity Database. July 2022. Special Animals List. California Department of Fish and Wildlife. Sacramento, CA. Available at. Last accessed on July 28, 2022.

CNPS (California Native Plant Society), 2022a. Rare Plant Program. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available at http://www.rareplants.cnps.org. Accessed on January 5, 2022.

CNPS. 2022b. A Manual of California Vegetation, Online Edition. California Native Plant Society, CA. 1300 pp. Retrieved from: http://www.cnps.org/cnps/vegetation/. Accessed on January 4, 2022.

Cornell Lab of Ornithology. 2022. All About Birds. Cornell Lab of Ornithology, Ithaca, New York. Available at https://www.allaboutbirds.org Accessed on June 20, 2022

Curtis, K.E. and R.W. Lichvar. 2010. Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. Wetland Regulatory Assistance Program. Cold Regions Research and Engineering Laboratory. U.S. Army Engineer Research and Development Center, Hanover, New Hampshire.

eBird. 2022. Cornell Lab of Ornithology. All About Birds. Cornell Lab of Ornithology, Ithaca, New York. Available at https://www.allaboutbirds.org Accessed on January 11, 2022.

eFlora. 2022. Jepson Flora Project (eds.) Available at http://ucjeps.berkeley.edu/eflora/. Accessed on January 12, 2022

Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Technical Report Y-87-1. Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station. Retrieved from: http://el.erdc.usace.army.mil/wetlands/pdfs/wlman87.pdf

Google Earth V 7.3.3.7721. 2021. San Dimas, Los Angeles County, California, U.S.A. 34 07'05.34", 117°48.43.49", eye alt 4,052 feet. Available at https://www.google.com/earth/. Accessed on January 4, 2022.

Grubbs, Shannon E., and Paul R. Krausman. 2009. Use of urban landscape by coyotes. The Southwestern Naturalist 54(1):1-12. March 2009

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, Nongame Heritage Program, California Department of Fish & Game, Sacramento, Calif. 156 pp.

Howell, D. J. 1980. Adaptive variation in diets of desert bats has implications for evolution of feeding strategies. J. Mammal. 61:730-733.

Jameson E.W. Jr and Peeters H.J. 1988. California Mammals. Berkley (CA): University of California Press

Larson, Rachel N., Justin L. Brown, Tim Karels, and Seth P,D. Riley. 2020. Effects of urbanization on resource use and individual specialization in coyotes (Canis latrans) in southern California. PLoS ONE 15(2): e0228881. https://doi.org/10.1371 /journal.pone.0228881.

Lichvar, R. W and S. M. McColley. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual. Cold Regions Research and Engineering Laboratory. U.S. Army Engineer Research and Development Center, Hanover, New Hampshire.

Ng, Sandra J., Jim W. Dole, Raymond M. Sauvajot, Seth P.D. Riley, and Thomas J. Valone. 2003. Use of highway undercrossings by wildlife in southern California. Biological Conservation 115 (2004) 499–507.

Sawyer et al., J.O., T. Keeler-Wolf, J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society Press. Sacramento, CA. 1300 pp.

Soil Survey Staff, 2022. Natural Resources Conservation Service, United States Department of Agriculture, Web Soil Survey: Custom Soil Resource Report, California. Available at https://websoilsurvey.sc.egov.usda.gov/. Downloaded on January 4, 2022.

Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento

USACE (United States Army Corps of Engineers). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), Page 2, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

USACE. 2020. National Wetland Plant List, version 3.5. Retrieved from: **http://wetland-plants.usace.army.mil/**. Accessed on August 2, 2022.

USDA (United States Department of Agriculture). 2017. Official Soil Series Description Tujunga Series. Available online at: https://soilseries.sc.egov.usda.gov/OSD_Docs/T/TUJUNGA.html/ Accessed on January 30, 2022.

USDA-NRCS (United States Department of Agriculture National Resources Conservation Service). 2022. Soil Data Access (SDA) Hydric Soils List. Available at https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316619.html. Accessed on January 30, 2022.

USEPA, 2022. EPA Waters GeoViewer. Available at https://www.epa.gov/waterdata/waters-geoviewer. Accessed on January 29, 2022.

USFWS. 2022a. Information for Planning, and Consultation (IPaC), IPaC Resource List. January 22, 2022. Retrieved from http://ecos.fws.gov/ipac/ Accessed on January 23, 2022.

USFWS. 2022b. Carlsbad Fish and Wildlife Office. Official Species List: Consultation Code: 083CAR00-2022-SLI-0369. Carlsbad, California. Retrieved from http://ecos.fws.gov/ipac/. Accessed on January 22, 2022.

USFWS. 2022c. USFWS ECOS: Environmental Conservation Online System Species Reports. Available at https://ecos.fws.gov/ecp/species-reports. Accessed on January 29, 2022.

USFWS. 2022d. National Wetlands Inventory (NWI) website, National Wetlands Mapper. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Retrieved from https://www.fws.gov/wetlands/. Accessed on January 29, 2022.

USFWS. 2022e. USFWS Critical Habitat Portal. Retrieved from http://ecos.fws.gov/crithab/. Latest database search conducted on January 29, 2022

USGS (United States Geological Survey). 2022. National Hydrography Dataset. Available at https://apps.nationalmap.gov/viewer/. Accessed on January 28, 2022.

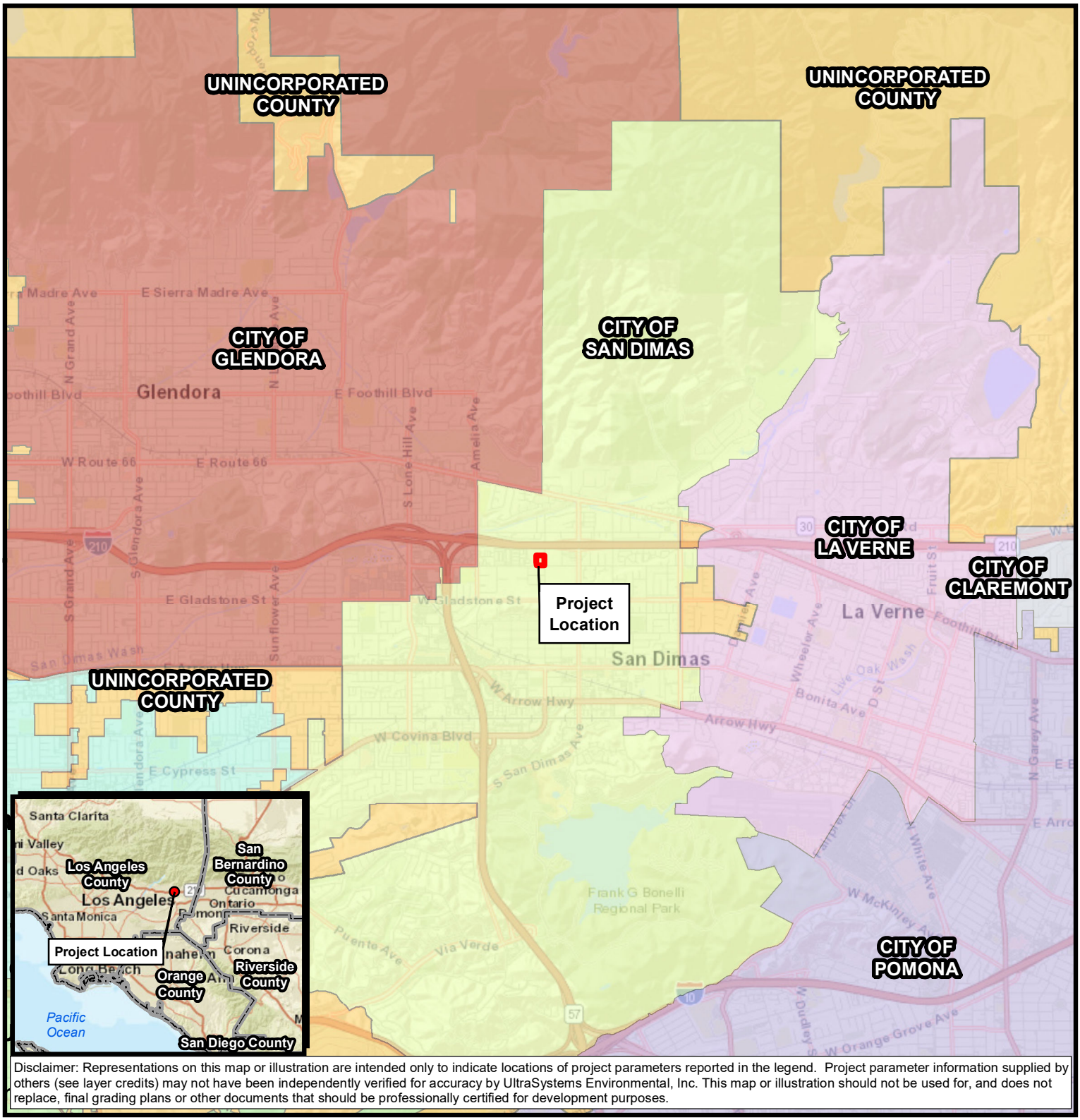
WBWG (Western Bat Working Group). 2005. WBWG News: Volume 1, Issue 1. Available at: http://wbwg.org/wp-content/uploads/2015/03/December-2005.pdf Accessed on January 14, 2022.

WRCC, 1901-1972 - Western U.S. Climate Historical Summaries, Western Regional Climate Center. Azusa City PK FC 143, CALIFORNIA (040410) https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca0410. Accessed January 12, 2022.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart of Fish and Game, Sacramento, California

APPENDIX A

Figures



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Path: \\GISSVR\gis\Projects\7091_SanDimas_Allen_Cataract_Warehouse_ISMND\MXDs\7091_SanDimas_3_0_Project_Vicinity_2021_10_06.mxd
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October 06, 2021

Scale: 1:63,360

N

Legend

Project Boundary

Allen/Cataract Warehouse Project

Project Vicinity
Figure 1

0 0.5 1 Miles

0 0.5 1 Kilometers

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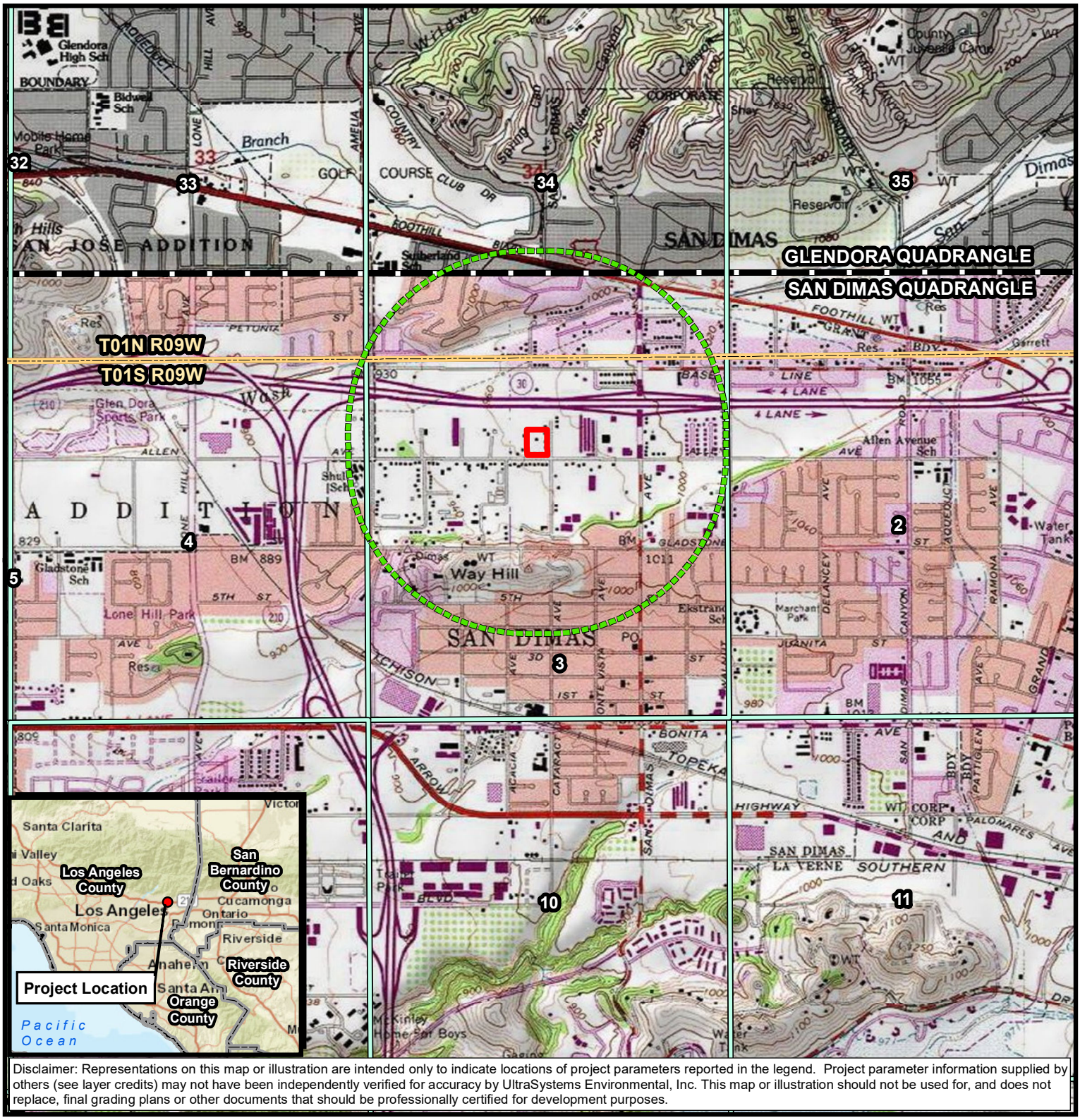

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Path: \\GISSVR\gis\Projects\7091_SanDimas_Allen_Cataract_Warehouse_ISMND\MXDs\7091_SanDimas_4_5_Cul_Topo_2021_10_05.mxd

October 06, 2021

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Scale: 1:24,000

N

0 1,000 2,000 Feet

0 250 500 Meters

Legend

- Project Boundary
- Half-Mile Radius
- Quadrangle Boundary
- Township Boundary
- Section Boundary

Allen/Cataract Warehouse Project

Topographic Map
USGS Quadrangle: San Dimas
Township: 1S Range: 9W
Section: 3
Figure 2

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Allen/Cataract Warehouse Project

Legend

Project Boundary

500ft Biological Study Area (BSA)

Key Map

0 80 160 Feet

0 10 20 Meters

N

Scale: 1:1,800

Project Boundary and Biological Study Area (BSA)

Figure 3

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Date

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Path: \\GISSVR\gis\Projects\7091_SanDimas_Allen_Cataract_Warehouse_ISMND\MXDs\BIO\7091_San_Dimas_Project_Location_BSA_2022_01_03.mxd

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community; UltraSystems Environmental, Inc., 2022.

Allen/Cataract Warehouse Project

Legend

- Project Location
- 2-Mile Radius

Common Name, Scientific Name

- Parry's spineflower, *Chorizanthe parryi var. parryi*
- Plummer's mariposa-lily, *Calochortus plummerae*
- Riversidian Alluvial Fan Sage Scrub, *Riversidian Alluvial Fan Sage Scrub*
- Southern Coast Live Oak Riparian Forest, *Southern Coast Live Oak Riparian Forest*
- Chaparral ragwort, *Senecio aphanactis*
- Many-stemmed dudleya, *Dudleya multicaulis*
- Mesa horkelia, *Horkelia cuneata var. puberula*
- Thread-leaved brodiaea, *Brodiaea filifolia*

Key Map

0 1,250 2,500 Feet

0 200 400 Meters

N

Scale: 1:30,000

CNDDB Known Occurrences Plant Species and Habitats

Figure 4

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Date

Path: \\GISSVR\gis\Projects\7091_SanDimas_Allen_Cataract_Warehouse_ISMND\MXDs\BIO\7091_SanDimas_CNDDB_Plant_2022_01_04.mxd

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Allen/Cataract Warehouse Project

Legend

- Project Location
- 2-Mile Radius

Common Name, Scientific Name

- American badger, *Taxidea*
- Coast Range newt, *Taricha*
- Coastal California gnatcatcher, *Polioptila californica californica*
- Hoary bat, *Lasiurus cinereus*
- Pallid bat, *Antrozous pallidus*
- Two-striped gartersnake, *Thamnophis hammondii*
- Western mastiff bat, *Eumops perotis californicus*

Key Map

0 1,250 2,500 Feet

0 200 400 Meters

N

Scale: 1:30,000

CNDDB Known Occurrences Wildlife Species

Figure 5

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Date

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Path: \\GISSVR\gis\Projects\7091_SanDimas_Allen_Cataract_Warehouse_ISMND\MXDs\BIO\7091_SanDimas_CNDDB_Wildlife_2022_01_04.mxd

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community; CDFW, December 2021; UltraSystems Environmental, Inc., 2022.

Allen/Cataract Warehouse Project

Legend

Project Boundary

500ft Biological Study Area

Soil Map Unit

1003-Urban land-Palmview-Tujunga, gravelly complex, 2 to 9 percent slopes

Key Map

0 75 150 Feet

0 20 40 Meters

N

Scale: 1:1,800

USDA Soils

Figure 6

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Path: \\Gissvr\gis\Projects\7091_SanDimas_Allen_Cataract_Warehouse_ISMND\MXDs\BIO\7091_SanDimas_4_4_Soil_11x17_2022_02_14.mxd

February 14, 2022

Allen/Cataract Warehouse Project

Legend

- Project Boundary
- 500ft Biological Study Area

Land Cover Type

- Urban Developed/Ornamental
- Non-Native Grassland
- *Schinus (molle, terebinthifolius)* – *Myoporum laetum* Forest & Woodland Semi-Natural Alliance

Key Map

0 75 150 Feet

0 20 40 Meters

N

Scale: 1:1,800

Land Cover Types

Figure 7

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Date

Path: \\GISSVR\gis\Projects\7091_SanDimas_Allen_Cataract_Warehouse_ISMND\MXDs\BIO\7091_San_Dimas_4_4_Land_Cover_2022_01_19.mxd

Allen/Cataract Warehouse Project

Legend

- Project Location
- 5-Mile Radius
- Natural Landscape Block
- Essential Connectivity Area
- Small Natural Areas
- Potential Riparian Connections

LINKAGE TYPE, NAME

- Missing Link, San Gabriel River
- Linkage Network of the California Desert

Key Map

0 0.625 1.25 Miles

0 0.6 1.2 Kilometers

N

Scale: 1:79,200

CDFW Wildlife Corridors

Figure 8

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environmental • management • planning

February 10, 2022

Path: \\Gissvr\gis\Projects\7091_SanDimas_Allen_Cataract_Warehouse_ISMND\MXDs\BIO\7091_SanDimas_4_4_Wildlife_Corridors_2022_02_10.mxd

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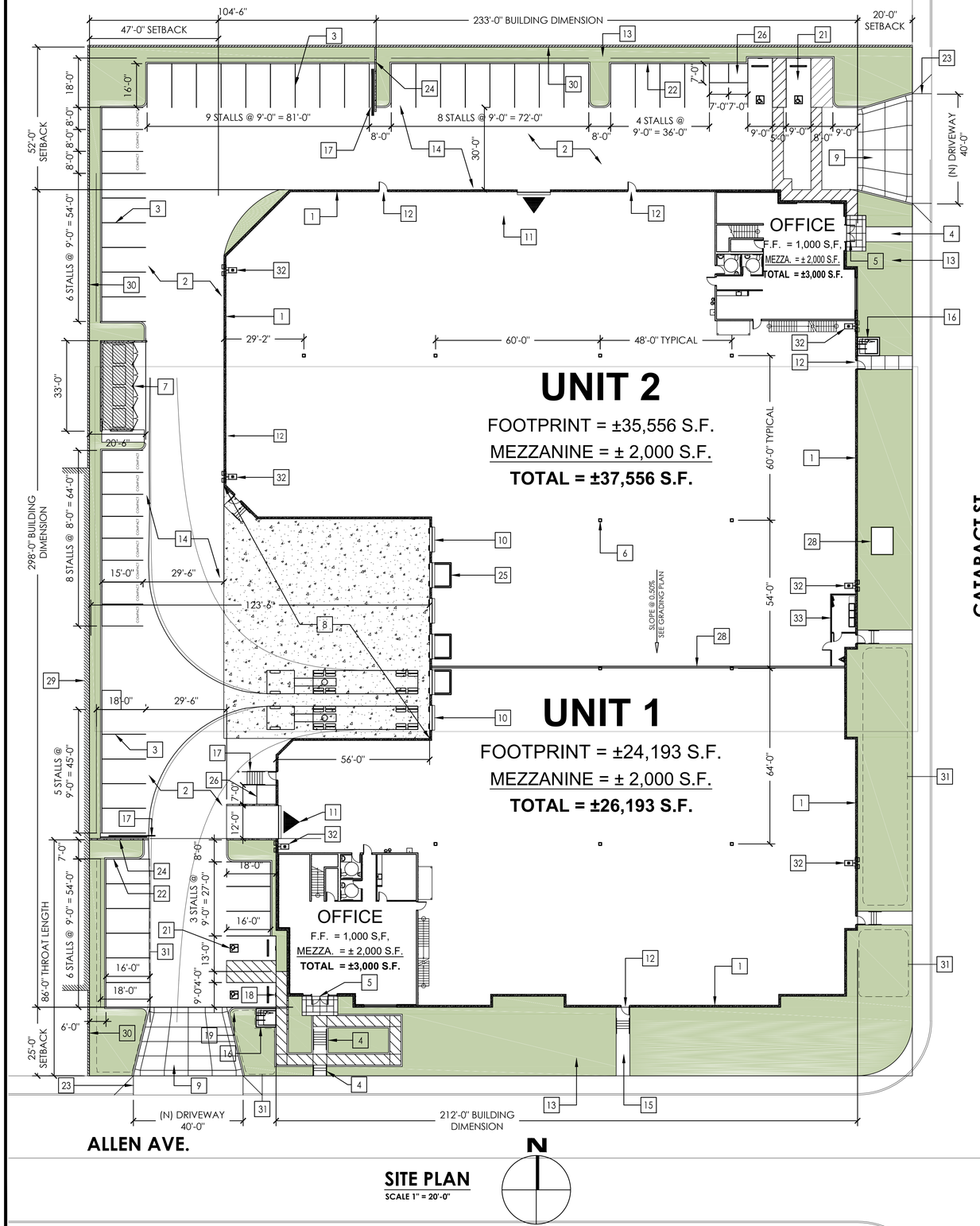
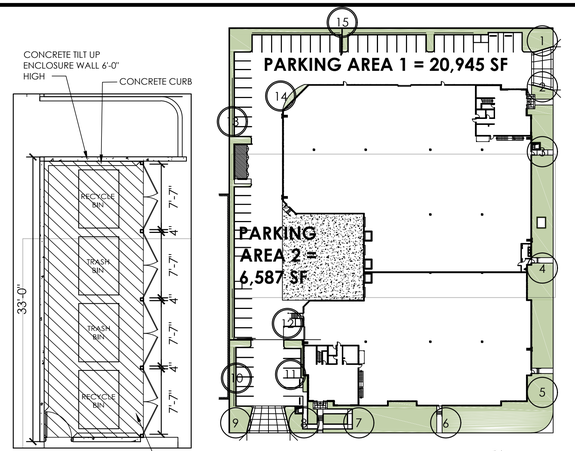
APPENDIX B

SITE PLANS



SITE PLAN
SCALE 1" = 20'-0"



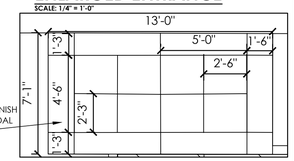
NOTE:
THE TRASH ENCLOSURE SHALL BE GRADED SO THAT STORAGE CONTAINERS REMAIN AT REST WITHOUT AUXILIARY RESTRAINING DEVICES.

KEY PLAN
NOT TO SCALE

3. ENLARGED TRASH ENCLOSURE PLAN
SCALE - 1/8" = 1'-0"

TOP-CAST MEDIUM FINISH CONCRETE, CHARCOAL COLOR

ENLARGED ENTRANCE
SCALE: 1/4" = 1'-0"



SITE


VICINITY MAP
NOT TO SCALE

CITY OF SAN DIMAS NOTES:

1. ALL UTILITIES ON THE SITE SHALL BE INSTALLED UNDERGROUND.

KEY NOTES:

1	CONCRETE TILT-UP WALL
2	A.C. PAVING
3	PARKING STALL STRIPING (PER CITY OF SAN DIMAS STDS.) TYPICAL
4	ACCESSIBLE PATH OF TRAVEL, 48" WIDE (MIN.)
5	BUILDING ENTRANCE. PROVIDE A 4" SQ. DISABLED ACCESSIBILITY SIGN
6	STEEL COLUMNS, TYPICAL
7	TRASH ENCLOSURE, MIN. 6' HIGH SCREEN WALLS WITH METAL DOORS-SEE (1-TRASH/1-RECYCLE BIN) PER CITY OF INDUSTRY STANDARDS
8	CONCRETE TRUCKWELL PER STRUCTURAL DRAWINGS
9	ENHANCED PAVEMENT, TOP CAST MEDIUM FINISH CONCRETE CHARCOAL COLOR, SCORE LINES PER PLAN
10	9' X10' TRUCK DOOR (DOCK HIGH), TYPICAL
11	12' X14' TRUCK DOOR (GRADE LEVEL) TYPICAL
12	3'X7' MAN DOOR (TYPICAL)WITH 60"x60" LANDING, TYPICAL
13	LANDSCAPE W/AUTOMATIC IRRIGATION SYSTEM
14	28'-0" WIDE MIN. & CLEAR TO THE SKY FIRE LANE W/ FIRE TRUCK TURNABOUT STRIPED PER FIRE DEPARTMENT STANDARDS
15	CONCRETE WALKWAY, TYPICAL
16	(2) BICYCLE RACK (PARKS 5 BICYCLE EA.) MODEL #2290-05S AS MANUF. BY PARK*RITE.
17	8'-HIGH BI PART TELESCOPING SLIDING WROUGHT IRON GATE
18	VAN ACCESSIBLE PARKING SIGN
19	WARNING SIGN FOR ALL DRIVEWAY ACCESSIBLE PARKING
20	CONCRETE BUMPER, TYPICAL SEE
21	9'X18' MIN. ACCESSIBLE PARKING STALL W/ ALL SYMBOLS, SIGNS, RAMPS AS REQUIRED TO MEET TITLE 24 AND ADA REQUIREMENTS
22	6" MIN. HIGH CONCRETE CURB, TYPICAL
23	NEW DRIVE APPROACH PER CITY OF SAN DIMAS STANDARDS. 6" MIN. THICK, 3500 PSI FINISHED ON EXPOSED AGGREGATE.
24	10'-0" HIGH CONCRETE TILT UP SCREEN WALL TO MATCH BUILDING, SEE ELEVATIONS
25	DOCK LEVELER
26	7' X 7' MOTORCYCLE PARKING
27	DEMISING WALL
28	PROPOSED LOCATION OF TRANSFORMER PAD COMPLETELY SCREENED BY LANDSCAPE
29	EXISTING BUILDING ADJACENT TO PROPERTY LINE
30	EXISTING MASONRY WALL ALONG PROPERTY LINE, SHARED WITH ADJACENT LOTS
31	PROPOSED LOCATION OF RUN-OFF CONTAINMENT, INFILTRATION BASINS
32	PROPOSED LOCATION OF INTERIOR ROOF DRAIN
33	PROPOSED LOCATION OF MECHANICAL ROOM

LANDSCAPE CALCS

LANDSCAPED AREA REQUIRED 25' SETBACK ON ALLEN 20' SETBACK ON CATARACT 10% OF THE PARKING AREA	TOTAL LANDSCAPED AREA PROVIDED = 15,709 S.F. AGGREGATE PLANTER AREAS
PARKING AREA 1 = 20,945 S.F. PARKING AREA 2 = 6,587 S.F. **TOTAL AREA = 27,532 S.F.**	REQUIRED PARKING LANDSCAPED AREA = 2,753 S.F.
	PARKING LANDSCAPED AREA PROVIDED = 3,327 S.F.

PLANTER TABULATION

SETBACK PLANTER		PARKING PLANTER	
AREA 1 =	397 S.F.	AREA 10 =	491 S.F.
AREA 2 =	207 S.F.	AREA 11 =	142 S.F.
AREA 3 =	2,026 S.F.	AREA 12 =	99 S.F.
AREA 4 =	2,019 S.F.	AREA 13 =	386 S.F.
AREA 5 =	2,703 S.F.	AREA 14 =	52 S.F.
AREA 6 =	2,124 S.F.	AREA 15 =	2,157 S.F.
AREA 7 =	1,741 S.F.	**TOTAL**	**= 3,327 S.F.**
AREA 8 =	696 S.F.		
AREA 9 =	469 S.F.		
TOTAL	**= 12,382 S.F.**		

PROJECT DATA

DESCRIPTION	AREAS	
CURRENT ZONING	AL - LIGHT AGRICULTURAL	
PROPOSED ZONING	M-1 LIGHT MANUFACTURING	
LAND USE DESIGNATION	INDUSTRIAL	
PROJECT DESCRIPTION	(1) NEW CONCRETE TILT UP WAREHOUSE / OFFICE BUILDING	
ASSESSOR'S PARCEL NO:	8392-016-008, 8392-016-047 & 8392-016-048	
BUILDING CODE	CBC 2019	
BLDG. OCCUPANCY	B : OFFICE S1 : WAREHOUSE	
BUILDING TYPE	III-B, FULLY SPRINKLERED	
LAND AREA : PARCEL SIZE	GROSS ±112,500 S.F. (2.58 AC)	
COVERAGE :	57%	
ALLOWABLE COVERAGE :	60%	
LANDSCAPED AREA REQUIRED 25' SETBACK ON ALLEN 20' SETBACK ON CATARACT 10% OF THE PARKING AREA	TOTAL LANDSCAPED AREA PROVIDED = 15,709 S.F. AGGREGATE PLANTER AREAS	
CONSTRUCTION TYPE	III-B WITH FULLY SUPERVISED AUTOMATIC FIRE SPRINKLER SYSTEMS	
BUILDING HEIGHT	MAXIMUM BUILDING HEIGHT PER 504.3 = 75'	
NUMBER OF STORIES	ALLOWABLE STORIES PER 504.4 = 3	
AREA JUSTIFICATION	ALLOWABLE AREA *S1-S= 48,000 PER TABLE 506.2 BUILDING FOOTPRINT: 61,500 S.F. < **70,000 S.F.**	
*HEIGHT, NUMBER OF STORIES AND ALLOWABLE AREA CALCULATED BASED ON THE MOST RESTRICTIVE OCCUPANCY ALLOWANCE PER § 508.3, IN THIS CASE F1-S		
BUILDING TOTAL AREA		**63,749 S.F.**
FIRST FLOOR	WAREHOUSE OFFICE **TOTAL FOOTPRINT**	57,749 S.F. 2,000 S.F. **59,749 S.F.**
MEZZA FLOOR	WAREHOUSE OFFICE **TOTAL MEZZANINE**	0 S.F. 4,000 S.F. **4,000 S.F.**
	TOTAL WAREHOUSE TOTAL OFFICE	57,749 S.F. 90% 6,000 S.F. 10%
PARKING REQUIRED : WAREHOUSE + 10% OFFICE OFFICE EXCEEDING 5,000 SF = 1,000 S.F.		OFFICE 2,000 / 250 = 8 CARS 15,000 / 500 = 30 CARS 15,000 / 2,000 = 7.5 CARS 31,749 / 4,000 = 8 CARS TOTAL = 54 CARS +4 MOTORCYCLE STALLS
PARKING PROVIDED: ACCESSIBLE (STANDARD) 14' X 18' ACCESSIBLE (8' RAMP) 17' X 18' STANDARD STALLS 9' X 18' COMPACT STALLS 8' X 16' CLEAN AIR STALLS 9' X 18' CLEAN AIR STALL EVSE 9' X 18' PER TABLE 5.106.5.3.3 TOTAL CARS		1 - STALLS 2 - STALLS 32 - STALLS 11 - STALLS 5 - STALLS 5 - STALLS 56 - STALLS
MOTORCYCLE STALLS 7' X 7'		4 - STALLS
LONG TERM BIKE RACK @ 5% OF PARKING SHORT TERM BIKE RACK @ 5% OF PARKING		3 SPACES 3 SPACES
TRUCK LOADING REQUIRED TRUCK LOADING / PARKING PROVIDED		3 SPACES 6 SPACES
TRASH ENCL. AREA PROVIDED		412 S.F.

architecture
LICENSED ARCHITECT CHRISTOPHER J. OSGOOD C-34996 10/31/2019 RENEWAL DATE STATE OF CALIFORNIA
O.C. DESIGN & ENGINEERING
7901 CROSSWAY DR. PICO RIVERA, CA 90660 TEL (562)942-9664 FAX (562)948-1705
C.E.G. CONSTRUCTION
7901 CROSSWAY DR. PICO RIVERA, CA 90660 TEL (562)942-9664 FAX (562)948-1705

REVISIONS: .

CLIENT: CHALMERS EQUITY GROUP
7901 CROSSWAY DRIVE
PICO RIVERA, CA 90660

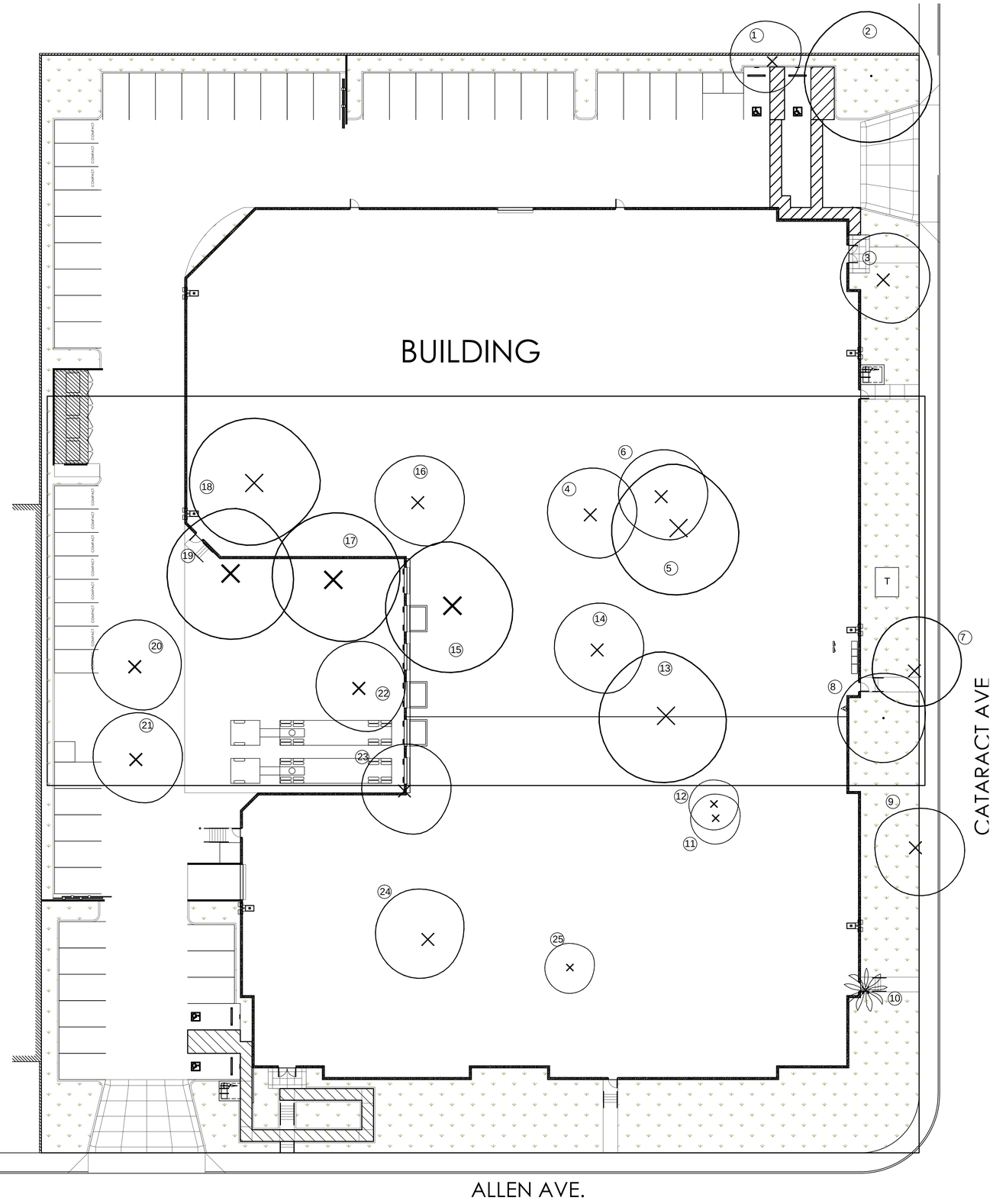
CONTENTS: SITE PLAN
SCALE:
PROJECT NO. A-20-01X
DATE: 07-29-2020
DRAWN: R.S.

SHEET A100 1 OF - SHEETS

ALLEN INDUSTRIAL
309 W. ALLEN AVENUE, SAN DIMAS, CA - CONRETE TILT UP WAREHOUSE / OFFICE BUILDING

EXISTING TREES PLANT LEGEND

TREE #	BOTANICAL NAME	COMMON NAME	DBH (inches)	HEIGHT (feet)	WIDTH (feet)	REMARKS
1	Ficus benjamina	Weeping Fif	8	20	20	TO BE REMOVED
2	Pinus torreyana	Torrey Pine	36	40	40	TO REMAIN
3	Ailanthus altissima	Tree of Heaven	8	20	19	TO BE REMOVED
4	Schinus molle	California Pepper	30	40	30	TO BE REMOVED
5	Schinus molle	California Pepper	30	40	30	TO BE REMOVED
6	Schinus molle	California Pepper	14	20	15	TO BE REMOVED
7	Schinus molle	California Pepper	24	20	35	TO BE REMOVED
8	Schinus molle	California Pepper	36	45	35	TO REMAIN
9	Schinus molle	California Pepper	14,8,14	25	40	TO BE REMOVED
10	Washingtonia robusta	Mexican Fan Palm	24	65	16	TO BE REMOVED
11	Schinus molle	California Pepper	6	15	18	TO BE REMOVED
12	Schinus molle	California Pepper	5	18	18	TO BE REMOVED
13	Schinus molle	California Pepper	30	48	48	TO BE REMOVED
14	Schinus molle	California Pepper	27	38	43	TO BE REMOVED
15	Schinus molle	California Pepper	30	35	39	TO BE REMOVED
16	Pinus torreyana	Torrey Pine	30	57	43	TO BE REMOVED
17	Schinus molle	California Pepper	30	40	40	TO BE REMOVED
18	Schinus molle	California Pepper	41	60	45	TO BE REMOVED
19	Schinus molle	California Pepper	36	50	56	TO BE REMOVED
20	Fraxinus	Ash Tree	14	30	16	TO BE REMOVED
21	Fraxinus	Ash Tree	10	23	11	TO BE REMOVED
22	Fraxinus	Ash Tree	12	22	15	TO BE REMOVED
23	Schinus molle	California Pepper	24	35	38	TO BE REMOVED
24	Schinus molle	California Pepper	46	40	60	TO BE REMOVED
25	Cupaniopsis anacardioides	Carrotwood Tree	12	22	20	TO BE REMOVED



All improvements are to be maintained by the property owner.

NORTH

0 8' 16' 32'

SCALE: 1/16" = 1'-0"

REVISIONS	BY
04-06-21	

PHIL MAY LANDSCAPE ARCHITECTURE
2532 Wallace Ave.
Fullerton, CA 92831
Phone: 909 373 1959
pmay@philmaydesign.com
www.philmaydesign.com

REGISTERED LANDSCAPE ARCHITECT
PHILIP S. MAY 3576
SIGNATURE
05-31-21
RENEWAL DATE
04-06-21
DATE
STATE OF CALIFORNIA

TREE INVENTORY PLAN

NEW BUILDING
309 W. ALLEN AVE.
SAN DIMAS, CA

DRAWN R.S.
CHECKED R.S.
DATE 01-15-2021
SHEET L-1
OF 2 SHEETS
JOB NO. 21006

PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS FACTOR
	TREES			
	Cercis c. 'Forest Pansy'	Forest Pansy Redbud	24" box	MODERATE
	Tristania conferta	Brisbane box	24" box	MODERATE
	Geijera parvifolia	Australian Willow	24" box	MODERATE
	Pinus canariensis	Canary Island Pine	24" box	MODERATE
+	Existing Tree to Remain			
	SHRUBS			
	Myrtus c. 'Compacta'	Compact Myrtle	5 gal	LOW
	Muhlenbergia capillaris 'Irvine'	Pink Muhly Grass	1 gal	LOW
	Olea europaea 'Montra'	Little Ollie	5 gal	LOW
	Callistemon 'Little John'	Dwarf Bottlebrush	5 gal	LOW
	Westringia fruticosa	Coastal Rosemary	5 gal	LOW
	PERENNIALS			
	Agave 'Blue Glow'	Blue Glow Agave	5 gal	LOW
+	Aloe striata	Coral Aloe	1 gal	LOW
	Dianella t. 'Variegata'	Variegated Flax Lily	1 gal	LOW
	GROUNDCOVER			
	Myoporum parvifolium	Prostrate Myoporum	flats	LOW

Water Efficient Landscape Worksheet

Reference Evapotranspiration (ETo)		**50.2**	El Monte				
	ETWU requirement	**ETWU requirement**	**ETWU requirement**	**ETWU requirement**	**MAWA requirement**	**ETWU requirement**	
Hydrozone#/Planting Description	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	**ETAF** (PF/IE)	Landscape Area **(LA)** (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)
Regular Landscape Areas							
1) low water use plants	0.2	Drip	0.81	0.247	15,609	3,854.07	119,954
			Totals		15,609	3,854.07	119,954
Special Landscape Areas (SLA): Recycled Water							
1) low water use plants				1	0	0	0
2) medium water use plants				1	0	0	0
3) medium water use plants				1	0	0	0
			Totals		0	0	0
						Estimated Total Water Use (ETWU)	**119,954**
						Maximum Allowed Water Allowance (MAWA)	**267,198**

ETWU must be Less than MAWA

ETWU will be "0" for 100% recycled water systems

Plant Water Use Type	**Plant Factor**	**Irrigation method**	**Irrigation Efficiency**
very low	0-0.1	overhead spray	0.75
low	0.1-0.3	drip	0.81
medium	0.4-0.6		
high	0.7-1.0		

MAWA (annual gallons allowed)= (Eto) (0.62) ((ETAF x LA) + ((1-ETAF) x SLA))

where 0.62 is a conversion factor that converts acre-inches per acre/year to gallons per sq. ft./year. LA is the total landspape area in sq. ft, SLA is the total special landscape area in sq. ft., and ETAF is .55 for residential areas and 0.45 for non residential areas.

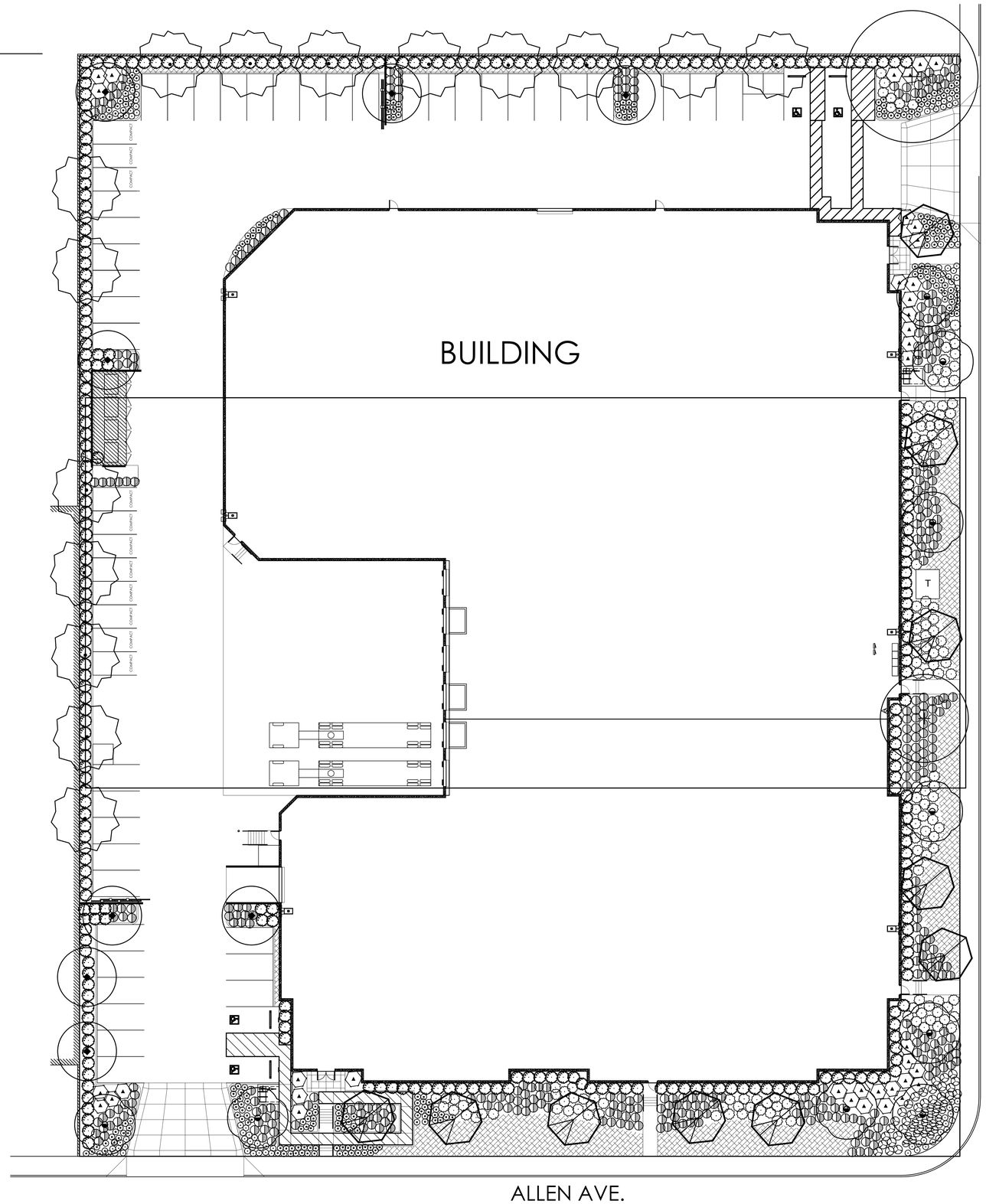
ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	3,854	
Total Area	15,609	Average ETAF for regular landscape areas must be 0.55 or below for
Average ETAF	**0.25**	residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas

Total ETAF x Area	3,854
Total Area	15,609
Sitewide ETAF	**0.25**



All improvements are to be maintained by the property owner.

NOTE:
ALL PROPOSED LANDSCAPE AREAS WILL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION CONTROLLER SYSTEM

NORTH

0 8' 16' 32'

SCALE: 1/16" = 1'-0"

REVISIONS	BY
04-06-21	
10-27-21	

PHIL MAY LANDSCAPE ARCHITECTURE
2532 Wallace Ave.
Fullerton, CA 92831
Phone: 909 373 1959
pmay@philmaydesign.com
www.philmaydesign.com

REGISTERED LANDSCAPE ARCHITECT
PHILIP S. MAY 3178
SIGNATURE
05-31-21
RENEWAL DATE
04-06-21
DATE
STATE OF CALIFORNIA

PRELIMINARY PLANTING PLAN

NEW BUILDING
309 W. ALLEN AVE.
SAN DIMAS, CA

DRAWN R.S.
CHECKED R.S.
DATE 01-15-2021
SHEET L-2
OF 2 SHEETS
JOB NO. 21006

APPENDIX C

ARBORIST REPORT

ARBORIST REPORT
FOR THE
ALLEN AND CATARACT WAREHOUSE PROJECT
CITY OF SAN DIMAS, LOS ANGELES COUNTY, CALIFORNIA

In Support of the CEQA Analysis
Prepared for:

City of San Dimas
245 East Bonita Avenue
San Dimas, CA 91773

Prepared by:

UltraSystems
environmental•management•planning

16431 Scientific Way
Irvine, CA 92618
Phone: (949) 788-4900, Fax: (949) 788-4901

UltraSystems Environmental, Inc. Project No. 7128
Assessor Parcel Numbers 8392-016-008, 8392-016-047, & 8392-016-048

AUGUST 4, 2022

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1.0 PROJECT DESCRIPTION

The project proposes a two-unit warehouse building with an area of 64,422 square-feet. Unit 1 will have a footprint of 36,007 square feet with a mezzanine of 2,000 square feet. Unit 2 will have footprint of 24,415 square feet with a mezzanine of 2,000 square feet and a height of 41 feet. The project site is approximately 2.58 acres.

To accommodate the construction and project operations, the existing trees onsite will be removed during project construction. This Arborist Report (report) was prepared to survey all oak trees on the property following the scope of work presented in the proposal dated April, 2021.

1.1 Tree Survey

In line with the scope of work and with the tree preservation ordinance, a tree survey was conducted and the results of that survey are reported in this report. The purpose of this survey is to present the physical characteristics, mapped locations, impact and preservation totals, and appropriate mitigation for impacts to native and other protected trees. The tree quantities and related project impacts have been analyzed and are reported in the following sections.

2.0 REGULATORY CONTEXT

Chapter 18.162 Tree Preservation

The requirements for tree removal are detailed in The San Dimas Municipal Code Chapter 18.162, *Tree Preservation* (hereafter, tree preservation ordinance) establishes regulations for the protection and preservation of trees on developed and undeveloped property (City of San Dimas, 2006). The project site's property falls under the tree preservation ordinance's definition of undeveloped property because the property is under development plan review and because a zone change is being applied for; the tree preservation ordinance's definition defines an undeveloped property as follows:

> *"'Undeveloped property,' for the purposes of this chapter, refers to any parcel or parcels of land which does not contain physical man-made improvements, and may be improved in conformance with the applicable development standards of the zoning classification where the property is located. Undeveloped property shall also refer to any parcel or parcels of land which may or may not contain improvements and on which development applications including, but not limited to, development plan review board, variance, zone change and subdivision, have been submitted.*

Ordinance No. 913 § 1 (Exh. A), 1990 (City of San Dimas, 1990) in Chapter 18.162.010, *Purpose* of the tree preservation ordinance states the goal of protecting and preserving mature trees, as well as "*other trees which are determined to be desirable*". The tree preservation ordinance defines a mature significant tree as follows:

> "*any tree within the city of an oak genus which measures eight inches or more in trunk diameter, and/or any other species of tree that measures ten inches or more in trunk diameter, and/or any multi-trunk tree(s) having a total circumference of thirty-eight inches or more; the multi-trunk tree shall include at least one trunk with a diameter of a minimum of four inches*".

The tree preservation ordinance requires that the trunk diameter must be measured at a point 36 inches above the ground at the base of the tree. The ordinance also requires that no significant trees

shall be removed or relocated on an undeveloped property without first submitting an arborist report and obtaining a tree removal permit from the city's Development Services, Planning Division.

Removal or relocation of mature significant trees must be approved by the director of development services or the development plan review board. This approval is subject to conditions as deemed necessary to implement this chapter's provisions. Section 18.162.060 *Conditions Imposed* of the tree preservation ordinance establishes the following as conditions of approval for tree relocation or removal:

1. *Tree relocation and/or two for one replacement with minimum fifteen-gallon box tree(s), or other replacement of equivalent value and size, within the subject property. The two for one replacement ratio may be reduced as determined by the final decision making body, if a minimum of one of the following additional findings are made: (1) The reduced replacement requirement is consistent with the purposes of this chapter, (2) the tree(s) in question are located where the impact of the tree removal on the community is limited (such as trees in a generally flat portion of the rear yard of a single-family house that are deemed to have less public benefit).*
2. *When on-site features, project constraints, and/or other considerations exist which prevent reasonable on-site relocation, relocation to an approved off-site location shall be permitted.*
3. *If said conditions are imposed, the owner will be responsible for all replacement and relocated trees for a minimum period of two years. If during this time the tree(s) is (are) declared unhealthy by a certified arborist as set forth in Section 18.162.090, the diseased trees shall be removed and replaced at the cost of the applicant, as set forth in Section 18.162.100*
4. *A maintenance agreement shall be submitted by the applicant and established for each replaced and relocated tree. The maintenance agreement and maintenance responsibility shall be transferred with the sale of the property if title to the property is transferred within the specified maintenance period. (Ord. 1165 § 4, 2006)*

In addition, the tree preservation ordinance states in Section 18.162.070 *Required Findings,* that mature significant trees can be removed if the preservation of those trees would constrain development of the project.

3.0 METHODOLOGY

A tree survey was conducted at the project site on January 7, 2022 by UltraSystems Environmental, Inc. (UltraSystems) International Society of Arboriculture (ISA) certified arborist Matthew Sutton (WE-12790-A). During the survey visit, Mr. Sutton performed various tasks associated with surveying, mapping, photographing, inventorying, and evaluating the condition of the property's trees, as described in the following sections.

In addition to mapping onsite trees, the UltraSystems arborist gathered tree characteristics data, which included identification to species (or genus in some instances), number of trunks per tree, trunk diameter, height, canopy diameter (i.e., tree spread), canopy circumference (i.e., drip line), and general health and vigor of trees that had trunk diameters that met the tree preservation ordinance's standard of a mature significant tree; whereas, smaller non-significant trees that did not meet that standard were mapped but not surveyed for all of the abovementioned characteristics. Trunk diameter measurements were collected at thirty-six inches above the ground at the base of the tree using a tree diameter tape as per the tree preservation ordinance's requirements. Tree height measurements were performed using a rangefinder hypsometer with clinometer feature. Tree

canopy circumference was determined using a Trimble Geo 7x unit and collecting data while walking the perimeter of the canopy.

The tree canopy radius was determined in post-processing by deriving the diameter based on the circumference using the formula Circumference = 2*π*(Radius). Once the radius was determined, then that value was multiplied by two to determine the canopy diameter. Only living tree parts were measured. The Trimble unit was also used to collect point data of each tree's location by placing the unit at the north side of the trunk and collecting satellite data for at least 20 seconds. All tree attribute data is recorded in **Attachment 1**, *Arborist Tree Inventory Sheet*.

Assessments of aesthetic and health factors for each tree, as well as an overall vigor rating, were documented (see **Attachment 1**, *Arborist Tree Inventory Sheet*). Surveyed trees were evaluated for overall health. Health was rated as excellent, very good, average, poor, very poor or dead, with ratings defined below. Photographs of both the surveyed trees and the non-surveyed trees are included in the photo appendix (**Attachment 2**, *Arborist Tree Inventory Photo Appendix*).

The following rating system and respective criteria were used to establish each overall health grade:

1. **Dead:** The tree is either dead or shows little sign of survival**.**

2. **Poor:** Greater than 75% of this tree shows evidence of stress, disease and/or pest infestation and appears to be in a state of rapid decline. The degree of decline may vary greatly.

3. **Average:** Semi-healthy in overall appearance, with 25% - 75% of the tree showing evidence of stress, disease and/or pest infestation.

4. **Good:** A healthy and vigorous tree with less than 25% of the tree affected by visible signs of stress, disease and/or pest infestation.

5. **Excellent:** A healthy and vigorous tree characteristic of its species and reasonably free of any visible signs of stress, disease or pest infestation.

Pursuant to the ISA's *Guide for Plant Appraisal* (CTLA & ISA, 2000), tree health and structure were evaluated with respect to five distinct tree components; roots, trunk(s), scaffold branches, small branches, and foliage. Each component of the tree was assessed with regard to health factors such as insect, fungal, or pathogen damage; fire damage; mechanical damage; presence of decay; presence of wilted or dead leaves; and wound closure. Components were graded as excellent, good, average, poor, and dead. This method of tree condition rating is comprehensive and results in ratings that are useful for determining the status of trees based on common standards. Trees in natural settings have important habitat value, as evidenced by numerous cavity nesters and insects that thrive on and within oak trees, even when they are considered in poor structural or health condition. However, this assessment focuses on tree condition with regard to health and structure for purposes of analyzing potential project impacts and where necessary, providing recommendations for mitigating potential tree hazards, such as trees with weak limb attachments, cavities and rot, or excessive lean.

Upon completion of field data collection and mapping, raw GPS data was post-processed using GPS Pathfinder Office (version 3.10), and individual tree location data were compiled and updated in a geographic information system (GIS). The digital tree locations were linked to individual tree identification numbers and associated tree attribute data. This dataset was then evaluated using

ArcGIS (version 10.1) software to determine the position of individual trees related to the proposed project development areas. Data resulting from this analysis was used to evaluate the individual tree impact totals presented in this report.

4.0 RESULTS

UltraSystems arborist Mr. Sutton surveyed 24 onsite trees and several saplings (i.e., trunk diameter of less than 3 inches), none of which is of the oak genus, and all of which are proposed for removal by the project proponent (see **Exhibit 1**, *Tree Inventory Map*, **Attachment 1**, *Arborist Tree Inventory Sheet*, **Attachment 2**, *Arborist Tree Inventory Photo Appendix*, and **Table 4.0-1**). Of the 24 onsite trees, 19 meet the criteria for mature significant trees according to the Tree Protection Ordinance, as defined in **Section 2.0**, *Regulatory Context* (see also **Exhibit 1**, *Tree Inventory Map*). The 19 surveyed mature significant trees consist of the following species and number per species: two native bishop pine (*Pinus muricata*), three white ash (*Fraxinus americana*), twelve pepper tree (*Schinus molle*), one carrotwood (*Cupaniopsis anacardioides*), and one Mexican fan palm (*Washingtonia robusta*) [SelecTree, 2022]. The fan palm and pepper tree species are classified as invasive species with limited ratings by the California Invasive Plant Council (Cal-IPC, 2006). Two mature significant trees, Tree MST1, a bishop pine, and Tree MST11, a pepper tree, will be protected in place, and the other 17 will be removed (see **Exhibit 1**, *Tree Inventory Map*).

The remaining five small, non-significant onsite trees and several saplings are not categorized as mature significant trees and are planned to be removed. They are not considered mature significant trees because their trunk diameters were too small to meet the criteria provided in the tree preservation ordinance. These trees and saplings were recorded to species and mapped. The small trees consisted of the following species and number per species: two pepper tree, pomegranate (*Punica granatum*), weeping fig (*Ficus benjamina*), and tree of heaven (*Ailanthus altissima*). There were approximately 25 tree of heaven saplings, all having a trunk diameter of fewer than three inches. The tree of heaven species is classified as an invasive species with a moderate rating by Cal-IPC (Cal-IPC, 2006). Refer to **Attachment 1,** *Arborist Tree Inventory Sheet* for a complete record of the characteristics of the surveyed mature significant trees and some of the characteristics of the non-significant trees.

Table 4.0-1 indicates the number and size of replacement trees required for each species of mature significant tree.

Table 4.0-1
TREE REPLACEMENT REQUIREMENTS FOR REMOVAL TREES

Common Name	Botanical Name	Number of Mature Significant Trees Proposed for Removal	Number of Replacement Trees (15-gallon box minimum)
Bishop pine	*Pinus muricata*	1	2
Pepper tree	*Schinus molle*	11	22
Mexican fan palm	*Washingtonia robusta*	1	2
Carrotwood	*Cupaniopsis anacardioides*	1	2

Common Name	Botanical Name	Number of Mature Significant Trees Proposed for Removal	Number of Replacement Trees (15-gallon box minimum)
White ash	*Fraxinus americana*	3	6
	Total	**17**	**34**

5.0 MITIGATION AND RECOMMENDATIONS

The project proponent plans to remove 17 mature significant trees and 5 non-significant trees. In accordance with the City's tree preservation ordinance, which specifies that two replacement trees be planted for every removed mature significant tree, 34 replacement trees of at least a 15-gallon size will need to be planted on the project site by the project proponent (see **Table 4.0-1**).

In the project proponent's Preliminary Planting Plan (planting plan), there are plans to plant approximately forty 24-inch box trees of the following four species around the grounds surrounding the proposed warehouse: nine forest pansy redbud (*Cercis* canadensis 'Forest Pansy'), fifteen Brisbane box (*Tristania conferta*), seven Australian willow (*Ceijera parvifolia*), and nine Canary Island pine (*Pinus canariensis*). In addition, the planting plan calls for incorporating several species of shrubs, forbs and grasses into the site's landscaping. The planting plan satisfies the two-to-one replacement plant requirement of the tree preservation ordinance because it provides for more than the required 34 replacement trees of at least 15-gallon box trees.

Although the planting plan will likely satisfy the requirements of the tree preservation ordinance, it is recommended that the project component incorporate more native species into the plant palette. Native plant species can attract and serve as foraging territory for visiting wildlife, in particular, birds. Some recommended alternative native tree species to incorporate into the plant palette include desert willow (*Chilopsis linearis*) and sugarberry (*Celtis laevigata*). Some recommended drought-tolerant species to incorporate include pink Chitalpa (x. *Chitalpa tashkentensis* 'Pink Dawn'), thornless South American mesquite (*Prosopis* x Phoenix) and fringe tree (*Chionanthus virginicus*).

The arborist report was prepared to support the California Environmental Quality Act (CEQA) document which will provide detailed mitigation measure in accordance with the tree preservation ordinance.

Listed below are the recommendations for this project:

1. UltraSystems recommends prohibiting use of any Cal-IPC-rated invasive plant species in the landscape plan. Please consult with the project's Landscape Architect to ensure that invasive plant species are not used for this project.
2. UltraSystems recommends incorporating drought-tolerant and/or native trees and shrubs into the landscape plan for the project. The California Fish & Wildlife Department strongly suggests replacement of invasive and/or low-value ornamentals with native species that can be used for the same purpose. For a list of native species that can be used as "ornamental" landscape plants, please consult with local native plant nurseries such as the Theodore Payne Foundation, California Botanic Garden, and Tree of Life Nursery.

6.0 REFERENCES

Cal-IPC (California Invasive Plant Council), 2006. California Invasive Plant Inventory. Accessed online at: https://www.cal-ipc.org/plants/inventory/ Accessed on April 9, 2021.

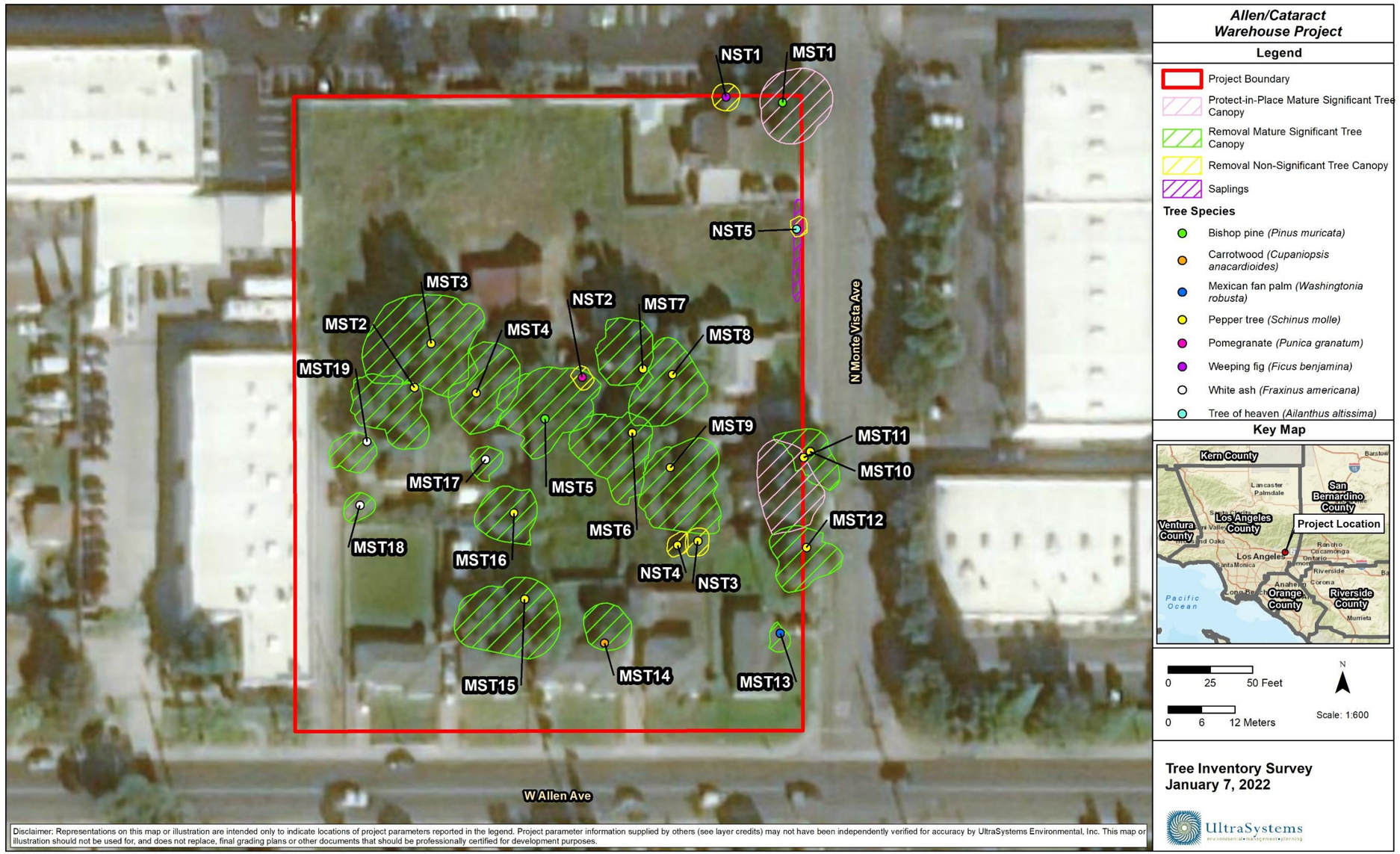
City of San Dimas, 1990. San Dimas, California, Municipal Ordinance No. 913 § 1 (Exh. A), Municipal Code Title 18, Zoning, Chapter 18.162.010 *Purpose*. Available at http://file.lacounty.gov/SDSInter/acwm/216023_SanDimasMC.pdf. Accessed on January 7, 2022.

City of San Dimas, 2006. San Dimas, California, Municipal Code Title 18, Zoning, Chapter 18.162 *Tree Preservation*. Available at http://file.lacounty.gov/SDSInter/acwm/216023_SanDimasMC.pdf. Accessed on January 7, 2022.

CTLA & ISA (Council of Tree and Landscape Appraisers, & International Society of Arboriculture. 2000. *Guide for Plant Appraisal*. Champaign, IL: International Society of Arboriculture.

SelecTree, 2022. California Polytechnic State University, San Luis Obispo. Urban Forest Ecosystem Institute. Available at http://selectree.calpoly.edu/. Accessed on January 12, 2022.

Exhibit 1
TREE INVENTORY MAP



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Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; UltraSystems Environmental, Inc., 2022.

Date

ATTACHMENT 1

ARBORIST TREE INVENTORY SHEET

Attachment 1
Arborist Tree Inventory Sheet

Tree #	Tree Fate	Common Name	Scientific Name	Latitude	Longitude	Number of Trunks	Trunk Diameter (in)	Height (ft)	Canopy Diameter (ft)	Canopy Circum-ference (ft)	Health & Vigor Rating 1=Dead; 5=Excellent	Comments
PIP1	Protect-in-Place	Bishop pine	*Pinus muricata*	34.11865373	-117.8116227	1	37.7	48.2	46.5	136.7	5	Healthy branch structure and crown balance. Lower branches pruned.
MST2	Removal	Peruvian pepper tree	*Schinus molle*	34.11819204	-117.8123425	1	38.2	57.2	56.4	135.9	4	Primary trunk lean is 20%. Canopy growth limited by canopy of T2. Healthy branch structure.
MST3	Removal	Peruvian pepper tree	*Schinus molle*	34.11826355	-117.8123097	1	42.8	61.3	77.7	203.2	4	Healthy branch structure and crown balance. Fruiting. Some sap oozing from cankers. Fungus on trunk.
MST4	Removal	Peruvian pepper tree	*Schinus molle*	34.11818323	-117.8122219	1	28.6	51.7	53.6	140.9	4	Healthy crown structure. Fruiting.
MST5	Removal	Bishop pine	*Pinus muricata*	34.11814077	-117.8120877	1	33.8	54.4	64.9	166.2	4	Healthy crown structure. Pruned up to 20' height. Rot and stripped bark on main branch.
MST6	Removal	Peruvian pepper tree	*Schinus molle*	34.11811818	-117.8119175	3	34.7	49.2	55.9	148.2	3	Major branch fallen and is growing parallel to ground. Otherwise healthy. Flowering.
MST7	Removal	Peruvian pepper tree	*Schinus molle*	34.11822165	-117.8118967	1	42.1	29.1	45.4	118.8	3	Two large branches have fallen. Canopy is unevenly balanced.
MST8	Removal	Peruvian pepper tree	*Schinus molle*	34.11821223	-117.8118387	1	30.7	65.4	56.1	140.4	5	Healthy branch structure.
MST9	Removal	Peruvian pepper tree	*Schinus molle*	34.1180613	-117.8118434	1	37.3	65.5	59.9	165.1	5	Healthy branch structure.
MST10	Removal	Peruvian pepper tree	*Schinus molle*	34.11808695	-117.8115703	1	29.0	41.1	46.4	99.7	4	Several cankers at base of trunk. Large branch has sheared off of tree.
MST11	Protect-in-Place	Peruvian pepper tree	*Schinus molle*	34.11807756	-117.8115832	1	37.0	47.9	53.7	142.3	4	Several cankers at base of trunk. Orange fungus of approx.. 8"X6: on trunk. Healthy branch structure.
MST12	Removal	Peruvian pepper tree	*Schinus molle*	34.1179312	-117.811578	3	35.9	38.5	45.0	119.8	4	Healthy branch structure.
MST13	Removal	Mexican fan palm	*Washingtonia robusta*	34.11779221	-117.8116292	1	22.5	66.8	17.9	44.6	5	Rocks have become incorporated into base of tree. Part at root crown exposed.
MST14	Removal	Brazilian pepper tree	*Schinus terebinthifolia*	34.11777666	-117.8119724	1	11.0	24.2	30.3	88.2	4	Healthy crown structure. Flowering.
MST15	Removal	Peruvian pepper tree	*Schinus molle*	34.11784813	-117.8121283	1	61.4	38.1	61.9	169.5	4	Some damage to trunk as trunk has grown into property fencing. Healthy crown structure.
MST16	Removal	carrotwood	*Cupaniopsis anacardioides*	34.11798807	-117.8121487	1	26.0	30.1	38.8	110.5	5	Some central trunks are dead. Most other trunks are healthy with healthy canopies.
MST17	Removal	white ash	*Fraxinus americana*	34.11807496	-117.8122041	1	11.0	28.1	19.5	58.6	4	Some stress points at base of trunk. Healthy canopy structure.
MST18	Removal	white ash	*Fraxinus americana*	34.1180013	-117.8124494	1	10.2	25.8	18.8	54.8	5	Healthy canopy structure.

Attachment 1
Arborist Tree Inventory Sheet

Tree #	Tree Fate	Common Name	Scientific Name	Latitude	Longitude	Number of Trunks	Trunk Diameter (in)	Height (ft)	Canopy Diameter (ft)	Canopy Circum-ference (ft)	Health & Vigor Rating 1=Dead; 5=Excellent	Comments
MST19	Removal	white ash	*Fraxinus americana*	34.11810416	-117.812435	1	15.9	27.9	27.9	79.5	5	Damage to bark as base of tree. Healthy canopy structure.

ATTACHMENT 2

ARBORIST TREE INVENTORY PHOTO APPENDIX

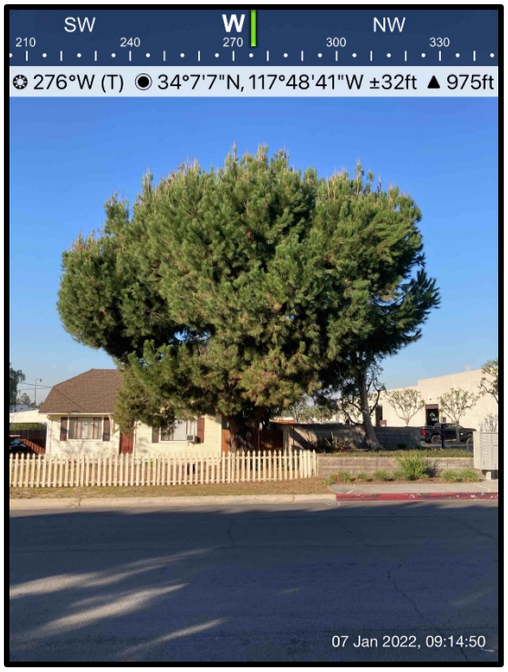


PHOTO 1: West facing view of Tree MST1, a bishop pine tree that will be protected in place. Date: January 7, 2022.

PHOTO 2: East facing view of Tree MST2, a Peruvian pepper tree. Date: January 7, 2022.

PHOTO 3: Fungus observed growing on Tree MST3, a Peruvian pepper tree. Date: January 7 2022.

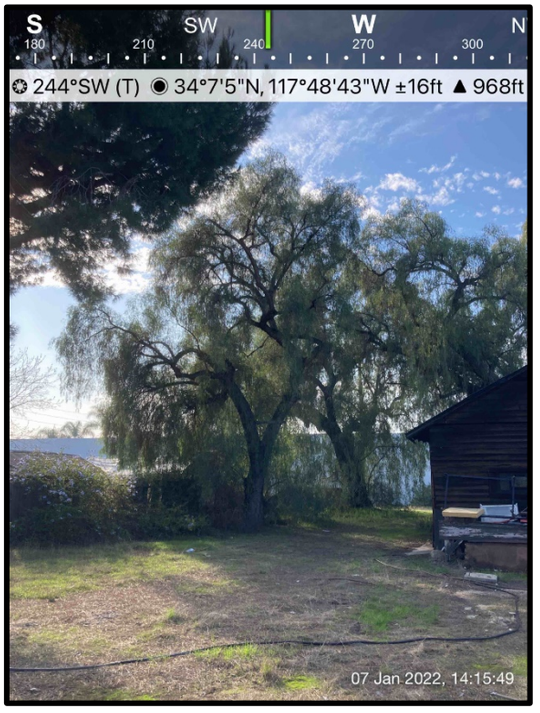


PHOTO 4: Southwest facing view of Tree MST4, a Peruvian pepper tree. Date: January 7, 2022.

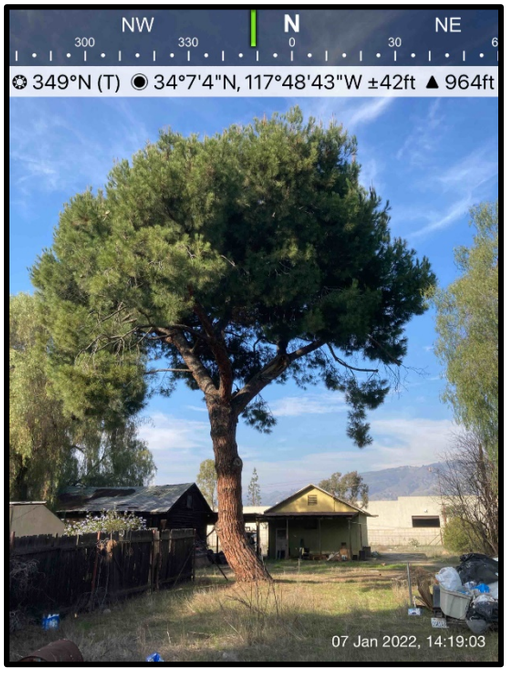


PHOTO 5: North facing view of Tree MST5, a bishop pine. Date: January 7, 2022.

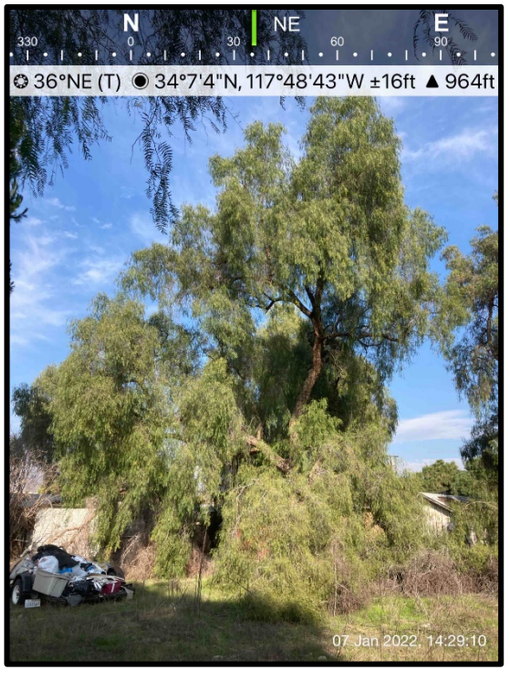


PHOTO 6: Northeast facing view of Tree MST6, a pepper tree. Date: January 7, 2022.

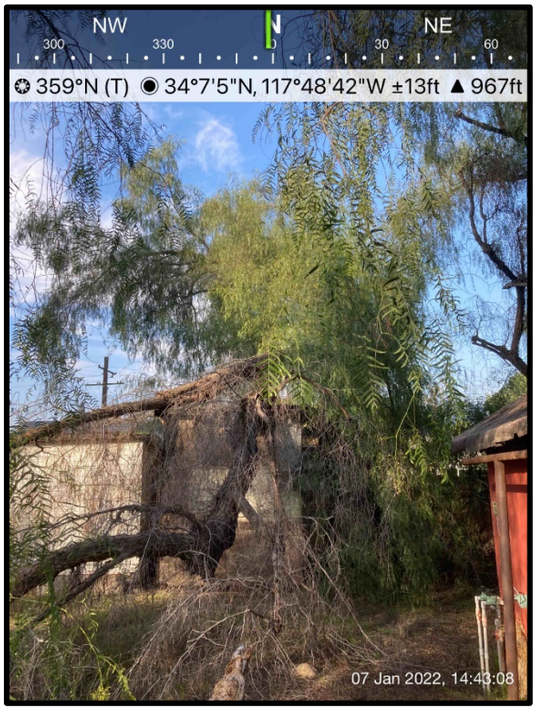


PHOTO 7: North facing view of Tree MST7, a pepper tree. Date: January 7 2022.

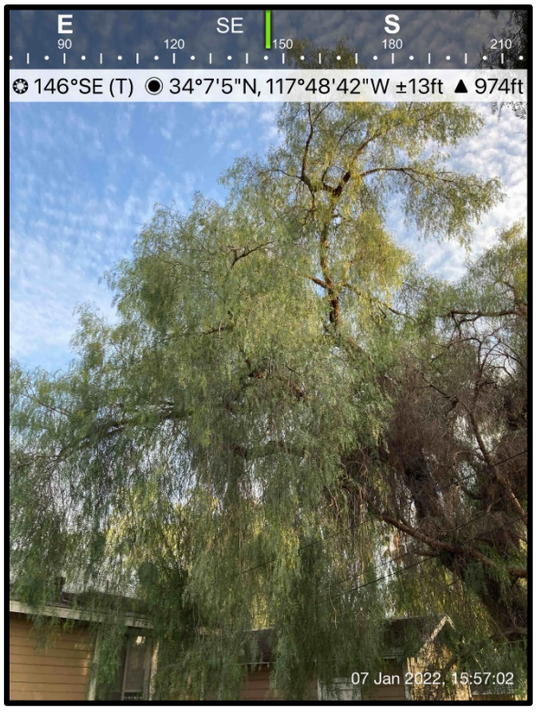


PHOTO 8: Southeast facing view of Tree MST8, a pepper tree.. Date: January 7, 2022.

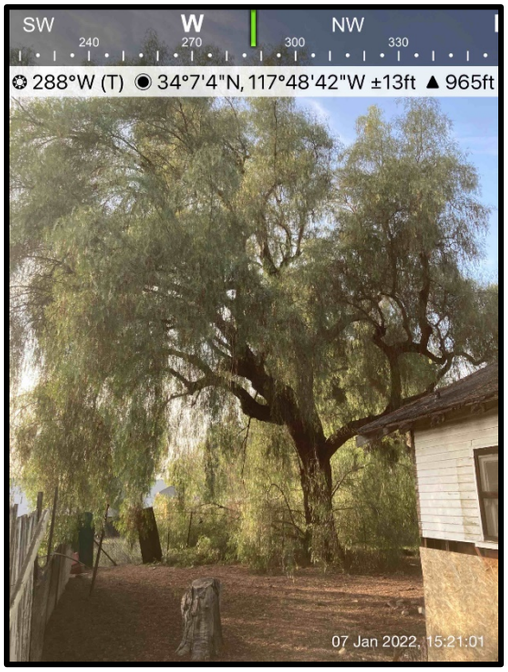


PHOTO 9: West facing view of Tree MST9, a pepper tree. Date: January 7, 2022.

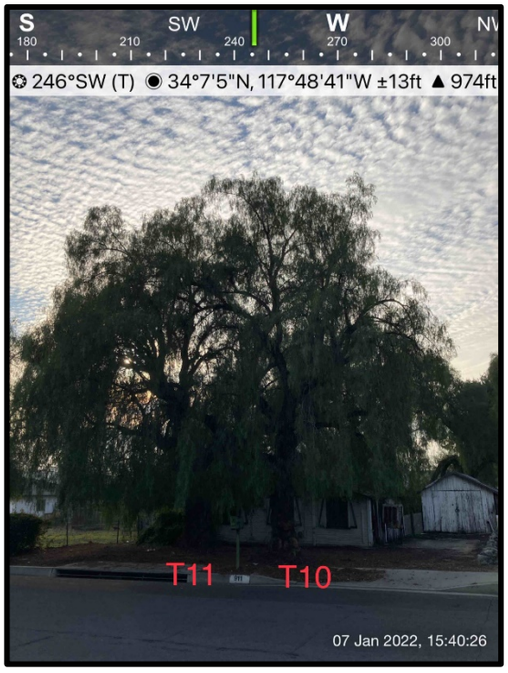


PHOTO 10: Southwest facing view of Tree MST10 and Tree MST11, both pepper trees. Tree MST11 will be protected in place. Date: January 7, 2022.

PHOTO 11: Northeast facing view of Tree MST12, a pepper tree. Date: January 7 2022.

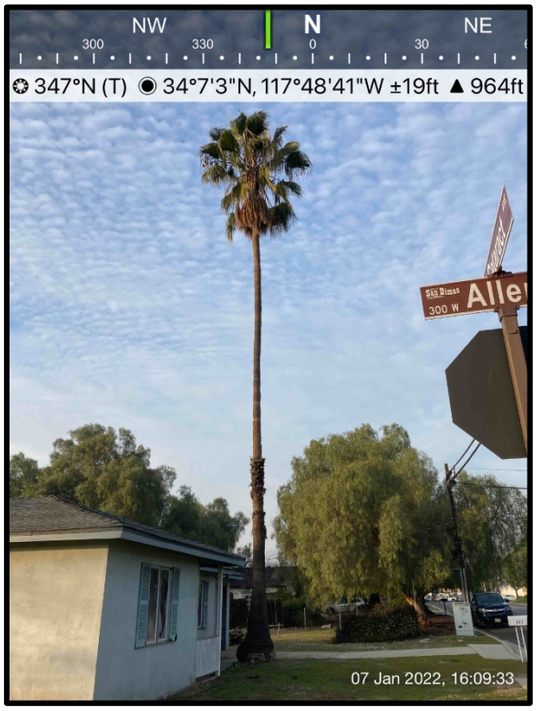


PHOTO 12: North facing view of Tree MST13, a Mexican fan palm. Date: January 7, 2022.

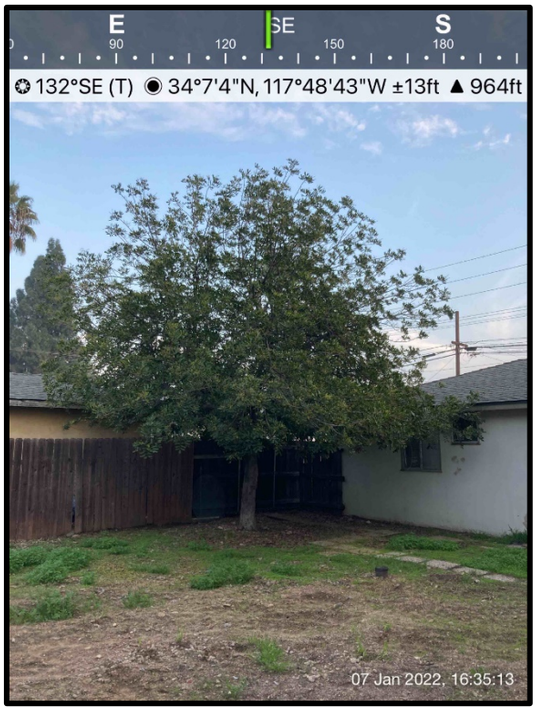


PHOTO 13: Southeast facing view of Tree MST14, a carrotwood tree. Date: January 7, 2022.

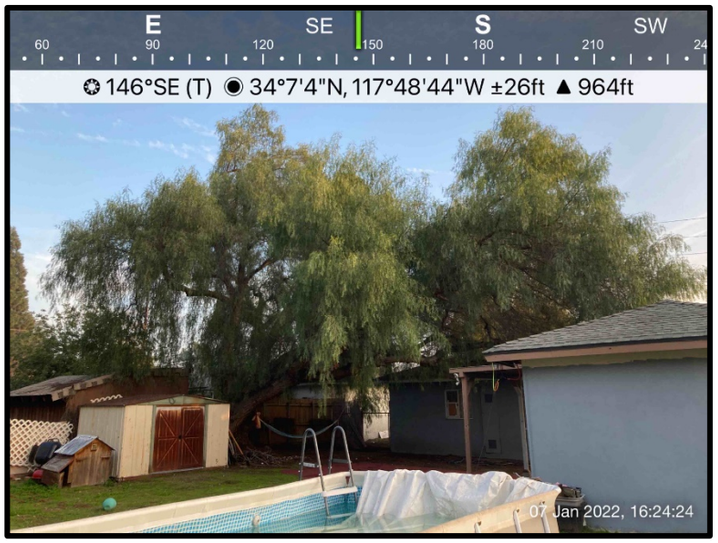


PHOTO 14: Southwest facing view of Tree MST15, a pepper tree. Date: January 7, 2022.

PHOTO 15: Southeast facing view of Tree MST16, a pepper tree. Date: January 7 2022.

PHOTO 16: Northeast facing view of Tree MST17, a white ash. Date: January 7, 2022.

PHOTO 17: Southeast facing view of Tree MST18, a white ash. Date: January 7, 2022.

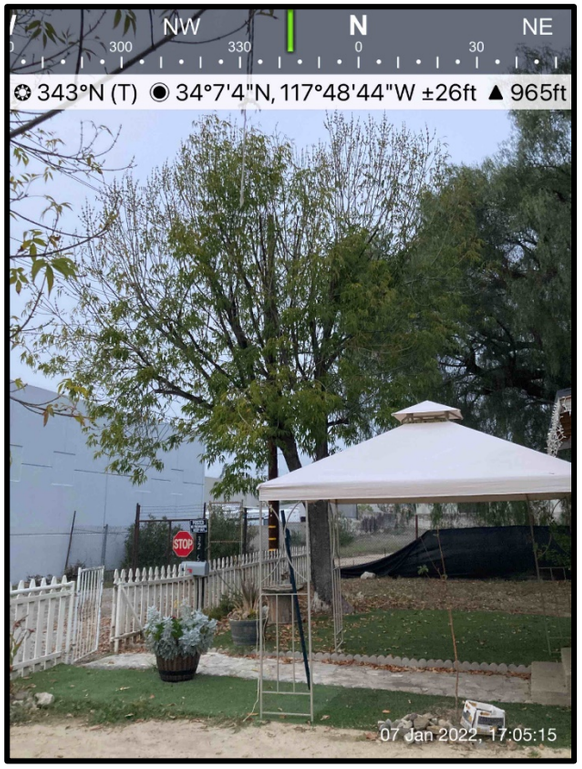


PHOTO 18: Northwest facing view of Tree MST19, a white ash. Date: January 7, 2022.

PHOTO 19: Northwest facing view of some of Tree NST5, a heaven tree and saplings on the eastern edge of the project site, adjacent to North Cataract Avenue. Date: January 7, 2022.

PHOTO 20: Northwest facing view of Tree NST1, a weeping fig, that is a non-significant tree. Date: January 7 2022..

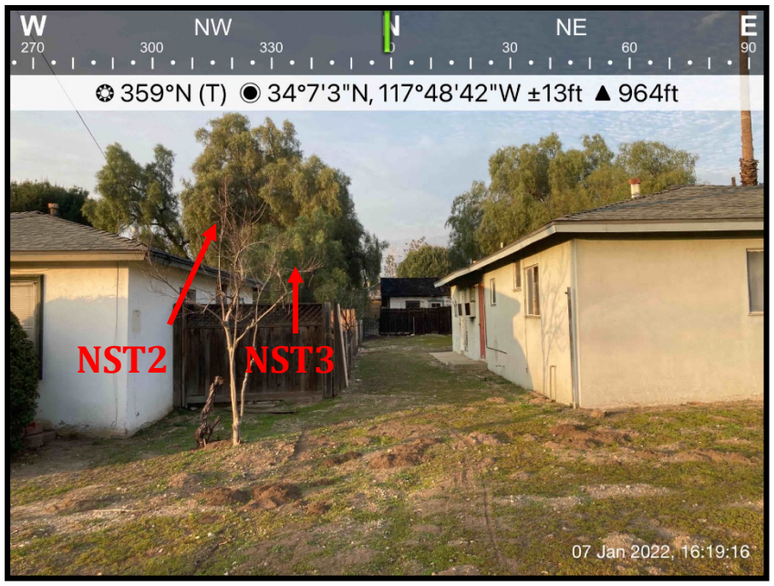


PHOTO 21. North facing view of Tree NST2 and Tree NST3, two pepper trees that are both non-significant trees. Date: January 7 2022..

PHOTO 22. Northeast facing view of Tree NST4, a pomegranate tree that is a non-significant trees. Date: January 7 2022..

APPENDIX D

FIELD DATA SHEETS

BIOLOGICAL RESOURCES SURVEY FORM

Job # 7091 Project Name San Dimas Cataract Allen Warehouse

Date 1/7/2022 Surveyor(s) M Sutton

LOCATION DESCRIPTION

Site Address: W. Aller Ave & N. Cataract Ave	City, State: San Dimas, CA
Client or Landowner: City of San Dimas? CEG?	County: Los Angeles

Start (time) 3:30 pm	End (time) 5:15 pm
Temp (°F) 56	Temp (°F) 54
Cloud Cover (%) 20	Cloud Cover (%) 100
Precipitation —	Precipitation —
Wind (mph) 2	Wind (mph) 2

Current Land Use(s) Residential, mostly unoccupied.

Surrounding Land Use(s): Residential, Freeway, commercial, light industrial.

Disturbances: Foot and vehicle traffic.

Vegetation Communities and Land Cover Observed:

Soil is a sandy loam with ~~many small~~ gravel and some small rocks (< 6"). There is a mound of debris and soil in the northwestern section of field that consists of plywood, pipes, concrete, toys and other debris.

Notes/Observations (nest observed/active or inactive/wildlife/plants/behaviors):

American crow, gopher mounds. open field is non-native annual grassland dominated by annual grass species and intermixed with occassional occurrences of herbs such as sisymbrium irio, cheeseweed, erodium sp., Salsola sp., Heterotheca grandiflora. There are also several oleander shrubs dispersed over field. There are a high cover of gopher mounds throughout the field, with some of 4" diameter openings.

Recommendations:

There is suitable habitat for BUOW in the grassy field. Recommend BUOW pre-construction survey. Suitable ~~but~~ nesting habitat for special-status birds. Recommend pre-construction NB survey. Resident reported coyotes, skunk, rabbits on project site. Black bear observed at nearby school. Mountain lion observed within 1/4 mile of site, south of freeway.

UltraSystems
environmental management planning

16431 Scientific Way
Irvine, CA 92618
Phone: 949-788-4900 • Fax: 949-788-4901
www.ultrasystems.com

SPECIES OBSERVATIONS

PLANT SPECIES PRESENT

specify plant layer as herb (H), shrub (S) or tree (T)

Species	Layer
Pinus ~~sp.~~ + muricata	T
Sisymbrium irio	H
~~AG1~~ Bromus madritensis	H
~~DT1~~ Fraxinus cardiniana	T
~~Erodium sp.~~ moschatum	H
~~Amaranthus~~ sp.	H
Nerium Oleander	S
Poa annua	H
Solsola sp.	H
Heterotheca grandiflora	H
AF1	H
~~PG1~~ Stipa sp.	H
Lactuca serriola	H
Agave sp.	H
Marrubium vulgare	H
Marah macrocarpa	H
Chenopodium album	H
Bromus diandrus	H
~~Schismus~~ Stipa milliacea	H
Stelloria media	H
Oxalis	H
Plumbago sp.	S
Stinging nettle	H
Solanum ~~sp.~~ douglasii	H
Malva parviflora	H
Schinus molle	T
Fraxinus americana	T
Washingtonia robusta	T
Schinus terebenthifolia	T
~~Pinus sp./ Pine tree~~	~~T~~

WILDLIFE SPECIES PRESENT

specify observation type as aural (A), sign (S), or visual (V), describe if breeding/nesting

Species	Observation
AMCR, American crow	V, A
Botta's gopher,	S (mound)
BLPH, black phoebe	V
ANHU, Anna's hummingbird	A
~~HERBGU~~ Herring gull	V, A
RTHA, red-tailed hawk	V

Additional Plant Species	Layer
Chenopodium murale	H
Euphorbia serpens	H
Prunus sp.	T
Pomegranate	T
Bromus madritensis	H

Signature: Matthew Sutton Date: January 11, 2022

Date: 1/7/2022 **Project:** 7091 San Dimas_Allen Cataract Warehouse **Surveyors:** ~~M Tollett~~ & M Sutton

Tree Survey Data Collection Form

Start Time: 9:00 AM **End Time:** 5:15 PM

Temperature (°F): 54 – 54 **Wind Speed:** 0 – 10 mph **Weather Conditions:** Clear, Sunny to marine layer 100%

Tree #	Species	Number of Trunks	DBH (inches per trunk)	Total DBH	Approximate Height (feet)	Approximate Canopy Diamter (feet)	Health Rating 1= Excellent; 5= Dead	Photo #	Notes
1	Pinus sp. 1	1	37.7"	37.7"	48.2'	GPS'd	☐1 ☐2 ☐3 ☐4 ☒5	Y	Healthy branch structure and crown balance. Lower branches pruned.
2	Schinus molle	1	~~13.7~~ 38.2"	38.2"	57.2'	GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	20% lean. Canopy growth limited by pepper tree to north. Healthy branch structure.
3	Schinus molle	1	42.8"	42.8"	~~53.9~~ 61.3'	GPS'd	☐1 ☐2 ☐3 ☒4 (circled) ~~☒5~~	Y	Healthy branch structure and crown balance. Fruiting. Some fungus and sap [illegible] from cankers.
4	Schinus molle	1	28.6"	28.6"	51.7'	GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	Healthy crown structure. Fruiting.
5	Pinus sp. 2	1	33.8"	33.8"	54.4'	GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	Healthy crown structure. [illegible] to 20'. Rot and stripping bark on main branch.
6	Schinus molle	1	34.7"	34.7"	49.2'	GPS'd	☐1 ☐2 ☒3 ☐4 ☐5	Y	Major branch fallen and growing parallel to ground. Otherwise healthy. Flowering.
7	Schinus molle	1	42.1"	42.1"	29.1'	GPS'd	☐1 ☐2 ☒3 ☐4 ☐5	Y	Two large branches have fallen. Canopy is unevenly balanced.
8	Schinus molle	1	30.7"	~~33.0"~~ 30.7"	65.4'	GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	Healthy branch structure
~~9~~ 11	Schinus molle	1	37.0"	~~33.0"~~ 37.0"	47.9'	GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	Several cankers at base of trunk. Orange fungus of 8" x 6" dimensions. Healthy branch structure.
~~10~~ 9	Schinus molle	1	37.3"	37.3"	65.5'	GPS'd	☐1 ☐2 ☐3 ☐4 ☒5	Y	Healthy branch structure.
~~11~~ 10	Schinus molle	1	29.0"	29.0"	41.1'	GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	Several cankers at base of trunk, large branch sheared off.

Date: ___1/7/2022_____ **Project:** __7091 San Dimas_Allen Cataract Warehouse **Surveyors:** _~~M Tollett~~ & M Sutton__

Tree #	Species	Number of Trunks	DBH (inches per trunk)	Total DBH	Approximate Height (feet)	Approximate Canopy Diamter (feet)	Health Rating 1= Excellent; 5= Dead	Photo #	Notes
12	Schinus molle	3	13.8" 13.7" 8.4"	35.9"	38.5'	GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	Healthy branch structure.
13	~~Schinus molle~~ Washingtonia robusta	1	22.5"	22.5"	66.8'	GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	Rocks incorporated into base. Part of root crown exposed.
~~14~~	~~OT Schinus molle~~ N/A						☐1 ☐2 ☐3 ☐4 ☐5		
14	~~15~~ OT, Schinus terebinthifolia	1	~~38~~ 11.0"	11.0"	24.2'	~~GPS'd~~ GPS'd	☐1 ☐2 ☐3 ~~☒4~~ ☒5	Y	Some damage to trunk as trunk has grown into property fence. Healthy crown structure.
15	~~16~~ Schinus molle	1	61.4"	61.4"	38.1'	~~GPS'd~~ GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	~~Healthy~~ Healthy crown structure. Flowering
16	~~17~~ Schinus molle	1	26.0"	26.0"	30.1'	GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	~~Fence~~ Tree has grown into fencing. Healthy canopy structure.
17	~~18~~ Fraxinus americana	1	11.0"	11.0"	28.1'	GPS'd.	☐1 ☐2 ☐3 ☒4 ☐5	Y	Some dead stub points in base of trunk. Healthy canopy.
18	~~19~~ Fraxinus americana	1	10.2"	10.2"	25.8'	GPS'd	☐1 ☐2 ☐3 ☐4 ☒5	Y	Unhealthy canopy structure.
19	~~20~~ Fraxinus americana	1	15.9"	15.9"	27.9'	GPS'd	☐1 ☐2 ☐3 ☒4 ☐5	Y	Damage to trunk at base of tree. Healthy canopy.
							☐1 ☐2 ☐3 ☐4 ☐5		
							☐1 ☐2 ☐3 ☐4 ☐5		
							☐1 ☐2 ☐3 ☐4 ☐5		
							☐1 ☐2 ☐3 ☐4 ☐5		
							☐1 ☐2 ☐3 ☐4 ☐5		

Date: ___1/7/2022_____ **Project:** __7091 San Dimas_Allen Cataract Warehouse **Surveyors:** _~~M Tollett~~ & M Sutton__

In assessment of the tree health, the following conditions were considered during the tree survey:

- unbalanced crown
- weak or yellowing foliage
- defoliation
- dead or broken branches
- poor branch attachment
- lean
- pruning scars
- basal/trunk scars
- conks
- rot/cavity
- insect damage
- cracks
- girdling roots
- exposed surface roots
- trenching/grade change

The following criteria were used to evaluate the overall health conditions:

1 = the tree is either dead or shows little sign of survival.
2 = more than 75% of the tree shows evidence of stress, disease, pest infestations with rapid decline.
3 = Semi healthy but display 25%-75% signs of visible stress, disease or pest infestations.
4 = healthy tree with less than 25% signs of visible stress, disease or pest infestations.
5 = healthy tree that shows no visible signs of stress, disease or pest infestations.

Biological/Environmental Issues Recognized and Actions Taken: Click or tap here to enter text.

Notes: **Significant tree is based on following 3 categories: (1) oak tree measuring 8 inches or more in trunk diameter; (2) any other species of tree that measures 10 inches or more in diameter; (3) any multi-trunk tree having a total circumference of 38 inches or more, with at least one trunk having a minimum diameter of 4 inches. All DBH must be measured at 36 inches above ground level.**

Signature: Matthew Sutton **Date:** January, 11, 2022

APPENDIX E

SITE PHOTOGRAPHS

PHOTO 1: South facing view of the project site; photo taken from the northwest segment of the BSA,.. Date: January 7, 2022.

PHOTO 2: Northeast facing view of on-site ornamental trees; photo taken from the southwest segment of the project site. Date: January 7, 2022.

PHOTO 3: Northwest-facing view of on-site urban developed/ornamental areas; photo taken from the central-northeast portion of the project site. Date: January 7 2022.

PHOTO 4: Northeast-facing view of some debris, vegetation, and urban/ornamental areas on-site; photo taken from the relative center of project site Date: January 7, 2022.

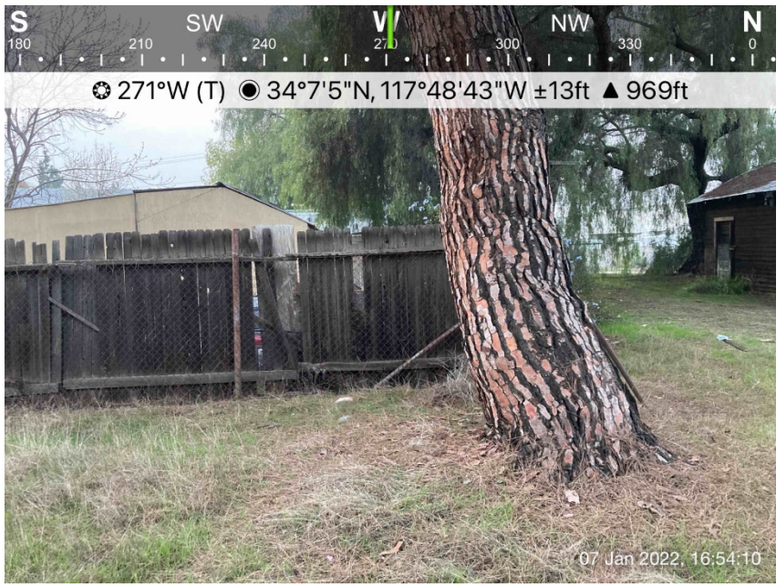


PHOTO 5: West-facing view of ornamental Peruvian pepper tree and a building on-site; photo taken from the relative center of project site. Date: January 7, 2022.

PHOTO 6: East-facing view on-site areas; photo taken from the northern boundary of the project site. Date: January 7, 2022.

PHOTO 7: North-facing view of areas in the west segment of the BSA; photo taken from just outside the southwest project boundary, within the BSA. Date: January 7 2022.

PHOTO 8: Northeast-facing view of on-site urban/ornamental areas on-site; photo taken from the western segment of project site Date: January 7, 2022.

APPENDIX F

SOILS REPORT

United States Department of Agriculture

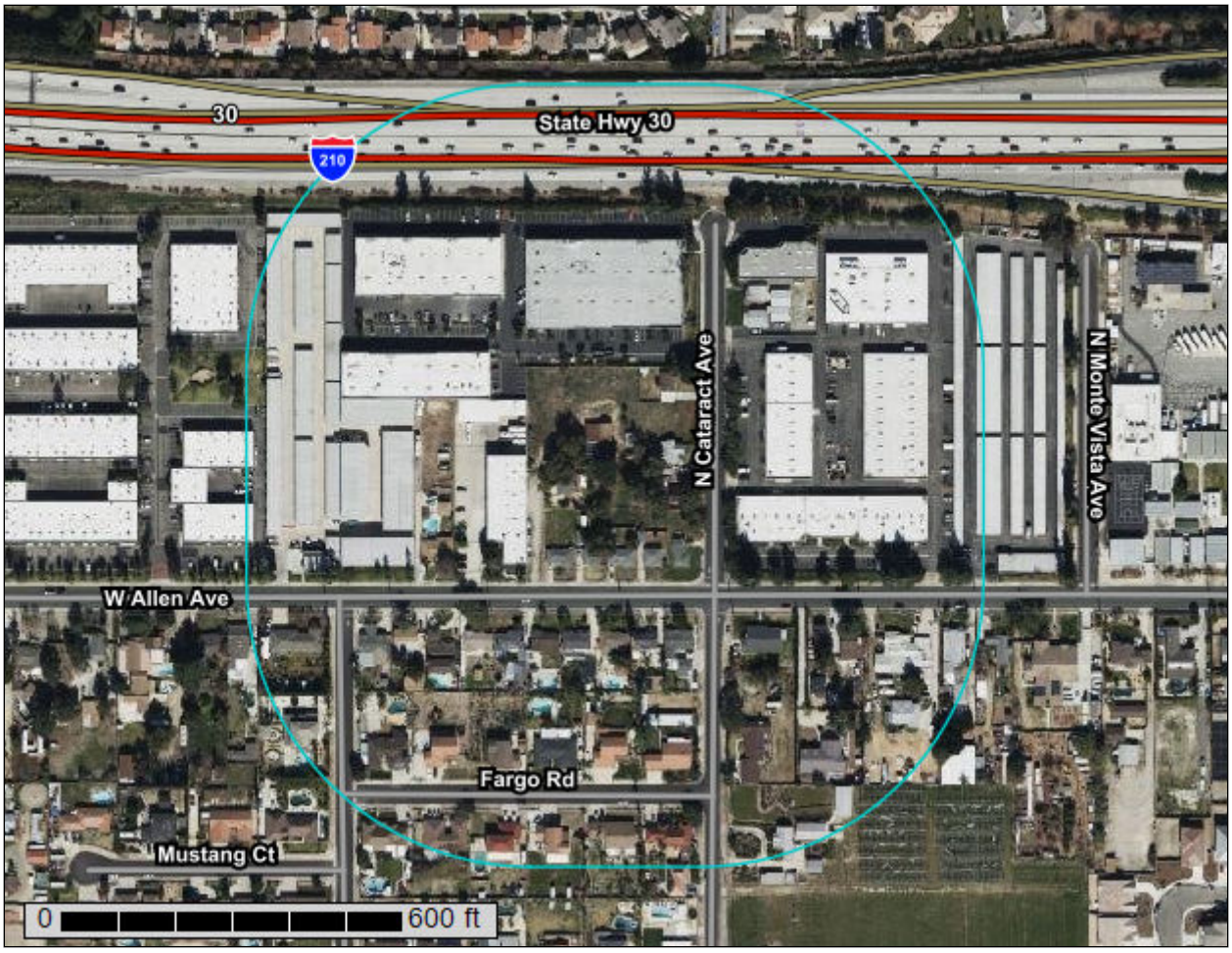
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Los Angeles County, California, Southeastern Part

7091_SanDimas_500ft_BSA



January 4, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

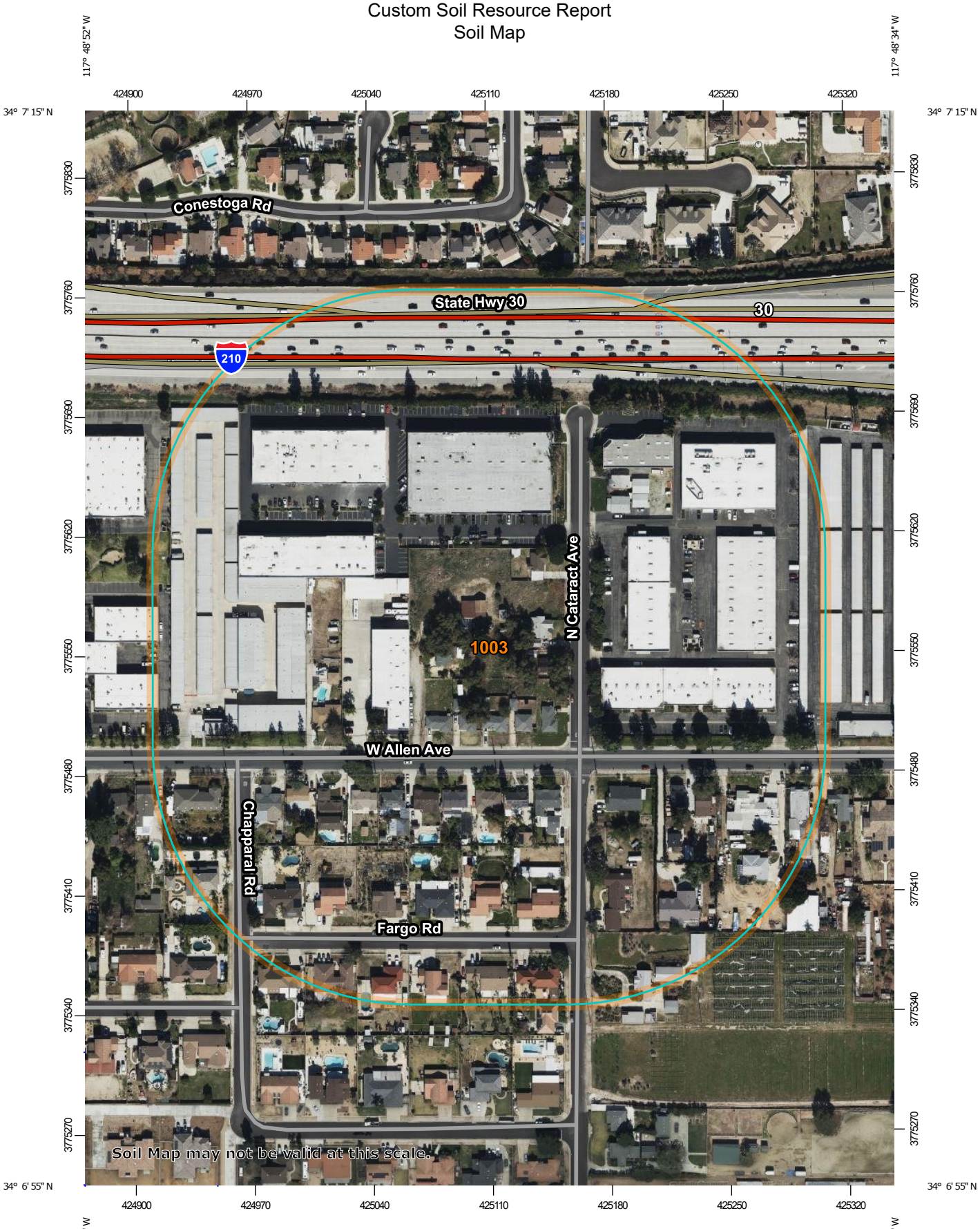
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:3,070 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 45 90 180 270

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Los Angeles County, California, Southeastern Part
Survey Area Data: Version 8, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 5, 2020—Feb 6, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1003	Urban land-Palmview-Tujunga, gravelly complex, 2 to 9 percent slopes	36.1	100.0%
Totals for Area of Interest		**36.1**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Los Angeles County, California, Southeastern Part

1003—Urban land-Palmview-Tujunga, gravelly complex, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: 2qds7
Elevation: 200 to 2,240 feet
Mean annual precipitation: 17 to 27 inches
Mean annual air temperature: 63 to 66 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 45 percent
Tujunga, gravelly, and similar soils: 20 percent
Palmview and similar soils: 20 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform: Alluvial fans

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: Very high

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Ecological site: R019XG911CA - Loamy Fan
Hydric soil rating: No

Description of Tujunga, Gravelly

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Discontinuous human-transported material over alluvium derived from granite

Typical profile

^Au - 0 to 6 inches: loamy sand
^A - 6 to 9 inches: gravelly loamy sand
2C1 - 9 to 30 inches: gravelly sand
2C2 - 30 to 79 inches: gravelly sand

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained

Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: R019XG912CA - Sandy Fan
Hydric soil rating: No

Description of Palmview

Setting
Landform: Alluvial fans
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Discontinuous human-transported material over alluvium derived from granite

Typical profile
^A1 - 0 to 4 inches: sandy loam
^A2 - 4 to 14 inches: sandy loam
2C1 - 14 to 28 inches: sandy loam
2C2 - 28 to 79 inches: sandy loam

Properties and qualities
Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Ecological site: R019XG911CA - Loamy Fan
Hydric soil rating: No

Minor Components

Soboba
Percent of map unit: 10 percent
Landform: Alluvial fans

Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Tujunga

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Erosion Factors

Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

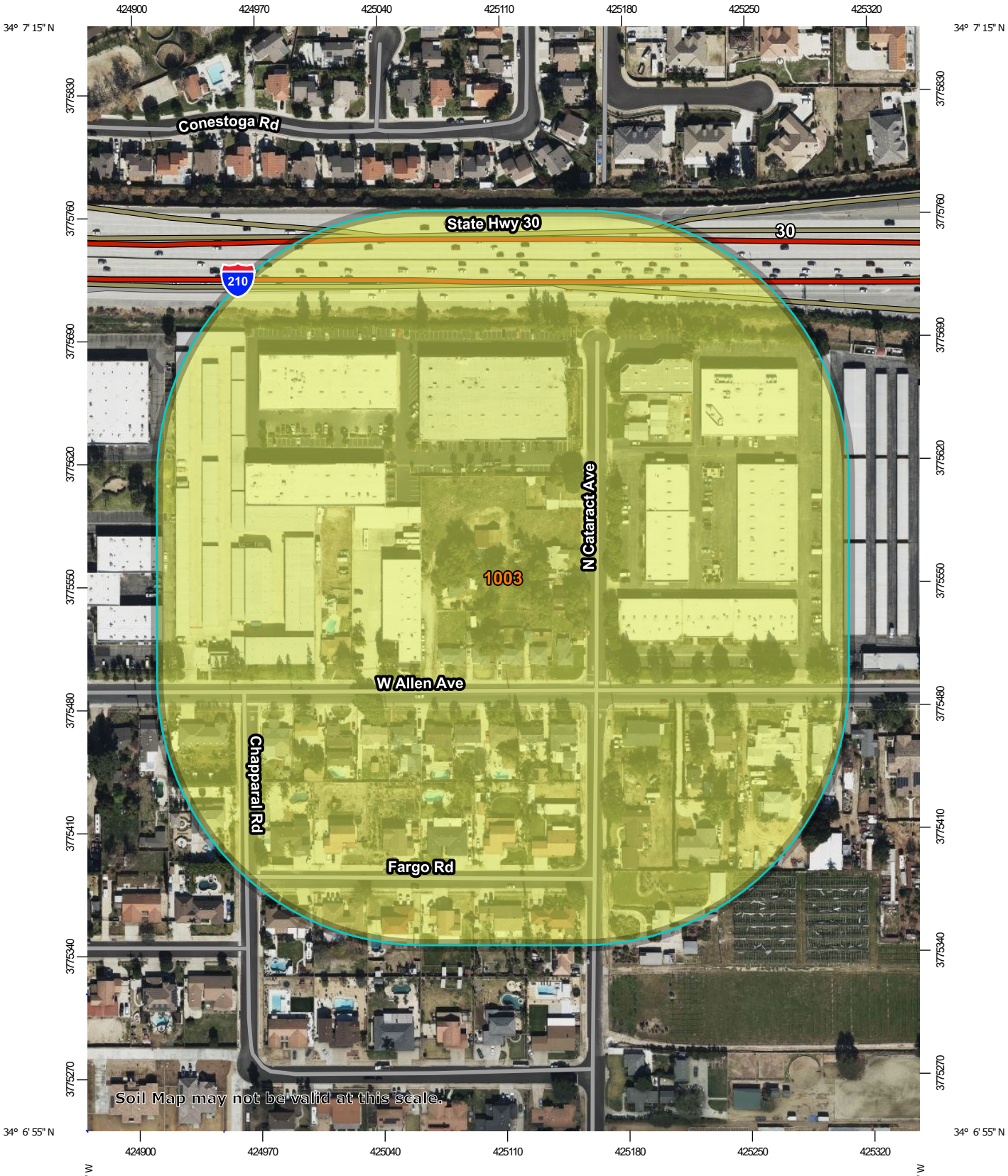
K Factor, Whole Soil

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

Custom Soil Resource Report
Map—K Factor, Whole Soil



Map Scale: 1:3,070 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 45 90 180 270

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Soil Rating Lines

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Soil Rating Points

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Los Angeles County, California, Southeastern Part
Survey Area Data: Version 8, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 5, 2020—Feb 6, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND	MAP INFORMATION
	imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—K Factor, Whole Soil

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1003	Urban land-Palmview-Tujunga, gravelly complex, 2 to 9 percent slopes	.20	36.1	100.0%
Totals for Area of Interest			**36.1**	**100.0%**

Rating Options—K Factor, Whole Soil

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX G

PLANT AND WILDLIFE SPECIES OBSERVED DURING SURVEYS

Table 1 contains the list of vascular plant taxa recorded during the biological field survey conducted within the BSA. Plant nomenclature and taxonomic order is based on *The Jepson Manual: Vascular Plants of California, s*econd Edition (Baldwin et al., 2012), and/or the Calflora website (Calflora, 2022).

Table 1
Plant Species Observed during the Field Surveys

Scientific Name	Common Name
Agavaceae	**Agave Family**
Agave sp.*	agave species
Amaranthaceae	**Amaranth Family**
Amaranthus sp.*	Amaranth species
Apocynaceae	
*Nerium oleander**	common oleander
Anacardiaceae	**Cashew Family**
*Schinus molle**	pepper tree
Caryophyllaceae	**Cashew Family**
*Stellaria media**	common chickweed
Chenopodiaceae	**Amaranth Family**
*Chenopodium album**	lamb's quarters
*Chenopodium murale**	nettle leaf goosefoot
*Salsola tragus**	Russian thistle
Arecaceae	**Arum Family**
*Washingtonia robusta**	Mexican fan palm
Asteraceae (Compositae)	**Sunflower Family**
Heterotheca grandiflora	telegraph weed
*Lactuca serriola**	prickly lettuce
Brassicaceae (Cruciferae)	**Mustard Family**
*Sisymbrium irio**	London rocket
Cucurbitaceae	**Gourd Family**
Marah macrocarpa	chilicothe

Scientific Name	Common Name
Euphorbiaceae	**Spurge Family**
*Euphorbia serpens**	matted sandmat
Geraniaceae	**Geranium Family**
*Erodium moschatum**	Greenstem filaree
Lamiaceae	**Mint Family**
*Marrubium vulgare**	white horehound
Lythraceae	**Loosestrifes Family**
*Punica granatum**	pomegranate
Moraceae	**Mulberry Family**
*Ficus benjamina**	weeping fig
Oleaceae	
*Fraxinus caroliniana**	Carolina ash
*Fraxinus americana**	white ash
Pinaceae	
Pinus muricata	bishop pine
Oxalidaceae	**Wood-sorrel family**
*Oxalis pes-caprae**	Bermuda buttercup
Poaceae	**Grass Family**
Stipa sp.	needle grass
*Stipa miliacea**	smilo grass
*Poa annua**	annual blue grass
*Bromus madritensis**	foxtail chess
*Bromus diandrus**	ripgut brome
Sapindaceae	**Soapberry Family**
*Cupaniopsis anacardioides**	carrotwood
Simaroubaceae	**Simaroubaceae Family**
*Ailanthus altissima**	tree of heaven
Solanaceae	**Nightshade Family**
Solanum douglasii	Douglas' nightshade

Scientific Name	Common Name
Urticaceae	**Nettle Family**
*Urtica dioica**	stinging nettle
Plumbaginaceae	**Leadwort Family**
Plumbago auriculata	cape leadwort
*non-native species	

Table 2 contains the list of wildlife species observed and/or detected during the biological field surveys. Wildlife nomenclature and taxonomic order is based on the following treatments according to class of species:

- **Birds.** *Check-list of North American Birds. S*eventh Edition and Supplements (Chesser et al., 2022)
- **Mammals**. *Complete List of Amphibian, Reptile, Bird and Mammal Species in California* (CDFW, 2016).

Table 2
Wildlife Species Observed/Detected during the Field Surveys

Scientific Name	Common Name	Status
Birds		
Accipitridae		
Buteo jamaicensis	red-tailed hawk	
Trochilidae		
Calypte anna	Anna's hummingbird	
Corvidae		
Corvus brachyrhynchos	American crow	
Laridae		
Larus argentatus	herring gull	
Tyrannidae		
Sayornis nigricans	black phoebe	
Mammals		
Geomyidae		
*Thomomys bottae**	Botta's pocket gopher	

APPENDIX H

SPECIAL-STATUS SPECIES POTENTIAL OCCURRENCE DETERMINATION

Scientific Name (=Synonym)	Common Name (=Synonym)	Status	General Habitat Description in California	Plant Elevation Range (feet amsl)	BSA Contains Potential Suitable Habitats	BSA is Located Within the Plant Species' Known:		Potential For Occurrence in the BSA	Comment Section
						Elevation Range	General Distribution		
Listed Endangered, Threatened, Candidate and State Rare Plants: Plants with official status under the federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), and/or the Native Plant Protection Act (NPPA). A species may have other sensitive designations in addition to their federal or state listing.									
Berberis nevinii (=Mahonia nevinii)	Nevin's barberry	FE, SE, CRPR: 1B.1	Lifeform: perennial evergreen shrub Habitats: two habitat types- alluvial scrub community, chaparral community Soils: alluvial scrub community it grows on sandy and gravelly substrates along the margins of dry washes, chaparral community, it grows on steep, north-facing slopes with coarse soils and rocky slopes Bloom Period: February to June	229 – 2,706	Yes	Yes	Yes	**No** potential to occur. The project site does contain gravelly soil, while the BSA contains primarily disturbed soils that have been heavily impacted by development and other related human activites. The BSA does not provide steep slopes. . There are no recent occurrences (<15 years) of this species within 10 miles of the project site (CNDDB, 2022a)	
Castilleja gleasoni (=Castilleja gleasonii)	Mt. Gleason paintbrush (frosted Indian paintbrush)	SR, CRPR: 1B.2	Lifeform: perennial herb Habitats: flats and slopes and in rocky crevices within pinyon and juniper woodlands and lower montane coniferous forests Soils: sandy granitic soils Bloom Period: May to September	2,181 – 7,118	Yes	No	Yes	**No** potential to occur. The project site lies at an elevation that is lower than the elevation at which this plant occurs, and therefore this plant does not occur within the region at which the BSA is located. In addition, the BSA does not provide suitable habitat to support this species . Lastly, there have been no reported recent occurrences of this species (<15 years) within 10 miles of the BSA (CNDDB,2022a)	
Dodecahema leptoceras	slender-horned spineflower	FE, SE, CRPR: 1B.1	Lifeform: annual herb Habitats: flood plains and in washes Soils: sandy soil of alluvium in flood plains and in washes Wetlands, Drainages, or Seeps: Yes Bloom Period: April to June	656 – 2,493	Yes	Yes	Yes	**No** potential to occur. The BSA does not provide sandy soils in washes that is required to support this species. The BSA contais gravelly soil which has experienced heavy disturbance, therefore degrading the available habitat quality. There have been no reported recent occurrences of this species (<15 years) within 10 miles of the BSA (CNDDB, 2022a)	
Brodiaea filifolia	thread-leaved brodiaea (=threadleaf clusterlily)	FT, SE, CRPR: 1B.1	Lifeform: perennial bulbiferous herb Habitats: gentle hillsides, valleys, and floodplains in semi-alkaline mudflats, vernal pools, mesic southern needlegrass grasslands, mixed native-nonnative grasslands and alkali grasslands plant communities Soils: clay to fine sand Bloom Period: March to June	82 – 3,674	No	Yes	Yes	**No** potential to occur. Although this species has recent reported occurences (<15 years) within 10 miles of the project site, the BSA does not contain slay to find sand soils required to support this species.	
Sensitive Plants: These plants have no official status under the ESA, the CESA, and/or the NPPA; however they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations.									
Thelypteris puberula var. sonorensis	Sonoran maiden fern	CRPR: 2B.2	Lifeform: perennial rhizomatous herb Habitats: meadows and seeps along streams and seepage areas Bloom Period: January to September	164 – 2,001	No	Yes	No	**No** potential to occur. The BSA does not contain meadows along streams and seepage areas where this plant would typically be observed. There is not suitable habitat to support this species. Lastly, there have been no reported recent occurrences of this species (<15 years) within 10 miles of the BSA (CNDDB, 2022a)	
Pseudognaphalium leucocephalum (=Gnaphalium leucocephalum)	white rabbit-tobacco	CRPR: 2B.2	Lifeform: perennial herb Habitats: chaparral, cismontane woodlands, coastal scrub and riparian woodlands; sandy or gravelly benches, dry stream bottoms, canyon bottoms Soils: sandy and gravelly sites Bloom Period: (July) August to November (December)	0 – 6,888	Yes	Yes	Yes	**No** potential to occur. The site does contain gralvelly soils, however there are no wetlands or intermittent streams occuring in the BSA. Furthermore, the soil of the BSA has experienced heavy disturbance due to dvelopment and other related human activities, therefore degrading the available habitat quality. There have been no reported recent occurrences of this species (<15 years) within 10 miles of the BSA (CNDDB, 2022a)	
Senecio aphanactis	chaparral ragwort (=rayless ragwort)	CRPR: 2B.2	Lifeform: annual herb Habitats: rocky limestone slopes and washes in pinyon and juniper woodlands (carbonate) Bloom Period: January to April (May)	49 – 2,624	No	Yes	Yes	**No** potential to occur. There are recent occurrences (<15 years) of this species within a 2-mile radius of the project site (CNDDB, 2022a), however the BSA does not contain limestone slopes and is not located in pinyon/juniper woodlands.	
Symphyotrichum defoliatum (=Aster bernardinus)	San Bernardino aster	CRPR: 1B.2	Lifeform: perennial rhizomatous herb Habitats: cismontane woodlands, coastal scrub, lower montane coniferous forests, meadows and seeps, marshes and swamps, and vernally mesic valley and foothill grasslands Soils: moist fine alluvial soils Wetlands, Drainages, or Seeps: Yes Bloom Period: July to November	7 – 6,691	No	Yes	Yes	**No** potential to occur. The BSA does not contain marshes and swamps, lower montane coniferous forests, or cismontane woodlands.	
Symphyotrichum greatae (=Aster greatae)	Greata's aster	CRPR: 1B.3	Lifeform: perennial rhizomatous herb Habitats: mesic canyons of broad leafed upland forests, chaparral, cismontane woodlands, lower montane coniferous forests, and riparian woodlands Bloom Period: June to October	984 – 6,593	No	Yes	Yes	**No** potential to occur. The BSA does not contain riparian woodlands, coniferous forests, borad-leafed upland forests.	
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	CRPR: 4.3	Lifeform: annual herb Habitats: chaparral and coastal sage scrub often around rock outcrops Soils: dry soils Bloom Period: January to July	3 – 2,903	Yes	Yes	Yes	**No** potential to occur. There are no recent occurrnces (<15 years) of this species wihtin a 2-mile radius of the project site (CNDDB, 2022a). The project site does not contain rocky outcrops.	

Thysanocarpus rigidus	rigid fringepod	CRPR: 1B.2	Lifeform: annual herb Habitats: pinyon and juniper woodlands on dry rocky slopes and ridges of oak and pine woodlands in arid mountain ranges Bloom Period: February to May	1,968 – 7,216	No	No	Yes	**No** potential to occur. The BSA does not offer suitable habitat required to support this species such as oak, pine, juniper, or pinyon woodlands. This plant would not be observed at an elevation such as that of the project site, as it grows at elevations of at least 1,900 feet amsl. The quality of available habitat has been degraded due to urbanization, so the dry gravelly soils present in the BSA do not promote a diverse array of plant species.	
Atriplex coulteri	Coulter's saltbush	CRPR: 1B.2	Lifeform: perennial herb Habitats: coastal bluff scrub; on coastal dunes; and on ridge tops Soils: clay soils and alkaline low places Bloom Period: March to October	10 – 1,508	No	Yes	Yes	**No** potential to occur. The BSA does occur at a relatively low elevation, however does not contain clay soils that are required to create a suitable habitat for this species. The BSA is not located in areas of coastal bluff scrub, coastal dunes, or on ridge tops.	
Dudleya multicaulis	many-stemmed dudleya	CRPR: 1B.2	Lifeform: perennial herb Habitats: barrens, rocky places, and ridgelines as well as thinly vegetated openings in chaparral, valley and foothill grasslands, and coastal sage scrub Soils: clay soils, heavy soils, often clay Bloom Period: April to July	49 – 2,591	No	Yes	Yes	**No** potential to occur. There are reported recent occurrences (<15 years) of this species in the BSA, and within 2 miles of the project site, however the soil present in the BSA is not compatible with this species. The BSA contains gravelly soils that have been heavily disturbed, rather than heavy clay soils.	
Monardella macrantha ssp. hallii	Hall's monardella	CRPR: 1B.3	Lifeform: perennial rhizomatous herb Habitats: dry slopes, ridges and openings in broadleaved upland forests, chaparral, lower montane coniferous forests, cismontane woodlands, and valley and foothill grasslands Bloom Period: June to October	2,394 – 7,200	No	No	Yes	**No** potential to occur. The elevation range of this species is not consistent with that of the BSA. In addition, the BSA does not offer suitable habiat for this plant.	
Sidalcea neomexicana	salt spring checkerbloom (=mountain sidalcea)	CRPR: 2B.2	Lifeform: perennial herb Habitats: alkaline, mesic sites in chaparral, coastal scrub, lower montane coniferous forests, Mojavean desert scrub, alkali playas, and brackish marshes Bloom Period: March to June	49 – 5,018	No	Yes	Yes	**No** potential to occur. The BSA does not provide suitable habitat required to support this plant, incluing brackish marshes, coastal scrub, alkali playas, or lower montane coniferous forest. Mojavean desert scrub is common in the region in which the BSA is located, however is not present in the BSA.	
Orobanche valida ssp. valida	Rock Creek broomrape	CRPR: 1B.2	Lifeform: parasitic perennial herb Habitats: chaparral and pinyon and juniper woodlands Soils: granitic soils Bloom Period: May to September	4,100 – 6,560	No	No	Yes	**No** potential to occur. The elevation range of this species is not consistent with that of the BSA.	
Chorizanthe parryi var. parryi	Parry's spineflower	CRPR: 1B.1	Lifeform: annual herb Habitats: coastal scrub, chaparral, cismontane woodlands, and valley and foothill grasslands Soils: sandy or rocky soils Bloom Period: April to June	902 – 4,002	Yes	Yes	Yes	**Low** potential to occur. The BSA does contain gravellly soils, however the soils have experienced high levels of disturance due to development and other related human activities. The BSA contains primarily urbanized land, therefore degrading the quality of available habitat. This species does have recent reported occurrences (<15 years) within a 10-mile radius of the BSA, however the occurrences are concentrated in areas greater than six miles away.	
Horkelia cuneata var. puberula (=Horkelia cuneata ssp. puperula)	mesa horkelia	CRPR: 1B.1	Lifeform: perennial herb Habitats: maritime chaparral, coastal scrub, and cismontane woodlands Soils: sandy or gravelly sites Bloom Period: February to September	230 – 2,657	Yes	Yes	Yes	**Low** potential to occur. There are recent reported occurrences (<15 years) of this plant within 10 miles of the project site (CNDDB, 2022a) specifically concentrated along San Dimas Wash, which is located approximately 0.3 miles north of the BSA. The project site contains gravelly soil that creates suitable habitat for this species, however the soil has experienced high levels of disturbance due to urbanization of the area.	
Fimbristylis thermalis (=Fimbristylis spadicea)	hot springs fimbristylis	CRPR: 2B.2	Lifeform: perennial rhizomatous herb Habitats: alkaline meadows and seeps near hot springs Wetlands, Drainages, or Seeps: Yes Bloom Period: July to September	361 – 4,395	No	Yes	Yes	**No** potential to occur. The BSA does not contain suitable habitat for this species. The BSA contains primarily urbanized areas. It does not contain alkaline meadows, nor is it located in close proximity to hot springs.	
Calochortus clavatus var. gracilis	slender mariposa lily	CRPR: 1B.2	Lifeform: perennial bulbiferous herb Habitats: shaded foothill canyons often on grassy slopes within other habitat, chaparral and coastal scrub Bloom Period: March to June (November)	1,050 – 3,280	Yes	Yes	Yes	**No** Potential to Occur. The BSA does not contain shaded, grassy slopes. The topography of the project site is relatively level. In addition, there are no recent occurrences (<15 years) of this species within a 2-mile radius of the project site (CNDDB, 2022a).	
Calochortus weedii var. intermedius	intermediate mariposa lily (=Weeds mariposa lily)	CRPR: 1B.2	Lifeform: perennial bulbiferous herb Habitats: dry, rocky open slopes and rock outcrops in coastal scrub and chaparral Bloom Period: May to July	344 – 2,804	No	Yes	Yes	**No** potential to occur. The BSA does not contain dry, rocky open slopes to support this lily.	
Legend and Notes									

Federal Endangered Species Act (ESA) Listing Codes: the ESA is administered by the USFWS and NMFS. The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. For the purposes of the ESA, Congress defined species to include subspecies, varieties, and, for vertebrates, distinct population segments. The official federal listing of Endangered and Threatened plants is published in 50 CFR § 17.12.

- **FE** = federally listed as endangered: any species of plant or animal that is in danger of extinction throughout all or a significant portion of their range.
- **FT** = federally listed as threatened: any species of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future.
- **FC** = federal candidate for listing: candidate species are plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them for listing as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by higher priority listing actions to address species in greater need. A proposed regulation has not yet been published in the Federal Register for these species.
- **FPE** = federally proposed for listing as endangered: a candidate species that has been proposed by USFWS for listing as endangered and the proposed rule, but not a final rule, to list has been published in the Federal Register.
- **FPT** = federally proposed for listing as threatened: a candidate species that has been proposed by USFWS for listing as threatened and the proposed rule, but not a final rule, to list has been published in the Federal Register.
- **FPD** = federally proposed for delisting: a species that has been proposed by USFWS for delisting (or down listing from endangered to threatened) and the proposed rule to delist has been published in the Federal Register.

California Endangered Species Act (CESA) and California Native Plant Protection Act (NPPA) Listing Codes: *tth* e CESA and NPPA are administered by CDFW. The official listing of Plants of California Declared to Be Endangered, Threatened or Rare is contained in the California Code of Regulations, Title 14, § 670.2. Species, subspecies and varieties of California native plants are declared to be endangered, threatened as defined by § 2062 and § 2067 of the Fish and Game Code or rare as defined by § 1901 of the Fish and Game Code.

- **SE = state-listed as endangered**: "endangered species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease (Fish and Game Code § 2062).
- **ST = state-listed as threatened:** "threatened species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts (Fish and Game Code § 2067).
- **SCE = state candidate for listing as endangered**: a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for addition to the list of endangered species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).
- **SCT = state candidate for listing as threatened**: a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for addition to the list of threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).
- **SCD = state candidate for delisting:** a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for removal from either the list of endangered species or the list of threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to remove the species to either list.
- **SR = state rare**: A species, subspecies, or variety of native plant is rare when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens (Fish and Game Code § 1901).

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

- **CRPR: 1A** = California Rare Plant Rank 1A - plants presumed extirpated in California and either rare or extinct elsewhere: the plants with a CRPA of 1A are presumed extirpated because they have not been seen or collected in the wild in California for many years. This rank includes plants that are both presumed extinct as well as those plants which are presumed extirpated in California. All of the plants constituting CRPR 1A meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 1B** = California Rare Plant Rank 1B - plants rare, threatened, or endangered in California and elsewhere: plants with a CRPR of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. All of the plants constituting CRPR 1B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 2A** = California Rare Plant Rank 2A - plants presumed extirpated in California, but more common elsewhere: the plant taxa of CRPR 2A are presumed extirpated because they have not been observed or documented in California for many years. This list includes only those plant taxa that are presumed extirpated in California, but more common elsewhere in their range. All of the plants on List 2A meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 2B** = California Rare Plant Rank 2B - plants rare, threatened, or endangered in California, but more common elsewhere: except for being common beyond the boundaries of California, plants with a CRPR of 2B would have been ranked 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the ESA. All of the plants constituting CRPR 2B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

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

- **.1** = seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- **.2** = moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

Notes:

The BSA contains approximate elevations of 956 to 968 feet amsl.
(placeholder: The BSA encompasses a lower montane landscape on the coastal side of southern California mountain ranges (cismontane).
Yes = the BSA is located within the plant species' known distribution, elevation range, and/or the BSA contains suitable habitats and/or soils to support the plant species. The plant species has a potential to occur within the BSA. Further evaluation is needed.
No = the BSA is located outside the plant species' known distribution, elevation range, and/or the BSA lacks suitable habitats and/or soils to support the plant species. It is highly unlikely for the plant species to have a potential to occur within the BSA. No further evaluation is needed.
Present = observed within the BSA during surveys.
A CNPS elevation range is provided for each taxon in feet. The stated range is for the California portion of a plant's range only (if the taxon also occurs outside the state). These CNPS elevation range data are accumulated from literature, herbarium specimens, and field survey information.

Resources

- *The Jepson Desert Manual (Baldwin et al., 2002);*
- *The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al., 2012);*
- *BLM Special Status Plants under the jurisdiction of the California State Office as of October 30, 2013 (BLM, 2013);*
- *The Final Environmental Impact Report and Statement (Final EIR/S) for the West Mojave Plan (BLM, 2005);*
- *Final Environmental Impact Statement. Proposed Northern and Eastern Colorado Desert Coordinated Management Plan (NECO) (BLM and CDFG, 2002);*
- *(Calflora website);*
- *The Status of Rare, Threatened, and Endangered Plants and Animals of California, 2000–2004 (CDFG, 2005);*
- *CNDDB ;*
- *Special Vascular Plants, Bryophytes, and Lichens List (CDFW, 2016);*
- *State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW, 2016);*
- *(CNPS website);*
- *(eFloras.org website);*
- *(NatureServe Explorer website);*
- *Rare Plants of San Diego County (Reiser, 2001);*
- *USDA Forest Service, Pacific Southwest Region, Sensitive Plant Species List by Forest (USFS, 2013).*
- *UltraSystems in-house records.*

Scientific Name (=Synonym)	**Common Name (=Synonym)**	**Status**	**General Habitat Descriptions in California**	**The BSA:**		**Potential For Occurrence in the BSA**
				Located Within Species' Distribution and/or Elevation Range (if known)	**Contains Suitable Foraging, Roosting, and/or Breeding Habitats**	
Listed Endangered, Threatened, and Candidate Wildlife: Wildlife with official status under the federal Endangered Species Act (ESA) and/or the California Endangered Species Act (CESA). A species may have other sensitive designations in addition to their federal or state listing.						
Listed Invertebrates						
Danaus plexippus	monarch butterfly	FC (California overwintering population)	Habitats: wind-protected tree groves (eucalyptus [Eucalyptus sp.], Monterey pine [Pinus radiata], cypress), with nectar and water sources nearby	Yes	No	**No** Potential to Occur. The BSA does not contain wind-protected tree groves with nearby water sources.
Listed Fish						
Catostomus santaanae	Santa Ana sucker	FT, SSC	Habitats: small, shallow streams, less than 25 feet in width, with currents ranging from swift in the canyons to sluggish in the bottom lands, permanent streams in water ranging in depth from a few centimeters to a meter or more Soils: gravel, rubble, and boulders with growths of filamentous algae, sand/mud substrates Characteristics: most abundant where the water is cool, clean, and clear	Yes	No	**No** Potential to Occur. The BSA does not contain suitable aquatic habitats to support this fish.
Listed Amphibians						
Anaxyrus californicus (=Bufo californicus)	arroyo toad	FE, SSC	Habitats: sandy riverbanks, streams, washes, and arroyos, breeds in and near streams Characteristics: nearby sandy terraces, dampened in places by capillary action, and with some scattered vegetation providing surface sheltering and burrowing sites and foraging areas	Yes	No	**No** Potential to Occur. The BSA does not contain suitable foraging riparian, oak, or scrub habitats and it lacks suitable aquatic breeding sites to support this toad. Due to lack of available water on site; amphibians are not expected.
Rana muscosa	southern mountain yellow-legged frog	FE, SE, CDFW:WL,	Habitats: sunny riverbanks, meadow streams, isolated pools, lake borders, and rocky stream courses in the mountains of Southern California Characteristics: prefer open stream and lake margins that gently slope	Yes	No	**No** Potential to Occur. The BSA does not contain suitable aquatic breeding habitats within Ponderosa pine, montane hardwood-conifer, and montane riparian habitats to support this frog. This frog requires a permanent water source, which is not present in the BSA.
Listed Birds						
Gymnogyps californianus	California condor	FE, SE, fully protected	Habitats: semi-arid, pine or chaparral covered rugged mountain ranges, higher elevations, foraging habitat lies in foothills predominately covered by grasslands or oak-savannah habitats Characteristics: habitat requirements may be adequate food supplies, open-enough habitat that food can be readily found and accessed	Yes	No	**No** Potential to Occur. The BSA does not contain suitable adequate food supplies, enough open-habitat that food can be readily found and accessed, and reliable air movements allowing extended soaring flight. In addition, suitable breeding habitats are absent from the BSA. Any occurrence would most likely be restricted to fly-overs.
Haliaeetus leucocephalus	bald eagle	SE, fully protected, BCC Season of Concern: nesting & wintering	Habitats: seacoasts, rivers, wetlands swamps, and large lakes, in winter in dense, sheltered, remote conifer stands Characteristics: large nests are normally built in the upper canopy of large trees, usually conifers	No	No	**No** Potential to Occur. The BSA does not contain adequate large bodies of water, or free flowing rivers with abundant fish for foraging. In addition, suitable perching sites, roosting sites, and breeding habitats are absent from the BSA. Any occurrence would mostly likely be restricted to fly-overs.
Buteo swainsoni	Swainson's hawk	ST, BCC, Season of Concern: nesting	Habitats: large, open areas with abundant prey in association with suitable nest trees, native grasslands or lightly grazed pastures and croplands, open deserts, sparse shrub lands Characteristics: nest in juniper trees of juniper-sage flats not near riparian zones	Yes	No	**No** Potential to Occur. The BSA does not contain suitable breeding tree habitats or foraging native grasslands, grazed pastures, croplands, open deserts, or sparse shrubland habitats to support this species.
Empidonax traillii extimus	southwestern willow flycatcher	FE, SE, Season of Concern: nesting	Habitats: dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes, surface water, saturated soil, or herbaceous wetland plants present during the early summer months; woody riparian vegetation is present	Yes	No	**No** Potential to Occur. The BSA does not contain suitable breeding and foraging dense woody riparian and aquatic habitats or saturated soils to support this species. .
Vireo bellii pusillus	least Bell's vireo	FE, SE, Season of Concern: nesting	Habitats: dry, intermittent streams, on the desert slopes mesquite (Prosopis sp.) and sandbar willow in canyon locations, willow-dominated riverine riparian habitats with well-developed overstories, understories, and low densities of aquatic and herbaceous cover	Yes	No	**No** Potential to Occur. The BSA does not contain suitable breeding and foraging riparian and aquatic habitats to support this species.
Polioptila californica californica	coastal California gnatcatcher	FT, SSC	Habitats: small, non-migratory, permanent resident of coastal sage scrub, small, non-migratory, permanent resident of coastal sage scrub	Yes	Yes	**No** Potential to Occur. The BSA dos not provide suitable sage scrub habitat.
Agelaius tricolor	tricolored blackbird	ST, SSC , BCC, Season of Concern: nesting colony	Habitats: fresh water, preferably in emergent wetland with tall, dense cattails (Typha sp.) or tules, natural grassland, woodland, or agricultural cropland Characteristics: species is not migratory, but is nomadic and highly colonial	Yes	No	**No** Potential to Occur. The BSA does not contain suitable vegetation types for this specie.
Listed Mammals						
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE, SSC	Habitats: Riversidean alluvial fan sage scrub, river and stream terraces, flood plains, and along washes with nearby sage scrub Soil: sandy loam soils, alluvial fans	Yes	No	**No** Potential to Occur. The soil of the BSA are not sandy loam soils and the BSA does not provide suitable habitt to support this species.
Sensitive Wildlife: These animals have no official status under the ESA and/or the CESA; however they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations						
Sensitive Invertebrates						
Bombus crotchii	Crotch's bumble bee	CDFW: Special Animals List, formerly SCE	Habitats: open grasslands with sparsely-distributed flowring shrubs	Yes	No	**No** Potential to Occur. The BSA does not contain adequate open grasslands to provide a suitable habitat for this species.
Sensitive Amphibians						
Taricha torosa	coast Range newt (=California newt)	SSC (Monterey County and south)	Habitats: terrestrial habitats (grassland, woodland and forest), but breeds in ponds, reservoirs, and slow moving streams within coastal drainages Characteristics: can migrate over 1 km to breeding areas	Yes	No	**No** Potential to Occur. The BSA does not contain suitable habitat for breeding.
Sensitive Reptiles						

Scientific Name (=Synonym)	**Common Name (=Synonym)**	**Status**	**General Habitat Descriptions in California**	**The BSA:**		**Potential For Occurrence in the BSA**
				Located Within Species' Distribution and/or Elevation Range (if known)	**Contains Suitable Foraging, Roosting, and/or Breeding Habitats**	
Phrynosoma blainvilli (=Phrynosoma coronatum) (=Phrynosoma coronatum blainvillei)	Blainville's horned lizard (=coast horned lizard) (=San Diego horned lizard)	SSC	Habitats: wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest, habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low	Yes	Yes	**No** Potential to Occur. The BSA does not provide suitable habitat to support this species.
Thamnophis hammondii	two-striped garter snake	SSC	Habitats: aquatic and it is rarely found far from water, permanent or semi-permanent bodies of freshwater and adjacent riparian habitat, oak woodlands, chaparral and coniferous forests on the coastal slopes of mountains and foothills to sea level			**No** Potential to Occur. The BSA does not contain suitable aquatic habitats, vegetation, or basking sites to support this snake.
Sensitive Birds						
Elanus leucurus	white-tailed kite	fully protected, Season of Concern: nesting	Habitats: undisturbed, open grasslands, meadows, emergent wetlands, farmlands, crops, pastures, and other cultivated habitats Characteristics: adjacent to their nesting woodland must be open foraging grasslands	Yes	Yes	**No** Potential to Occur. The BSA does not contain suitable habitat such as undisturbed, open grasslands or emergent wetlands. The BSA also contains no pastures or cultivated crops.
Accipiter cooperii	Cooper's hawk	WL, Season of Concern: nesting	Habitats: broken woodland and habitat edges Characteristics: tolerant of human activities near the nest and is seen more often nesting in urban/residential areas	Yes	Yes	**Moderate** Potential to Occur. This species is well-adapted to a variety of urbanized environments. The project site is within this hawk's range of recent occurrences (CNDDB, 2022a).
Aquila chrysaetos	golden eagle	CDFW: fully protected, WL BCC, Season of Concern: nesting and wintering	Habitats: mountainous canyon land, rimrock terrain of open desert and grassland areas, open rolling foothills of grasslands, oak savannas, oak and juniper woodlands, chaparral, mountain areas, and desert, open habitats including grasslands, deserts, savannahs, and shrublands Characteristics: hilly or mountainous country, deeply cut canyons rising to open mountain slopes and crags are ideal habitat	Yes	Yes	**No** Potential to Occur. The BSA does not contain suitable nest sites, a dependable food supply, and broad expanses of open country for foraging. In addition, golden eagles are almost never detected in urbanized environments.
Carpodacus cassinii	Cassin's finch	BCC	Habitats: a common montane resident; breeds in most higher mountain ranges in California, prefers tall, open coniferous foests, in lodgepole pine, red fir, and subalpine conifer habvitats, particularly in breeding season, rare but regular as a migrant in Mojave Desert, but irregular elsewhere in southern foothills and lowlands Characteristics: resides in montane coniferous forests, nesting season in California begins in late May or June	No	No	**No** Potential to Occur. The BSA lies at an elevation that is significantly lower than this species breeding range. Additionally, there is no suitable habitat within the BSA such as mature forests of lodgepole and ponderosa pine, Douglas-fir, etc.
Chlidonias niger	black tern	SSC Season of Concern: nesting colony	Habitats: fresh emergent wetlands, lakes, ponds, moist grasslands, and agricultural fields Characteristics: loss of wetlands in the Central Valley has been mitigated in part by rice farming	Yes	No	**No** Potential to Occur. The BSA does not contain suitable undisturbed breeding habitats or large aquatic/pelagic feeding grounds to support this species.
Athene cunicularia	burrowing owl	SSC, BCC, Season of Concern: burrowing sites and some wintering sites	Habitats: open, dry, flat ground or low rolling hills with sparse vegetation and available burrows Characteristics: dig their own burrows in the soft banks of irrigation canals and ditches	Yes	Yes	**No** Potential to occur. The project site does contains friable soils in the grassy field, however the area experiences high volume of human activity, noise, and other disturbances related to development that woud likely deter BUOW. There are no recent (<15 years) recorded occurrences of this species within a 2-mie radius of the project site.
Cypseloides niger	black swift	SSC, BCC, Season of Concern: nesting	Habitats: small colonies in moist crevices or caves on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons Characteristics: lives where there are rocky cliffs available for its somewhat specialized nest site	Yes	No	**No** Potential to Occur. The BSA does not contain suitable breeding rock habitats near aquatic sites to support this species.
Selasphorus sasin	Allen's hummingbird	BCC	Habitats: sparse to dense scrub habitats and sparse to open woodlands Characteristics: nest on twig or fork of tree or shrub	Yes	Yes	**Low** Potential to Occur. The BSA does not contain scub habitats or open woodlands that this species prefers; however, this species could visit this site to forage nectar from flowering plants and insects that occur within the BSA.
Dryobates nuttallii (= Picoides nuttallii)	Nuttall's woodpecker	BCC	Habitats: low-elevation oak (any species) woodlands, especially where mixed with California sycamore (Platanus racemosa) and deciduous riparian habitats Characteristics: nests are located mostly in riparian habitat	Yes	No	**Low** Potential to Occur. The BSA does not contain deciduous riparian habitats that this species prefers; however, this species is adapted to urbanized areas and could visit this site to forage within the pepper tree grove. The majority of the BSA is urbanized areas including commercial and residential spaces, paved structures, and associated development that provides limited foraging habitat and would deter this woodpecker from breeding within the BSA.
Falco columbarius	merlin	WL, Season of Concern: nesting	Habitats: Alaska and Canada, Merlins winter in California from September to May , annual grasslands to open ponderosa pine and montane hardwood-conifer habitats, and coastlines, savannahs, woodlands, lakes, and wetlands Characteristics: dense tree stands may be used for cover and are frequently close to bodies of water	No	No	**No** Potential to Occur. The BSA does not contain suitable foraging winter habitat to support this species. In addition, the merlin does not breed in California.
Contopus cooperi	olive-sided flycatcher	SSC, BCC Season of Concern: nesting	Habitats: coniferous forests in high mountains where tall trees overlook canyons, meadows, lakes or other open terrain Characteristics: nests in California are mostly in conifers- willows (Salix sp.), alders (Alnus sp.), oaks and eucalyptus	Yes	No	**No** Potential to Occur. The BSA does not contain suitable conifer and tall tree habitats to support this species.
Aechmophorus clarkii	Clark's grebe	BCC	Habitats: large freshwater lakes and marshes whose edges have emergent vegetation such as reeds and rushes. Nesting in tidal areas is unusual. On very large lakes, colonies may number in the hundreds of pairs.	Yes	No	**No** Potential to Occur. The BSA does not provide suitable aquatic habitat to support this species.
Baeolophus inornatus	oak titmouse	BCC	Habitats: montane hardwood-conifer, montane hardwood, blue, valley, and coastal oak woodlands, chaparral, and montane and valley foothill riparian habitats Characteristics: nests are constructed in natural tree cavities, in old woodpecker holes, or in a bird box	Yes	No	**No** Potential to Occur. The BSA does not contain suitable oak, conifer, or riparian habitats to support this species.
Chamaea fasciata	wrentit	BCC	Habitats: coastal scrub and chaparral along the West Coast Characteristics: it lives in dense shrublands	Yes	No	**No** Potential to Occur. The BSA does not contain dense shrublands, nor is it in a coastal location. (Google Earth Pro, 2022)

Scientific Name (=Synonym)	**Common Name (=Synonym)**	**Status**	**General Habitat Descriptions in California**	**The BSA:**		**Potential For Occurrence in the BSA**
				Located Within Species' Distribution and/or Elevation Range (if known)	**Contains Suitable Foraging, Roosting, and/or Breeding Habitats**	
Toxostoma redivivum	California thrasher	BCC	Habitats: chaparral, coastal sage scrub in southern range and open woodlands in northern range Characteristics: requires underbrush with thick leaf litter for foraging	Yes	Yes	**No** Potential to Occur. The BSA does not offer undisturbed chaparral, coastal sage scrub, or open woodlands to support this species .
Geothlypis trichas sinuosa	saltmarsh common yellowthroat (=San Francisco common yellowthroat)	SSC, BCC	Habitats: woody swamp, brackish marsh, and freshwater marsh Characteristics: occupies the ecotone between moist and upland situations	Yes	No	**No** Potential to Occur. The BSA does not contain suitable habitat to support this species such as woody swamp, freshwater marsh, or brackish marsh.
Spizella atrogularis	black-chinned sparrow	BCC	Habitats: mixed chaparral, chamise-redshank chaparral, sagebrush, and similar brushy habitats, montane chaparral-chamise, ceanothus, and scrub oak-dominated habitats, Joshua Tree Characteristics: avoids open sage, preferring chaparral-covered hillsides	Yes	No	**No** Potential to Occur. The BSA does not provide suitable habitat to support this species such as mixed chaparral, sagebrush, montane chaparral-chamise, and scrub oak habitats. The areas in the BSA have undergone high levels of disturbance and therefore do not offer suitable habitat.
Spinus lawrencei	Lawrence's goldfinch	BCC	Habitats: oak woodland, chaparral, riparian woodland, valley foothill hardwood-conifer, pinyon-juniper woodlands, palm oasis, usually near water, open woodlands of arid and semiarid foothills and valleys Characteristics: nests are in evergreen oaks, conifers, or deciduous trees	Yes	No	**No** Potential to occur. The BSA .does not contain suitable foraging or breeding habitats to support this species.
Sensitive Mammals						
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	SSC	Habitats: open, sandy areas of both the Upper and Lower Sonoran life-zones of southwestern California and northern Baja California Characteristics: grassland and open sage scrub vegetation with sandy-loam to loam soils	Yes	Yes	**No** Potential to Occur. The BSA does not contain suitable open sage scrub vegetation with sandy-loam to loam soils. In addition, there are no recent (<15 years) recorded occurrences of this species within a 2-mile radius of the project site.
Eumops perotis californicus	western mastiff bat	SSC, WBWG:H	Habitats: low-lying desert areas of southern California, desert riparian, desert wash, desert scrub, desert succulent shrub, alkali desert scrub, palm oasis, conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, chaparral, urban. Roosts in crevices in cliff faces, high buildings, trees, and tunnels Characteristics: bats often are found in large groups	Yes	Yes	**Low** Potential to Occur. The BSA does provide native and ornamental trees as well as buildings that could serve as suitable roosting habitat for this bat. However, many of the habitats in which this species is found such as palm oasis, oak conifer, deciduous woodlands, and coastal scrub are not found in the BSA.
Nyctinomops femorosaccus	pocketed free-tailed bat	SSC	Habitats: pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, chaparral, and palm oasis Characteristics: prefer rock crevices in cliffs as roosting sites	Yes	Yes	**No** Potential to Occur. The BSA does not contain rock crevices in cliffs necessary for roosting. The BSA is primarily comprised of areas that have undergone heavy disturbances. The BSA offers mainly urbanized areas including commercial and residential structures, ornamental vegetation, and paved areas. There is no undisturbed desert scrub, desert riprian, desert succulent scrub, or desert wash to support this species.
Nyctinomops macrotis	big free-tailed bat	SSC, WBWG:M	Habitats: rugged, rocky habitats in arid landscapes, located in a variety of plant associations including desert shrub, woodlands, and evergreen forests. This bat roosts mainly in the crevices of cliff rocks although may roost in buildings, caves, and	Yes	Yes	**No** Potential to Occur. The hillsides of Angeles National Forest, approximately 1.1 miles north of the site, could provide suitable habitat for this bat. The project Occurrence of this bat in the BSA would likely be limited to passage to nearby suitable habitat, and therefore was determined to have no potential to occur on the project site.
Lasiurus cinereus	hoary bat	CDFW: Special Animals List WBWG: M	Habitats: near open grassy areas in coniferous and deciduous forest or near lakes, open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding Characteristics: winter roosts include sides of buildings and tree trunks	Yes	Yes	**Low** Potential to Occur. There are CNDDB-reported occurrences of this species within a two-mile radius of the project site, but none more recent than 1956. (CNDDB, 2022a) The BSA does contain buildings and tree trunks that could be used for roosting; however, there is not enough potential prey such as moths to sustain a bat colony. This species may forage in the BSA but is not anticipated to roost in it.
Lasiurus xanthinus	western yellow bat	SSC, WBWG:H	Habitats: valley foothill riparian, desert riparian, desert wash, and palm oasis habitats Characteristics: occurs year-round in California	Yes	No	**No** Potential to Occur. The BSA does not provide valley foothill riparian, desert riparian, desert wash, or palm oasis habitats. The BSA is comprised of primarily urbanized areas including commercial and residential structures, paved areas, and ornamental vegetation.
Antrozous pallidus	pallid bat	SSC, WBWG: M	Habitats: variety of habitats is occupied by pallid bats, including deserts, grasslands, shrublands, woodlands, and forests form sea level up through mixed conifer forests Characteristics: night roosts may be in more open sites, such as porches and open buildings	Yes	Yes	**Low** Potential to Occur. There are CNDDB-reported occurrences of this species within a two-mile radius of the project site, but none more recent than 1951 (CNDDB, 2022a). This species is well-adapted to a variety of urbanized environments; however, it is unlikely to roost or form maternity colony within the BSA due to lack of available foraging habitat.
Taxidea taxus	American badger	SSC	Habitats: alpine meadows to elevations as low as Death Valley Characteristics: requirements - sufficient food, friable soils, and relatively open, uncultivated ground	Yes	No	**Low** Potential to Occur. This species has been recently observed (<15 years) within 1 mile of the project site (CNDDB, 2022a). The project site does contain some open areas with friable soils; however, there is not sufficient prey source within the BSA for this species to establish a den. The availability of open ground in the BSA is limited as most areas have undergone some disturbances primarily associated with development.
Ovis canadensis nelsoni	desert bighorn sheep (=Nelson's bighorn sheep)	fully protected	Habitats: desert mountains, arid, rocky, sparsely vegetated lands, steep walled canyons and ridges bisected by rocky or sandy washes, with available water Characteristics: graze along open slopes, washes and alluvial fans where they can see approaching predators	Yes	No	**No** Potential to Occur. The BSA does not contain open slopes for grazing, nor does it contain steep-walled canyons and ridges bisected by sandy/rocky washes.

Legend and Notes

Federal Endangered Species Act (ESA) Listing Codes: the ESA is administered by the USFWS and NMFS. The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. For the purposes of the ESA, Congress defined species to include subspecies, varieties, and, for vertebrates, distinct population segments. The official federal listing of Endangered and Threatened animals is published in 50 CFR § 17.11.

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

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

FC = federal candidate for listing: candidate species are plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them for listing as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by higher priority listing actions to address species in greater need. A proposed regulation has not yet been published in the Federal Register for these species.

California Endangered Species Act (CESA) Listing Codes: the CESA is administered by CDFW. The official listing of Animals of California Declared To Be Endangered or Threatened is contained in the California Code of Regulations, Title 14, § 670.5. Species and subspecies of California native animals are declared to be endangered or threatened as defined by §§ 2062 and 2067 of the Fish and Game Code.

SE = state-listed as endangered: "endangered species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease (Fish and Game Code § 2062).

ST = state-listed as threatened: "threatened species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts (Fish and Game Code § 2067).

SCE = state candidate for listing as endangered: a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for addition to the list of endangered species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).

Scientific Name (=Synonym)	Common Name (=Synonym)	Status	General Habitat Descriptions in California	The BSA:		Potential For Occurrence in the BSA
				Located Within Species' Distribution and/or Elevation Range (if known)	Contains Suitable Foraging, Roosting, and/or Breeding Habitats	

California Department of Fish and Wildlife (CDFW) Designations:

For some wildlife species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nesting colonies. For many species of birds, the primary emphasis is on the breeding population in California. For some species which do not breed in California but winter here, emphasis is on wintering range. The SSC designation thus may include a comment regarding the specific protection provided such as nesting or wintering

SSC = species of special concern: a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.

Fully protected: fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Lists were created for fish (Fish and Game Code § 5515), amphibians and reptiles (Fish and Game Code § 5050), birds (Fish and Game Code § 3511) and mammals (Fish and Game Code § 4700).

WL = watch list: this list includes birds identified in the California Bird Species of Special Concern (Shuford and Gardali, 2008) report and are not on the current CDFW species of special concern list, but were on previous lists and they have not been state-listed under CESA; were previously state or federally listed and now are on neither list; or are on the list of fully protected species.

Special Animals List: the CESA does not allow listing of insects, so despite the insect's precarious status, the insect has no protection under state legislation. CDFW includes this insect on its Special Animals List.

California Fish and Game Code §§ 4800 – 4810: The mountain lion (genus Puma) is a specially protected mammal under the laws of California. It is unlawful to take, injure, possess, transport, import, or sell any mountain lion or any part or product thereof, except as specifically provided in California Fish and Game Code §§ 4800 - 4810.

Protected by § 460 of the California Code of Regulations [CCR], Title 14

United States Fish and Wildlife Service (USFWS) Designations:

BCC = bird of conservation concern: a bird of conservation concern is listed in the USFWS' 2008 Birds of Conservation Concern report. The report identifies species, subspecies, and populations of all migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that, without additional conservation actions, are likely to become candidates for listing under the ESA. While all of the bird species included in the report is priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing.

Western Bat Working Group (WBWG) Designations:

The WBWG is composed of agencies, organizations, and individuals interested in bat research, management, and conservation from 13 western states and provinces. Species are ranked as High, Medium, or Low Priority in each of 10 regions in western North America.

H = High Priority: These species are considered the highest priority for funding, planning, and conservation actions, Information about status and hreats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.

M = Medium Priority : These species warrant closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat .

Resources

Amphibian and Reptile Species of Special Concern in California (Jennings and Hayes, 1994);
Mammals of North America (Kays and Wilson, 2002);
Inland Fishes of Californica (Moyle, 2002);
Fish Species of Special Concern in California, Third Edition (Moyle et al., 2015);
Reference Atlas to the Birds of North America (National Geographic Society, 2003);
Complete Birds of North America (National Geographic Society, 2006);
Field Guide to the Birds of North America, 4th Ed (National Geographic Society, 2002);
(NatureServe Explorer website);
Shorebirds of North America. The Photographic Guide (Paulson, 2005);
A Field Guide to Mammals of North America North of Mexico. Fourth Edition (Reid, 2006);
A Natural History of California (Schoenherr, 1992);
California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California (Shuford and Gardali, 2008);
National Audubon Society, The Sibley Guide to Birds (Sibley, 2000);
A Field Guide to Western Reptiles and Amphibians, Third Edition (Stebbins, 2003);
(The Birds of North America Online website);
Life on the Edge: A Guide to California's Endangered Natural Resources. Wildlife (Thelander et al., 1994);
(California Fish Website);
United States Department of Agriculture (USDA) Forest Service, Pacific Southwest Region, Sensitive Animal Species by Forest (USFS, 2013);
Mammalian Species of Special Concern in California (Williams, 1986);
Mammal Species of the World (Wilson and Reeder, 2005);
The Smithsonian Book of North American Mammals (Wilson and Ruff, 1999);
The Final Environmental Impact Report and Statement (Final EIR/S) for the West Mojave Plan (BLM, 2005);
Proposed Northern & Eastern Colorado Desert Coordinated Management Plan (NECO) (BLM and CDFG, 2002);
UltraSystems in-house records.

Notes:

Yes= the BSA is located within the wildlife species' known distribution, elevation range, and/or the BSA contains suitable habitats or conditions to support the species. The wildlife species has a potential to occur within the BSA. Further evaluation is needed.

No = the BSA is located outside the wildlife species' known distribution, elevation range, and/or the BSA lacks suitable habitats or conditions to support the species. It is highly unlikely for the wildlife species to have a potential to occur within the BSA. No further evaluation is needed.

Present = observed within the BSA during surveys.

DPS = distinct population segment: A DPS, or a distinct population segment, is a vertebrate population or group of populations that is discrete from other populations of the species and significant in relation to the entire species. The ESA provides for listing species, subspecies, or distinct population segments of vertebrate species.

ESU = evolutionarily significant unit: a Pacific salmon population or group of populations that is substantially reproductively isolated from other conspecific populations and that represents an important component of the evolutionary legacy of the species.

Scientific Name (=Synonym)	**Common Name (=Synonym)**	**Status**	**General Habitat Descriptions in California**	**The BSA:**		**Potential For Occurrence in the BSA**
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Glossary
Alluvial fan: a wide, cone-shaped deposit of rocks, sand, gravel, and finer materials that has been deposited by a stream as it flows out of a mountainous area onto a plain.
Alluvium: river or stream deposits, such as sand and silt.
Alkali-sink: a sunken area of land where the soil is strongly impregnated with alkalis.
Altricial: born in an underdeveloped and therefore dependent state. The opposite of precocial.
Anadromous: refers to fish species that spend most of their lives in the ocean but migrate to freshwater rivers and streams to spawn.
Aquatic: growing, living in, or frequenting water, usually open water.
Brackish: somewhat salty.
Canopy: defined here as the cover provided by a layer of vegetation, such as overstory trees in a forest.
Catadromous: refers to species in which adults reproduce in salt water and juveniles migrate to fresh water to rear.
Crepuscular: occurring in twilight; animals that are active around dawn and dusk.
Cryptic: hidden.
Detritus: particles of organic material in various stages of decay.
Diurnal: active during the daytime.
Echolocation: a system of high-frequency sounds and their echoes used by most bats and some insectivores and cetaceans to navigate and locate their prey.
Endemic: found only in a specified geographic region.
Estivate: to spend the summer in a dormant condition.
Estuary: an area in which salt water from the ocean mixes with flowing fresh water, usually at the wide mouth of a river.
Extant: still existing.
Extinct: refers to a plant or animal that no longer exists anywhere.
Extirpated: refers to a plant or animal or vegetation type that has been locally eliminated, but is not extinct.
Fossorial: dwelling underground.
Friable: easily crumbled.
Hibernate: to spend the winter in a dormant condition.
Home range: the area in which an individual animal travels in the scope of normal activities; not to be confused with range or distribution which refers to entire taxa.
Hybridization: refers here to the crossbreeding of two animals or plants of different species or subspecies.
Introduced: refers to any species intentionally or accidentally transported and released into an environment outside of its native range.
Invasive: an introduced species which spreads rapidly once established and has the potential to cause environmental or economic harm. Not all introduced species are invasive.
Mesic habitat: a type of habitat with a moderate or well-balanced supply of moisture. Compared to a dry habitat, a mesic habitat is moister.

Midden: a dunghill or refuse heap.
Migratory: refers to animals which travel seasonally. Migrations may be local or over long distances.
Nocturnal: active at night.
Pacific Flyway: the westernmost migratory bird flyway in North America, which begins in Alaska and runs south through California. It consists of several parallel routes linked together by several branches and follows the coast of North America and the valleys of the major mountain ranges.
Pelagic: referring to the ocean surface or the open sea, as opposed to coastal waters.
Playa: flat-floored bottom of an undrained desert basin, which may lack water much of the time.
Precocial: born in a fully-developed state. The opposite of altricial.
Range: defined here as the maximum geographic extent of a taxon or habitat; does not imply suitable conditions exist through the defined limits.
Resident: refers to animal taxa which remain in a given location throughout the year.
Riparian; on, relating to, or near the banks of a river or stream.
Talus: talus or broken rock which rests near the surface it detached from.
Temperate: used here to describe climates neither extremely hot nor extremely cold.
Torpor: a state of inactivity.
Tundra: a flat, boggy, treeless arctic region.
Vagrant: an animal, usually migratory, straying outside of the normal range for its species.
Vernal pools: seasonal wetlands that form in depressions on the soil surface above a water-restricting layer of soil or rock. Plant and animal taxa endemic to vernal pools are those which can adapt to a unique cycle of flooding, temporary ponding, and drying.
Viable: able to persist over time; self-sustaining.
Watershed: defined here as a stream or river basin and the adjacent hills and peaks which "shed," or drain, water into it.
Wetland: a general term referring to the transitional zone between aquatic and upland areas. Some wetlands are flooded or saturated only during certain seasons of the year.
Xeric: dry or desert-like.