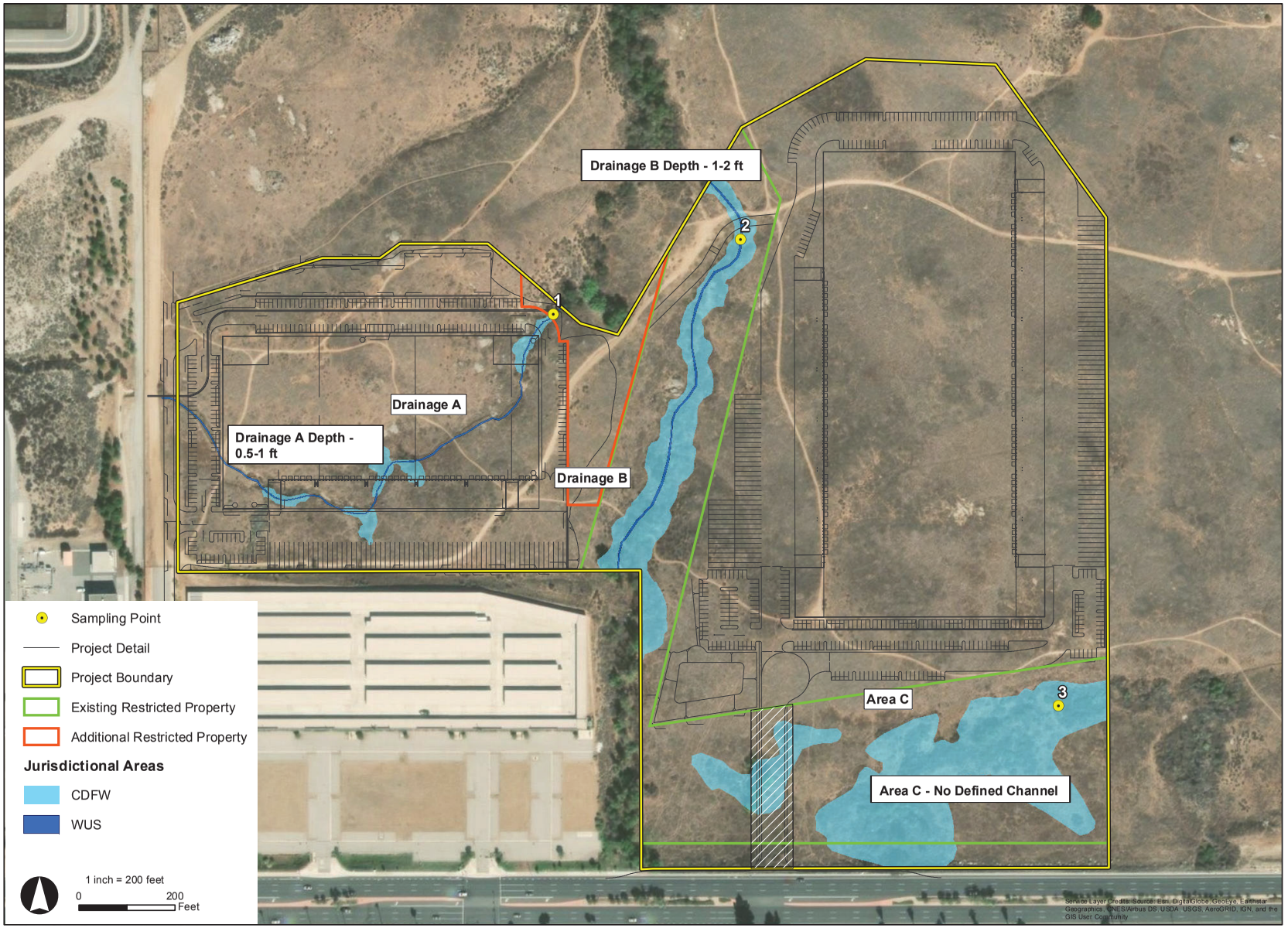


SYCAMORE HILLS DISTRIBUTION CENTER

RVA wood.

Drainages Map

Figure 5.3-5

Jurisdictional Resources

A delineation of jurisdictional waters, wetlands, and associated riparian habitat on the Project site was prepared (Appendix C). The purpose of the delineation is to determine the extent of State and Federal jurisdiction within the Project site potentially subject to regulation by the: USACE under Section 404 of the Clean Water Act (CWA), RWQCB under Section 401 of the CWA and Porter-Cologne Water Quality Act, and CDFW under Section 1602 of the state Fish and Game Code and to determine potential impacts from development of the Project. The Project site contains two jurisdictional drainages identified as Drainage A and Drainage B and a riparian area identified as Area C (Wood(b), p.22) as shown in Figure 5.3-5 – Drainages Map. Table 5.3-1 includes the drainages identified on the Project site, their jurisdictional status and area of jurisdiction, length of waterway within the Project site, and classification of aquatic resource.

Table 5.3-1: Summary of Jurisdictional Areas

Drainage ID	Non-Wetland WUS, WSC (acres)	CDFW Jurisdiction (acres)	Length (feet)	Latitude/ Longitude	Cowardin Class	Class of Aquatic Resource
A	0.08	0.35	1,183	33.91902/ -117.31228	R4SBW	Non-Section 10-Non wetland
B	0.11	1.36	918	33.91961/ -117.31018	R4SBW	Non-Section 10-Non wetland
Area C	0	3.45	n/a	33.91740/ -117.30845	n/a	Non-Section 10-Non wetland
Total	**0.19**	**5.16**	**2,101**	**n/a**	**n/a**	**n/a**

WUS-Waters of the United States, WSC-Waters of the State
CDFW-California Department of Fish and Wildlife
R4SBW-Riverine, Intermittent, Streambed, Intermittently Flooded/Temporary based on Classification of Wetlands and Deepwater Habitats of the United States

Drainage A

Drainage A enters the BSA near the northern portion of the western boundary and flows for approximately 1,183 feet before exiting the site near the middle of the northern boundary as shown on Figure 5.3-5- Drainages Map. USACE jurisdiction averaged 3 feet wide based on ordinary high water mark (OHWM) limits which included a break in bank slope and change in substrate. CDFW jurisdiction ranged from 3 feet wide based on the bankfull width in the upland vegetated portions of the drainage to 65 feet wide based on the extent of riparian vegetation. The banks of Drainage A ranged from vertically-incised to steeply-sloping with depths averaging 6 inches to 1 foot. Drainage A contained sparsely vegetated sections and areas of dense riparian vegetation. The sparsely-vegetated portions of the streambed of Drainage A were dominated by short-pod mustard (*Hirschfeldia incana*), western marsh cudweed (*Gnaphalium palustre*), and pygmy-weed (*Crassula connata*). The patches of riparian vegetation located at the center of the site, the southern corner, and small patches near Barton Street were dominated by mulefat (*Baccharis salicifolia*), willow (*Baccharis salicina*), Goodding's black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*) and blue elderberry (*Sambucus nigra* subsp*. caerulea*). (Wood(b), pp. 22-23)

The presence of USACE jurisdictional wetlands was investigated by recording the soil and hydrology characteristics and vegetation from a sampling point at the downstream end of Drainage A. Based on the jurisdictional delineation and as shown in Table 5.3-1 Drainage A consists of a total of 0.08 acre of non-wetland WUS and WSC, and 0.35 acres under CDFW jurisdiction (Wood(b), p. 22-23).

Drainage B

Drainage B enters the BSA near the middle of the southern boundary and flows for approximately 981 feet before exiting the site near the middle of the northern boundary as shown on Figure 5.3-5 – Drainages Map. USACE jurisdiction averaged 5 feet wide based on OHWM limits which included the destruction of terrestrial vegetation. CDFW jurisdiction ranged from 30 to 100 feet wide based on the extent of riparian vegetation. The banks of Drainage B ranged from gently-sloping to vertically-incised with depths averaging 1 to 2 feet (Wood(b), p. 23).

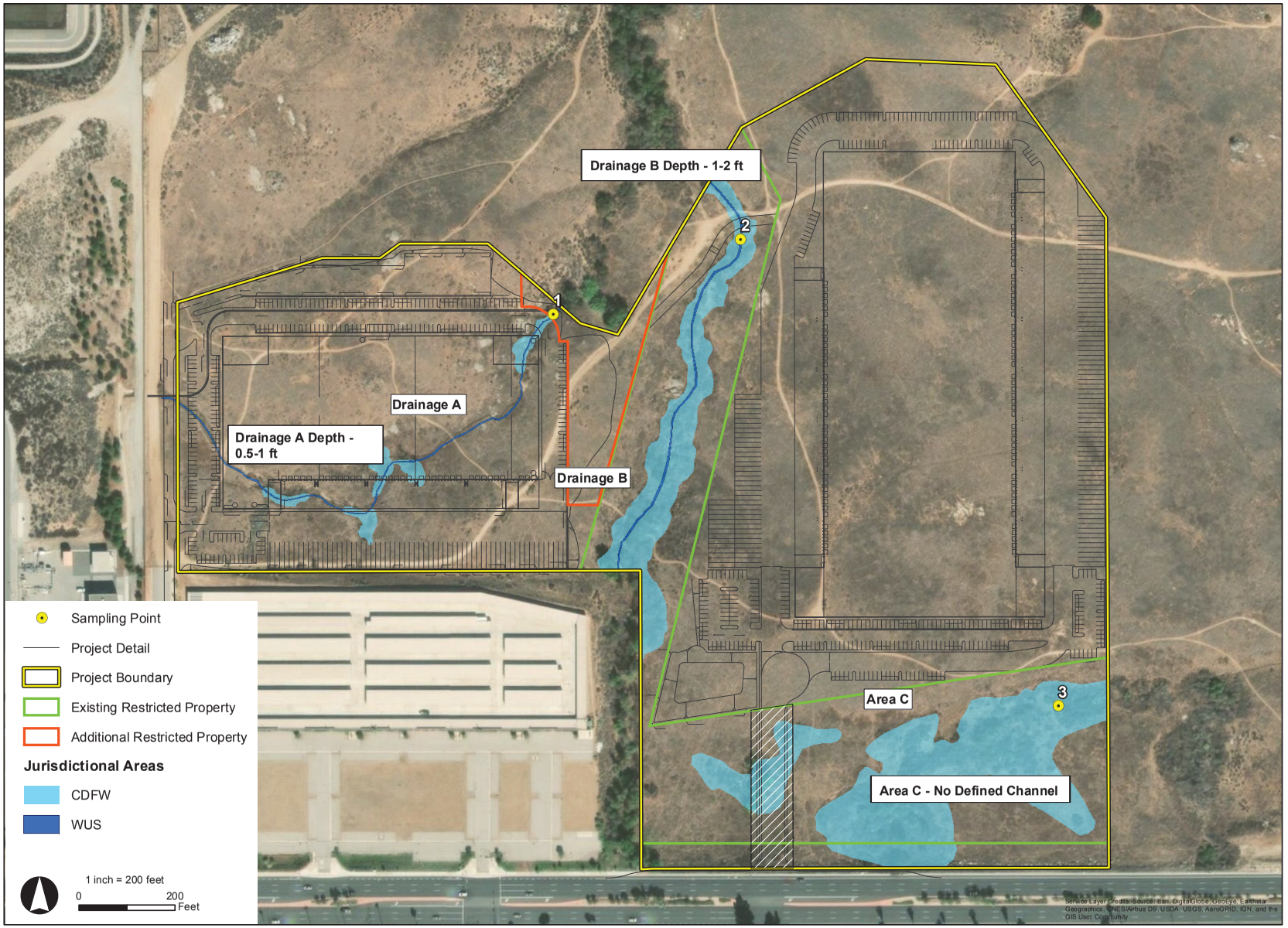
Drainage B contained dense riparian vegetation throughout the entire on-site extent. The canopy layer was dominated by Fremont cottonwood (*Populus fremontii* subsp.*fremontii*,) and red willow (*Salix laevigata)*. The understory was dominated by mulefat (*Baccharis salicifolia)*, willow (*Baccharis salicina*), hoary nettle (*Urtica dioica* subsp. *holosericea*), saltgrass (*Distichlis spicata*), and emergent grasses. (Wood(b), p. 23)

The presence of USACE jurisdictional wetlands was investigated by recording the soil and hydrology characteristics and vegetation from a sampling point at the downstream end of Drainage B. Based on the jurisdictional delineation and as shown in Table 5.3-1, Drainage B consists of a total of 0.11 acres of non-wetland WUS and WSC, and 1.36 acres under CDFW jurisdiction. (Wood(b), p. 22)

Area C

As shown in Figure 5.3-5 – Drainage Map, Area C contains riparian dominated habitat but does not exhibit a channel or other signs of confined water flow. It is located in the southeast portion of the BSA. There is no USACE jurisdiction associated with Area C due to a lack of an OHWM. CDFW jurisdiction totaled 3.45 acres based on the extent of riparian vegetation. Area C contain dense riparian vegetation dominated by mulefat (*Baccharis salicifolia)*, hoary nettle (*Urtica dioica* subsp. *Holosericea)*, willow (*Baccharis salicina*), branching phacelia (*Phacelia ramosissima*), and Goodding's black willow (*Salix gooddingii*) located in the southern portion of the Project site. (Wood(b), p. 23)

The presence of USACE wetlands was investigated by recording the soil and hydrology characteristics and vegetation at a sampling point within the eastern portion of Area C. The sampling point locations are shown on Figure 5.3-5 – Drainages Map. The sampling point in Area C exhibited hydrophytic vegetation but lacked hydric soils and wetland hydrology.



SYCAMORE HILLS DISTRIBUTION CENTER

RVA wood.

Drainages Map

Figure 5.3-5

5.3.2 Related Regulations

5.3.2.1 Federal Regulations

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) (16 U.S.C. 1531–1543) and subsequent amendments provide for the conservation of endangered and threatened species and the habitats on which they depend. A federally endangered species is one that is facing extinction throughout all or a significant portion of its geographical range. A federally threatened species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally threatened or endangered species on a site generally imposes severe constraints on development; particularly if development would result in a "take" of the species or its habitat which is prohibited under Section 9 of the FESA. The term "take," as defined under the FESA, means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct." Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history. Thus, if a listed species is present on the Project site and take of the species cannot be avoided, the Project proponent must obtain an incidental take permit, as issued by USFWS, through Section 7 or Section 10 Consultation. Habitat Conservation Plans (HCPs) for the impacted species must be developed in support of incidental take permits for non-federal projects to minimize impacts to the species and develop viable mitigation measures to offset the unavoidable impacts.

Clean Water Act

Pursuant to Section 404 of the CWA, the USACE regulates the discharge of dredged and/or fill material into waters of the U.S, including, but not limited to, grading, placing of rip-rap for erosion control, pouring concrete, laying sod, and stockpiling excavated material. The USACE has established a series of nationwide permits that authorize certain activities in WUS if a proposed activity can demonstrate compliance with standard conditions. Normally, the USACE requires an individual permit for an activity that will affect an area equal to or in excess of 0.5 acres of waters of the U.S., and projects that result in impacts less than 0.5 acre can be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions.

The term WUS, as defined in the Code of Federal Regulations (CFR) Section 328.3, include all waters or tributaries to waters such as lakes, rivers, intermittent and perennial streams, mudflats, sand-flats, natural ponds, wetlands, wet meadows, and other aquatic habitats. Frequently, waters of the U.S., with at least intermittently flowing water or tidal influences, are demarcated by an OHWM. The OHWM is defined in CFR Section 328.3(e) as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. In this region, the OHWM is typically indicated by the presence of an incised streambed with defined bank shelving.

The USACE defines a wetland (33 CFR 328.3(b)) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal

circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Wetland vegetation is characterized by vegetation in which more than 50 percent of the composition of dominant plant species are obligate wetland, facultative wetland, and/or facultative species that occur in wetlands. As a result of the 2001 Solid Waste Agency of Northern Cook County (SWANCC) case, a wetland must show connectivity to a stream course in order for such a feature to be considered jurisdictional.

Generally, the USACE does not assert jurisdiction over swales and erosional features, and ditches excavated wholly in or draining only uplands and that do not carry a relatively permanent flow of water. However, the USACE does reserve the right to regulate these waters on a case-by-case basis. Additionally, as part of the USACE permitting process, consultation with USFWS is required under Section 7 of the FESA for projects that may affect listed species or their designated habitat.

According to Section 401 of the CWA, "any applicant for a federal permit for activities that involve a discharge to waters of the state, shall provide the federal permitting agency a certification from the state in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB.

Under Section 401 of the CWA, the RWQCB regulates all activities that are regulated by the USACE. Additionally, under the state's Porter-Cologne Water Quality Act, the RWQCB regulates all activities, including dredging, filling, or discharge of materials into "waters of the state" that are not regulated by the USACE due to a lack of connectivity with a navigable water body and/or lack of an OHWM. The definition of "waters of the state" under the state Water Code is any surface water or groundwater, including saline waters, within the boundaries of the state, but may also include isolated waterbodies.

The Navigable Waters Protection Rule

On January 23, 2020, the Environmental Protection Agency (EPA) and the Department of the Army published a final rule called "The Navigable Water Protection Rule."

In this final rule, the agencies interpret WUS to encompass:

- The territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries that contribute surface water flow to such waters;
- Certain lakes, ponds, and impoundments of jurisdictional waters; and
- Wetlands adjacent to other jurisdictional waters.

The final rule excludes from the definition of WUS all waters or features not mentioned above, specifically clarifying that WUS do not include the following:

- groundwater, including groundwater drained through subsurface drainage systems;

- ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;
- diffuse stormwater runoff and directional sheet flow over upland;
- ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- prior converted cropland;
- artificially irrigated areas that would revert to upland if artificial irrigation ceases;
- artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
- water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;
- groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- waste treatment systems.

This rule was published in the Federal Register on April 21, 2020 and went into effect on June 22, 2020.

Migratory Bird Treaty Act

The MBTA protects all common wild birds found in the United States, except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs. Pursuant to the MBTA, it is unlawful to “take” (i.e., capture, kill, pursue, or possess) migratory birds or their nests. Nesting birds must not be disturbed. The MBTA requires that impacts to nesting bird species be minimized or eliminated by avoiding impacts to active nest sites present.

5.3.2.2 State Regulations

California Endangered Species Act

California Endangered Species Act (CESA) (Fish and Game Code 2050, et seq.) establishes that it is the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The state considers an “endangered” species one whose prospects of survival and reproduction are in immediate jeopardy. A “threatened” species is one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A “rare” species is one present in such small numbers throughout its portion of its known geographic range that it may become endangered if its present environment worsens. The rare species designation applies to California native plants. The term “species of special concern” is an informal designation used by CDFW for

some declining wildlife species that are not state candidates for listing. This designation does not provide legal protection but signifies that these species are recognized as sensitive by CDFW.

CESA mandates that state agencies should not approve projects which would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. Section 2080 provides the permitting structure for CESA. The "take" of a state-listed endangered or threatened species or candidate species will require incidental take permits as authorized by the CDFW. Thus, if a listed species is present on a project site and take of the species cannot be avoided, the project proponent must obtain an incidental take permit, as issued by the CDFW, through a 2081 permit or Memorandum of Understanding (MOU).

California Fish and Game Code

CDFW administers the Fish and Game Code. There are particular sections of the Fish and Game Code that are applicable to natural resource management. For example, Section 3503 of the Fish and Game Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird that is protected under the MBTA. Fish and Game Code Section 3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey such as hawks and owls, and their eggs and nests from any form of take. Fish and Game Code Section 3511 lists fully protected bird species where the CDFW is unable to authorize the issuance of permits or licenses to take these species.

Water resources are regulated by CDFW under Section 1600-1616 of the Fish and Game Code. Specifically, the Fish and Game Code mandates that "it is unlawful for any person to substantially divert or obstruct the natural flow or substantially changes the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity." CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses, including dry washes, characterized by the presence of hydrophytic vegetation, the location of definable bed and banks, and the presence of existing fish or wildlife resources. Further, CDFW jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function as part of the riparian system. Historic court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but re-emerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdiction. However, CDFW does not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake. Waters that are jurisdictional to CDFW require a Streambed Alteration Agreement between the CDFW and the project proponent as set forth in Section 1602.

Porter-Cologne Water Quality Control Act

This Act is the principal law governing water quality regulation in the state. It is the policy of the state, as set forth by this Act, that the quality of all of the WSC shall be protected, and that all activities and factors affecting the quality of water be regulated to attain the highest water quality within reason. Pursuant to this Act, the RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the state."

WSC are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.”

5.3.2.3 Regional Regulations

Western Riverside County Multiple Species Habitat Conservation Plan

The MSHCP is a comprehensive, multi-jurisdictional HCP focusing on conservation of species and their associated habitats in western Riverside County. The overall goal of the MSHCP is to maintain biological and ecological diversity within a rapidly urbanizing region and allows Riverside County and its cities to better control local land use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal ESAs.

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the FESA, as well as a Natural Communities Conservation Plan (NCCP) under the state NCCP Act of 2001. The MSHCP encompasses all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, San Jacinto, Menifee, Wildomar, Eastvale, and Jurupa Valley.

Rather than address sensitive species of an individual basis, the MSHCP provides for the collective conservation of the 146 covered species and their habitats. The MSHCP allows participating jurisdictions to authorize “take,” as defined under FESA, of plant and wildlife species identified within the MSHCP area. Under the MSHCP, the Wildlife Agencies (USFWS and CDFW) have granted “take authorization” for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation area, in exchange for the assembly and management of a coordination MSHCP conservation area, and as such, project applicants need not seek their own permits on a case-by-case basis from the USFWS and/or the CDFW.

The MSHCP is a “criteria-based plan” and does not rely on a hardline preserve map. Instead, within the MSHCP Plan Area, the MSHCP reserve will be assembled over time from a smaller subset of the Plan Area referred to as the Criteria Area. The Criteria Area consists of Criteria Cells or Cell Groupings, and flexible guidelines (criteria) for the assembly of conservation within the Criteria Cells or Cell Groupings. Criteria Cells and Cell Groupings also may be included within larger units known as Cores, Linkages, or Non-Contiguous Habitat Blocks.

In western Riverside County, many federal and state listed, or sensitive species and habitats are “covered species” under the MSHCP. In most instances the MSHCP requires no further surveys for most of the 146 covered species; however, Section 6 of the MSHCP states that additional surveys for 38 of these species is required if either the property occurs in a specific species survey area (e.g., BUOW, Criteria Area Species Survey Area [CASSA]) or if potential habitat exists on the property (e.g., LBVI, or Riverside fairy shrimp [*Streptocephalus wootoni*]). Further, the MSHCP includes policies for the review of projects in areas where habitat must be conserved (i.e., property within Criteria Cells) and policies for the protection of riparian habitats, vernal pools, and narrow endemic plants.

The City adopted the MSHCP on September 23, 2003 (Riverside Municipal Code, Chapter 16.72) and the federal and state Wildlife Agencies approved permits required to implement the MSHCP on June 22, 2004. Implementation of the MSHCP will conserve approximately 500,000 acres of habitat into a reserve system, including land already in public or quasi-public ownership and approximately 153,000 acres of land in private ownership that will be purchased or conserved through other means such as land acquisition and conservation easements. The money for purchasing private land comes from development mitigation fees imposed on new development within the boundaries of the MSHCP, as well as state and federal funds.

As a signatory to the MSHCP, the City adopted Ordinance No. 6709 (which is codified as Chapter 16.72 of the Riverside Municipal Code) and established a Local Development Mitigation Fee (LDMF) to be used by the Western Riverside County Regional Conservation Authority (RCA) to implement the MSHCP. The Project will participate in the MSHCP through the payment of the LDMF at the time building permits are issued pursuant to the provisions of Ordinance No. 6709.

Stephens' Kangaroo Rat Habitat Conservation Plan

The City is located within the boundary of the adopted Habitat Conservation Plan for the endangered Stephens' kangaroo rat (SKRHCP) administered by the Riverside County Habitat Conservation Agency (RCHCA). The SKRHCP mitigates impacts from development on the SKR by establishing a network of preserves and a system for managing and monitoring them. The SKRHCP initially established Core Reserves for the conservation of key SKR populations. Outside of the Core Reserves, the SKRHCP established a fee assessment area by which individual projects are granted coverage under the HCP by payment of SKR fees. The MSHCP, through its goals for SKR, reaffirms the conservation goals of the SKRHCP, while expanding the coverage area outside of the original coverage boundaries of the SKRHCP. Neither the SKRHCP nor MSHCP requires project-specific SKR surveys for sites located outside of the existing Core Reserves. Instead, payments of SKR fees are sufficient to obtain take authorization for SKR. Project proponent are required to pay the SKR Preservation Fee in effect at the time a grading permit is issued which is collected per Riverside Municipal Code Section 16.40.040.

5.3.2.4 Local Regulations

Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWP SKRMP)

The SCWP SKRMP was prepared with two purposes: update the park's conceptual development plan, and provide a coordinated Maintenance/Management Plan for the endangered SKR. Because the Sycamore Canyon Wilderness Park was designated as a core reserve in the SKRHCP, the City was required to prepare a Maintenance/Management Plan for the core reserve (SCWP SKRMP, p. 1).

The maintenance and management objectives of the SCWP SKRMP are to:

- Provide proper management of resources which ensure the preservation of all native plant and animal species with particular focus on preservation of SKR and its habitat;

- Preserve, maintain, restore and enhance the existing natural landscape for the benefit of the park visitor in a manner compatible with protection of biological resources;
- Preserve, maintain, and enhance the existing archaeological sites;
- Protect existing viewsheds and provide for optimum view opportunities within the site; and
- Encourage repeat visitation (SCWP SKRMP, p. 21).

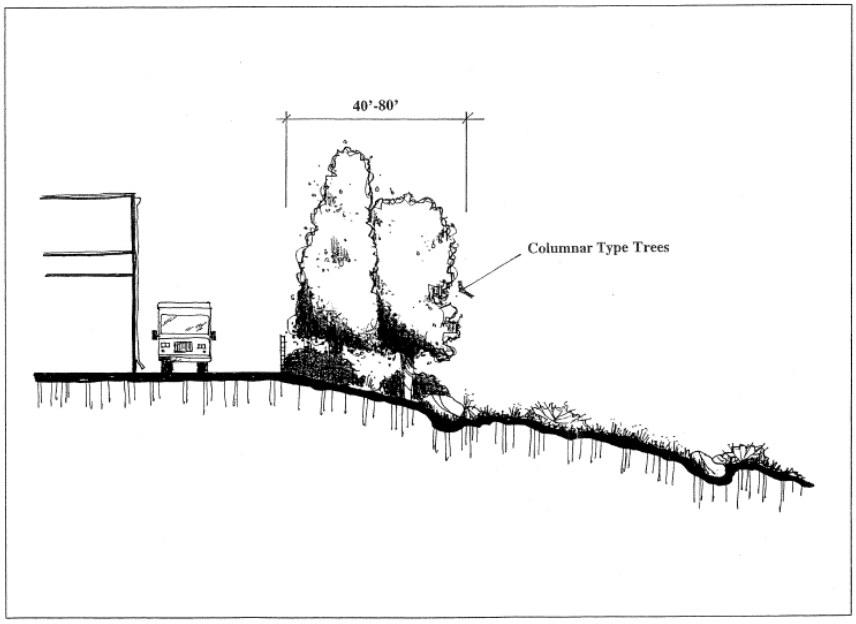
For the purpose of habitat management planning, the SCWP SKRMP divides the Park site into seven separate Management Units (MU's), ranging in size from just under 60 acres to a little over 775 acres. Dividing the site into MUs allows the Reserve Manager to evaluate the resources and management needs of the different segments of the Park in a more detailed manner. The Project site is adjacent to MU 5 (SCWP SKRMP, Figure 3-11).

This plan also examines a variety of alternatives for trailheads, edge treatments, and interpretive day-use facilities that will avoid impacts to the SKR habitat (SCWP SKRMP, p. 163). One of two minor trailheads is planned at the northerly terminus of Barton Street at the Park boundary and adjacent to the proposed Project. The second is at Sycamore Canyon Boulevard and Cottonwood Avenue. The Barton Street location is planned to include the typical trailhead shade structure and is sited in a location conducive to on-street parking (SCWP SKRMP, p. 7).

The SCWP SKRMP also identifies appropriate edge treatments between the park and other uses. It requires a 7-foot high masonry wall edge treatment along all commercial/industrial development adjacent to the park. This wall shall only have emergency vehicle access gates as required. To soften the visual impacts of the masonry wall, a planted area consisting of columnar trees and fire-resistant shrubs must stretch out a maximum of 80-feet from the wall as illustrated in Figure 6-8 of the SCWP SKRMP, shown below. The SCWP SKRMP indicates the edge treatment solid wall could be substituted with an open 6-foot-high iron fence, which would require a 100-foot swath of stubble management along the property line. Swathing involves the cutting of grass, weeds, or crops often by a mechanical swather which leaves a narrow strip of uniform stubble or stems on the ground as illustrated in Figure 6-6 of the SCWP SKRMP, shown below. However, this will eliminate any opportunity to screen the industrial area from park visitors as well as create higher risk of wildfire ignition. (SKR SKRMP, Section 6.7.5 Industrial/Commercial Edge Treatment, p. 176) The Project has appropriate edge treatments with the park, consistent with the SCWP SKRMP, as it includes 8-12 foot high solid walls (around development and along the northern boundary of Parcel 2), a 6-8 foot-high metal fence (along the northwest, western and southern boundaries of Parcel 2 and along the southern boundary of Parcel 1), and 4-foot high metal fence on top of 4-foot high solid wall (along the northern boundary of Parcel 2). Additionally, the trailhead parking lot (Parcel C) provides additional paving, decomposed granite, and landscaping that will function similar or better than stubble management for fire control.

Fire management for the SCWP SKRMP is an essential planning tool in Southern California. The SCWP SKRMP considers fire from two different perspectives: control of wildland fire, and fire as a management tool. The three SKR habitat management techniques recommended for Sycamore Canyon Wilderness Park are mowing, grazing, and controlled burning (SCWP SKRMP, p. 21).

SYCAMORE CANYON
WILDERNESS PARK
Conceptual Development
Plan Revision

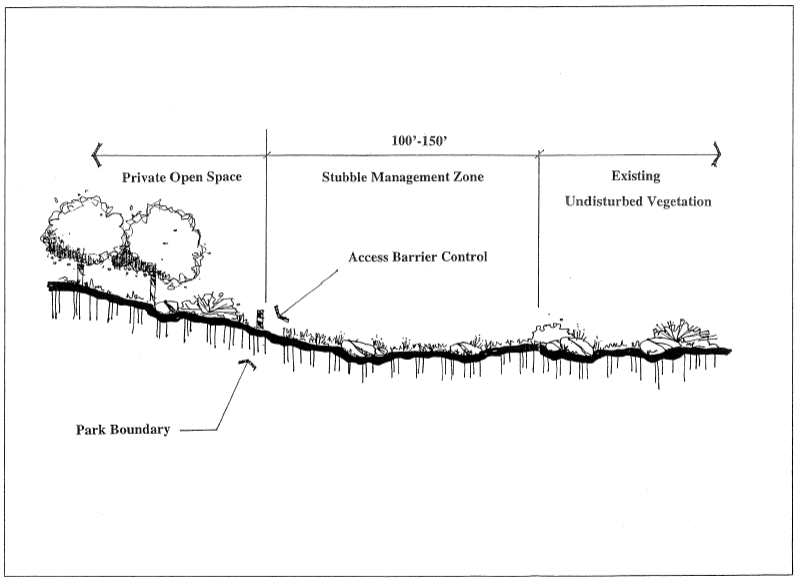


Industrial/Commercial
Edge Treatment

Figure 6-8

Dangermond & Associates
Recreation and Environmental Planning

SYCAMORE CANYON
WILDERNESS PARK
Conceptual Development
Plan Revision



Open Space
Edge Treatment

Figure 6-6

Dangermond & Associates
Recreation and Environmental Planning

Urban Forestry Policy Manual

The City's Urban Forestry Policy Manual is a guideline for the planting, pruning, preservation, and removal of all trees in the City rights-of-way and recreational facilities. These specifications are based on national standards for tree care established by the International Society of Arboriculture, the National Arborists Association and the American National Standards Institute. The manual incorporates input from Public Works Department staff, the Parks, Recreation, and Community Services Commission and staff, City Council, various other commissions and the citizens of the City. The manual is a reference for use by City staff, private contractors, volunteer organizations, and citizens when working in and around trees within City jurisdiction. Moreover, the Urban Forestry Policy Manual does not relate to private property trees.

Comprehensive Park, Recreation & Community Services Master Plan

The Riverside Comprehensive Park, Recreation & Community Services Master Plan serves as a guide and implementation tool for the management and development of parks and recreational facilities and programs for the City. This Master Plan is based on the current demographics and community input. The needs and recommendations presented should be re-evaluated every five to ten years to assess for any significant modifications that may influence the local community's recreation needs. The Master Plan is a reference for use by City staff. Therefore, the Comprehensive Park, Recreation & Community Services Master Plan does not relate to the Project site. However, Parcel C of the Project is proposed to be developed with a trailhead parking lot for the Sycamore Canyon Wilderness Park. The proposed trailhead parking lot is not required but is being provided by the applicant as an amenity to the City's Sycamore Canyon Wilderness Park, though it should be noted that Parcel C will not be formally incorporated into the Park.

Riverside General Plan 2025

The GP 2025 contains objectives and policies to protect biological resources within the City in the Open Space and Conservation Element. The following objectives and policies are applicable to the Project:

Objective LU-7: Preserve and protect significant areas of native wildlife and plant habitat, including endangered species.

> **Policy LU-7-1:** Continue to maintain Sycamore Canyon Wilderness Park as primarily a functioning wildlife habitat.
>
> **Policy LU-7-2:** Design new development adjacent and in close proximity to native wildlife in a manner which protects and preserves habitat.
>
> **Policy LU-7-3:** Continue to require natural open space easements in conjunction with new development in hillside and arroyo areas over non-graded areas of the development.
>
> **Policy LU-7-4:** Continue to participate in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

Objective OS-1: Preserve and expand open space areas and linkages throughout the City and sphere of influence to protect the natural and visual character of the community and to provide for appropriate active and passive recreational uses.

Policy OS-1.1: Protect and preserve open space and natural habitat wherever possible.

Policy OS-1.5: Require the provision of open space linkages between development projects, consistent with the provisions of the Trails Master Plan, Open Space Plan and other environmental considerations including the MSHCP.

Policy OS-1.6: Ensure that any new development that does occur is effectively integrated through convenient street and/or pedestrian connections, as well as through visual connections.

Objective OS-2: Minimize the extent of urban development in the hillsides, and mitigate any significant adverse consequences associated with urbanization.

Policy OS-2.2: Limit the extent and intensity of uses and development in areas of unstable terrain, steep terrain, scenic vistas, arroyos and other critical environmental areas.

Policy OS-2.3: Control the grading of land, pursuant to the City's Grading Code, to minimize the potential for erosion, landsliding and other forms of land failure, as well as to limit the potential negative aesthetic impact of excessive modification of natural landforms.

Policy OS-2.4: Recognize the value of ridgelines, hillsides and arroyos as significant natural and visual resources and strengthen their role as features which define the character of the City and its individual neighborhoods.

Objective OS-5: Protect biotic communities and critical habitats for endangered species throughout the General Plan Area.

Policy OS-5.1: Preserve significant habitat and environmental sensitive areas, including hillsides, rock outcroppings, creeks, streams, viewsheds and arroyos through application of the RC Zone standards and the Hillside/Arroyo standards of the City's Grading Code.

Policy OS-5.2: Continue to participate in the MSHCP Program and ensure all projects comply with applicable requirements.

Policy OS-5.3: Continue to participate in the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan including collection of mitigation fees.

Policy OS-5.4: Protect native plant communities in the General Plan Area, including sage scrub, riparian areas and vernal pools, consistent with the MSHCP.

5.3.3 Project Design Considerations

Walls and Fences

As described in Section 3.0 Project Description, and shown on Figure 3.0-11 – Fencing Plan, several different fences and walls will be installed with the most northern being a 42-inch cable rail theme fence along the northern property line, adjacent to the Sycamore Canyon Wilderness Park. The 42-inch cable rail theme fence will also extend along the western side of Parcel 1 and the boundary of Parcel A, the Restricted Property/Conservation Area. The 42-inch cable rail theme fence will also run along Parcels A and B Conservation Areas southern boundary and frontage along Alessandro Boulevard and on both sides of the Parcel 1/ Building A driveway on

Alessandro Boulevard. An 8-foot-high concrete screen wall will be constructed around the east, north and west sides of Building A at the outer edge of the drive aisles and parking area. A 6-foot to 8-foot-high metal fence will be placed along the outer edge of the drive aisles and parking area on the south side of Building A. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on both sides of the southern end of Building A that faces Alessandro Boulevard to screen views of the dock doors and loading areas from Alessandro Boulevard.

This 8-foot-high concrete screen wall will be installed around the northeast, east, and southeast sides of Building B, at the outer edge of the drive aisles and parking areas, adjacent to the Parcel A Conservation Area. A 6-foot to 8-foot-high metal fence will be placed along the northwestern, western, and southern sides of Building B at the outer edge of the drive aisles and parking areas. To separate the Building B northern parking lot/property line and the trail head parking lot an 8-foot-high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be installed. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on the south side of Building B facing west to Barton Street to screen views of the dock doors and loading area from Barton Street.

Trailhead Parking Lot

The trailhead parking lot, which is located along the northern side of Building B, will serve as a buffer between the warehouse operations and the wilderness park. The trailhead operational hours will be consistent with the operational hours of the wilderness park, open from dusk to dawn. Therefore, there would not be vehicle headlights at nighttime shining into the park from the trailhead parking lot.

Restricted Property

Parcels A and B contain the existing 11.6-acre Restricted Property that landlocks Parcel 1. Parcel C will be designated for a trailhead parking. Parcels A, B, and C are described in more detail below:

- Parcels A and B are on the west and east sides, respectively, of the proposed access road on Alessandro Boulevard. The proposed Project includes removing 0.81 acres of the Restricted Property to create a driveway connecting Parcel/ Building A to Alessandro Boulevard. As part of mitigation for the Project, 1.44 acres will be incorporated into Parcel A, for a net gain of 0.63 acre of new Restricted Property.

  The access road would include two elliptical shaped corrugated metal pipes measuring 38 inches high and 57 inches wide to allow drainage and wildlife connectivity between Parcel A and Parcel B. Parcels A and B will be managed in perpetuity by a professional conservation organization funded by the applicant as part of mitigation for the Project. Thus, Parcel A and B will have a total of 12.23 acres of Restricted Property, which will be placed under a Conservation Easement.

Project impacts to the existing Restricted Property and the associated riparian/riverine resources will be mitigated via the implementation of the Determination of Biologically Equivalent or Superior Preservation (DBESP) Report and Mitigation Planting Plan. Per the DBESP, the mitigation

proposed and approved by the wildlife agencies includes the creation (establishment) of 0.61 acres of riparian woodland of a type jurisdictional to CDFW, adjacent to the existing CDFW riparian woodland area south of the Project area and north of Alessandro Blvd. In addition, Project will enhance a total of 1.58 acres of riparian habitat: 0.01 acre in Drainage A, 1.34 acres in Drainage B, and 0.23 acre in Area C, and temporary impacts to 0.02 acre of riparian habitat in Drainage B will be restored. The DBESP findings showed the proposed enhanced riparian/riverine resources would provide a biologically superior riparian habitat for riparian species, including LBVI.

5.3.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the *State CEQA Guidelines*. They City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the *State CEQA Guidelines*. The Environmental Checklist prepared by the City for the Project (Appendix A of this EIR) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the Project would:

- (Threshold A) have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- (Threshold B) have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;
- (Threshold C) have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- (Threshold D) interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- (Threshold E) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- (Threshold F) conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.3.5 Environmental Impacts

Threshold A: *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

The Biological Resources & MSHCP Consistency Report (Appendix C) prepared for the Project identified the presence of some listed species on the site. The Project site is located within the MSHCP area, within the *Cities of Riverside and Norco Area Plan*. It is also within the SKRHCP. The Project site is not in a criteria area for the MSHCP (not within a Criteria Cell, Cell Group, habitat core or linkage), but is immediately adjacent to the Sycamore Canyon Wilderness Park to the north which is designated as Public Quasi Public (PQP) lands and Existing Core D of the MSHCP conservation area, as illustrated in Figure 5.3-6 – Riverside County MSHCP Conserved Lands. The Sycamore Canyon Wilderness Park is also designated as part of the Sycamore Canyon-March Air Force Base (AFB) Core Reserve of the SKRHCP.

Special-Status Plant Species

As mentioned in Section 5.3.1, several individuals of paniculate tarplant were found throughout the "non-native grassland" areas of the BSA. Paniculate tarplant is not a MSHCP-covered species and only has a CRPR of 4.2. CNPS List 4 plants have the lowest sensitivity ranking in the CNPS system, "Plants of Limited Distribution - A Watch List." The Project site also contains suitable habitat for Parry's spineflower and Robinson's pepper-grass, although they have not been observed on site. As smooth tarplant and Parry's spineflower are MSHCP-covered species, potential impacts to these plants are mitigated through compliance with the Plan and payment of the MSHCP fee. Southern Sycamore Alder Woodland, a special-status vegetation community, does not occur on-site and would not be impacted by the Project. Like paniculate tarplant, Robinson's pepper-grass is not covered by the MSHCP. Robinson's pepper-grass is not state or federally listed as threatened or endangered, and CNPS List 4 plants have the lowest sensitivity ranking in the CNPS system as "Plants of Limited Distribution - a Watch List." It is not known to occur on site, but it has not been specifically surveyed for.

Impacts from the Project on paniculate tarplant are not expected to be significant as it is not expected to substantially reduce the habitat for this species throughout its range. To further reduce impacts to this species, **MM BIO-1** will be implemented which will require a qualified biologist collect seed for paniculate tarplant and Robinson's pepper-grass throughout the proposed development footprint of the Project. The seeds shall be stored in accordance with the biologist's recommendations. On site restoration efforts shall incorporate the collected seed or salvaged topsoil. With the implementation of **MM BIO-1** I potential impacts to these sensitive plant species would be **less than significant with mitigation**.

Threatened and Endangered Wildlife

LBVI is a Federally and State listed species and covered by the MSHCP. The focused study conducted between April 21 and August 9, 2020, resulted in the observation of two (2) LBVI males within the riparian woodland habitat on-site. (Kidd, p. 9) Focused surveys conducted in 2014 also resulted in observations of LBVI. (Wood(a) p.28) Therefore, the on-site riparian woodland habitat is occupied by LBVI.

Noise from construction activities could adversely impact LBVI if construction were to occur while LBVI is present in the on-site riparian habitat (refer to Section 5.11 Noise of this EIR). Implementation of Mitigation Measure **MM NOI-1**, which requires a temporary noise barrier between the construction activities and the adjacent Sycamore Canyon Wilderness Park, and

between construction activities and on-site conservation areas, would reduce potential impacts from construction activities on LBVI to **less than significant with mitigation**.

The Project will result in 0.80 acre of permanent impacts and 0.02 acre temporary impacts to riparian/riverine areas, which serve as habitat for LBVI. However, mitigation measures **MM BIO-2** through **MM BIO-7** (described in more detail in Section 5.3.6), would be implemented to reduce potential impacts:

- **MM BIO-2:** This measure details avoidance and minimization measures to help avoid direct construction impacts to riparian plant communities to the greatest extent feasible.
- **MM BIO-3:** This measure would require the construction contractor to supervise provision and maintenance of all standard control BMPs to reduce fugitive dust emissions during soil excavation, grading, or other subsurface disturbances.
- **MM BIO-4:** This measure would require the implementation of a SWPPP as required by the California General Construction Storm Water Permit pursuant the Regional Board regulations.
- **MM BIO-5**: Construction worker training shall be provided by a qualified biologist on the first day of construction and the Project boundaries shall be clearly marked to prevent accidental/unauthorized intrusions during construction. Staging areas for storage of materials and heavy equipment shall be prohibited within 20 feet from the top of the slope adjacent to the conserved riparian habitat.
- **MM BIO-6:** Implementation of this measure will result in a total of 1.58 acres of riparian habitat enhancement and creation (establishment) of 0.61 acres of in-kind riparian woodland in Area C.
- **MM BIO-7:** This measure will require payment of the MSHCP mitigation fee to the City of Riverside prior to issuance of a grading permit for the Project.

Potential direct and indirect impacts to LBVI will be reduced to **less than significant with** implementation of Mitigation Measures **MM BIO-2** through **MM BIO-7.**

SKR is a Federally endangered, State threatened species and covered by the SKRHCP and the MSHCP. Suitable habitat is found on the Project site. SKR burrows, scat, and tracks were observed throughout the grassland areas. Although the Project site is located adjacent to the Sycamore Canyon Wilderness Park, which is designated as part of the Sycamore Canyon - March Air Force Base Core Reserve of the SKRHCP, the Project site itself is not within this reserve. In order to reduce potential impacts to SKR, **MM BIO-8** requires the payment of the SKRHCP fee be provided to the City prior to issuance of a grading permit. With implementation of **MM BIO-8** potential impacts to SKR to are reduced to **less than significant with mitigation**.

Special-Status Wildlife Species

Several special-status wildlife species have been observed at the Project site and include (Wood(a) p. 27):

- *Circus hudsonius*, northern harrier (MSHCP, SSC)
- *Accipiter cooperii*, Cooper's hawk (MSHCP; WL)
- *Lepus californicus bennettii,* San Diego black-tailed jackrabbit (MSHCP; SSC)
- *Neotoma* sp., wood rat middens* (MSHCP; SSC)
- *Crotalus ruber*, red-diamond rattlesnake (MSHCP; SSC; S)
- *Selasphorus rufus/sasin*, rufous/Allen's hummingbird (rufous is a BCC)
- *Phalacrocorax auritus*, double-crested cormorant (MSHCP; WL)
- *Empidonax traillii*, willow flycatcher (MSHCP; SE; BCC)
- *Eremophila alpestris actia*, California horned lark (MSHCP; WL)
- *Spinus lawrencei,* Lawrence's goldfinch (BCC)
- *Setophaga petechia brewsteri,* yellow warbler (MSHCP; BCC; SSC)
- *Aimophila ruficeps canescens*, southern California rufous-crowned sparrow (MSHCP; WL).

All of the avian, reptile and mammal species above could be found foraging and/or breeding in the non-native grassland community and the associated riparian habitat with the exception of a double-crested cormorant (flyover only). Rufous hummingbird may forage, but only in migration; they do not breed in southern California. The willow flycatchers detected in the BSA were migrants present for foraging only, likely of more northerly subspecies which do not nest in southern California (E.t. adastus or E.t. brewsteri), and not southwestern willow flycatchers (subspecies E.t. extimus). USFWS protocol does not recognize willow flycatchers as the "southwestern" species unless they are found to be nesting or if they stay on-site past the migratory period. (Wood(a) pp. 27-28)

The MSHCP covers most of these special status wildlife species. Rufous hummingbird and Lawrence's goldfinch are not covered by the MSHCP. However, they are protected by the Federal Migratory Bird Treaty Act (MBTA) (**MM BIO-9)**. Compliance with the MSHCP (outlined in detail in Threshold A) and payment of the MSHCP fee (**MM BIO-7**), are required to reduce potential impacts to these observed MSHCP-covered sensitive wildlife species to **less than significant levels with mitigation.**

CNDDB records of additional special status species recorded in the past within two miles of the Project site are shown on Figure 5.3-2. These records include many of the species already recorded in the BSA listed above, but also the following (Wood(a) p. 28):

- *Aspidoscelis hyperythra,* orange-throated whiptail (MSHCP, WL). Habitat present in the BSA.

- *Agelaius tricolor*, tricolored blackbird (MSHCP, ST, SSC, BCC). No habitat present in the BSA.
- *Chaetodipus fallax fallax*, northwestern San Diego pocket mouse (MSHCP, SSC). Habitat present in the BSA.
- *Spea hammondii*, western spadefoot (MSHCP, SSC). Like fairy shrimp, this species requires temporary pools to breed. No breeding habitat is present.
- *Onychomys torridus ramona*, southern grasshopper mouse (not covered by MSHCP, SSC). Habitat present in the BSA.
- *Lanius ludovicianus*, loggerhead shrike (MSHCP, SSC, BCC). Habitat present in the BSA.
- *Athene cunicularia*, burrowing owl (MSHCP, SSC, BCC). This species has a designated survey area in the MSHCP, and the project is within it. 2018 and 2020 surveys did not detect the species.
- *Dipodomys merriami parvus*, San Bernardino kangaroo rat (MSHCP, FE, state candidate for listing as endangered, SSC). This species has a designated survey area in the MSHCP, and the project is not within that survey area.
- *Phrynosoma blainvillii*, coast horned lizard (MSHCP, SSC). Habitat present in the BSA.
- *Nyctinomops femorosaccus*, pocketed free-tailed bat (SSC, not covered by MSHCP). No roosting habitat in the BSA could forage.
- *Perognathus longimembris brevinasus*, Los Angeles pocket mouse (MSHCP, SSC). This species has a designated survey area in the MSHCP, and the project is not within that survey area.

Compliance with the MSHCP (outlined in detail in Threshold D) and payment of the MSHCP fee (**MM BIO-7**), are required to reduce potential impacts to MSHCP-covered sensitive wildlife species with the potential to occur on site to **less than significant with mitigation.**

Although not covered by the MSHCP, the loss of habitat and/or individuals of southern grasshopper mouse or foraging habitat for pocketed free-tailed bat would not be considered significant. These species are not state or federally listed as threatened or endangered, and are of potential occurrence onsite, but not known to occur. The proposed 12.23 acres of Restricted Property/ Conservation Area and the 1,500-acre Sycamore Canyon Wilderness Park immediately to the north would continue to provide ample habitat for these species in the project area; thus, the small incremental loss of potential habitat from development of the project would not be significant. (Wood(a) p.29) Potential impacts to southern grasshopper mouse and pocketed free-tailed bat would be **less than significant without mitigation**.

As previously mentioned in Section 5.3.1, no BUOW were identified in the Project site during the 2018 and 2020 focused surveys. BUOW is a MSHCP covered species. Although no individual BUOW were identified, as the site contains suitable BUOW habitat, a 30-day BUOW pre-construction clearance survey (**MM BIO-10**) is required pursuant to the MSHCP and to ensure BUOW are not utilizing the site for nesting prior to construction start. Implementation will ensure potential impacts to BUOW are **less than significant with mitigation**.

The Project site may support nests utilized by birds protected under MBTA of 1918 (Code of Federal Regulations Section 10.13) or the California Fish and Game Code, as discussed under Section 5.2.2 – Related Regulations, above. Thus, the potential exists for construction-related disturbance to nesting birds. All migratory non-game native bird species are protected by the international treaty under the MBTA. Pursuant to the MBTA, it is unlawful to "take" (i.e., harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect) migratory birds or their nests. Many native bird species are covered under the MBTA. Impacts can be minimized or eliminated by avoiding impacts to potential nest sites present on the Project site. While there is no established protocol for nest avoidance, when consulted, CDFW generally recommends avoidance buffers of about 500 feet for birds-of-prey, and 100 to 300 feet for songbirds. Mitigation measure **MM BIO-9** is required to reduce potential impacts to these special-status bird species and any active nests to **less than significant levels with mitigation.**

In summary, impacts to species identified as a candidate, sensitive, or special status species will be **less than significant with mitigation measures MM BIO-1 through MM BIO-10 and MM-NOI-1.**

Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Riverside County MSHCP Conserved Lands

Figure 5.3-6

Threshold B: *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

The Project site is dominated by disturbed non-native grassland with two drainages containing some riparian vegetation labeled as Drainage A and Drainage B, and a third area labeled as Area C which exhibits riparian features but does not exhibit a channel or other signs of confined water flow.

Drainage A

As previously described in Section 5.3.1, Setting, Jurisdictional Resources, Drainage A contains sparsely vegetated sections and areas of dense riparian vegetation dominated by short-pod mustard, western marsh cudweed (*Gnaphalium palustre*), and pygmy-weed (*Crassula connata*). The patches of riparian vegetation were dominated by mulefat (*Hirschfeldia incana*), willow baccharis, (*Baccharis salicina*), Goodding's black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*) and blue elderberry (*Sambucus nigra subsp. caerulea*).

Drainage B

Drainage B contains dense riparian vegetation throughout the entire on-site extent. The canopy layer is dominated by Fremont cottonwood (*Populus fremontii* subsp. *fremontii*) and red willow. The understory was dominated by mulefat (*Hirschfeldia incana)*, willow (Baccharis *salicina)* hoary nettle (*Urtica dioica subsp. holosericea*), saltgrass (*Distichlis spicata*), and emergent grasses. Herbs are more common than shrubs the Project site lacks a well-develop mid-story canopy, and the understory is relative sparse.

Area C

Area C is located in the southeastern portion of the Project site. Area C contains dense riparian vegetation dominated by mulefat (*Hirschfeldia incana)*, hoary nettle, willow (Baccharis *salicina)*, branching phacelia (*Phacelia ramosissima*), and Goodding's black willow (*Salix gooddingii)*. The presence of USACE wetlands was investigated and although the sampling point exhibited hydrophytic vegetation it lacked hydric soils and wetland hydrology. There is no USACE WUS associated with Area C due to lack of OHWM. The extent of CDFW jurisdiction/riparian area on-site for Area C is 3.45 acres based on the extent of riparian vegetation.

Table 5.3-2 outlines impacts to jurisdictional areas onsite, WUS, and WSC from the Project. Drainage A would have 0.08 acre or 1,083 linear feet (LF) of permanent impacts to WUS and 0.23 acre of permanent impact to WSC. Drainage B would have 0.002 acres or 21 linear feet of temporary impacts to WUS and 0.017 acre of temporary impacts to WSC due to a temporary use of crossing over the drainage during construction. Area C is expected to have 0.57 acre of permanent impacts to WSC due to construction of the access road/driveway to building A (Wood(b) p. 25).

Table 5.3-2 Impacts to Jurisdictional Areas

Drainage	Temporary Impacts to non-wetland WUS	Permanent Impacts to non-wetland WUS	Temporary Impacts to CFW Jurisdiction	Permanent Impacts to CDFW Jurisdiction
A	0	0.08 acre 1,083 linear feet	0	0.23 acre
B	0.002 acre 21 linear feet	0	0.017 acre	0
Area C	0	0	0	0.57 acre
Total	**0.002 acre 21 linear feet**	**0.08 acre 1,083 linear feet**	**0.017 acre**	**0.80 acre**

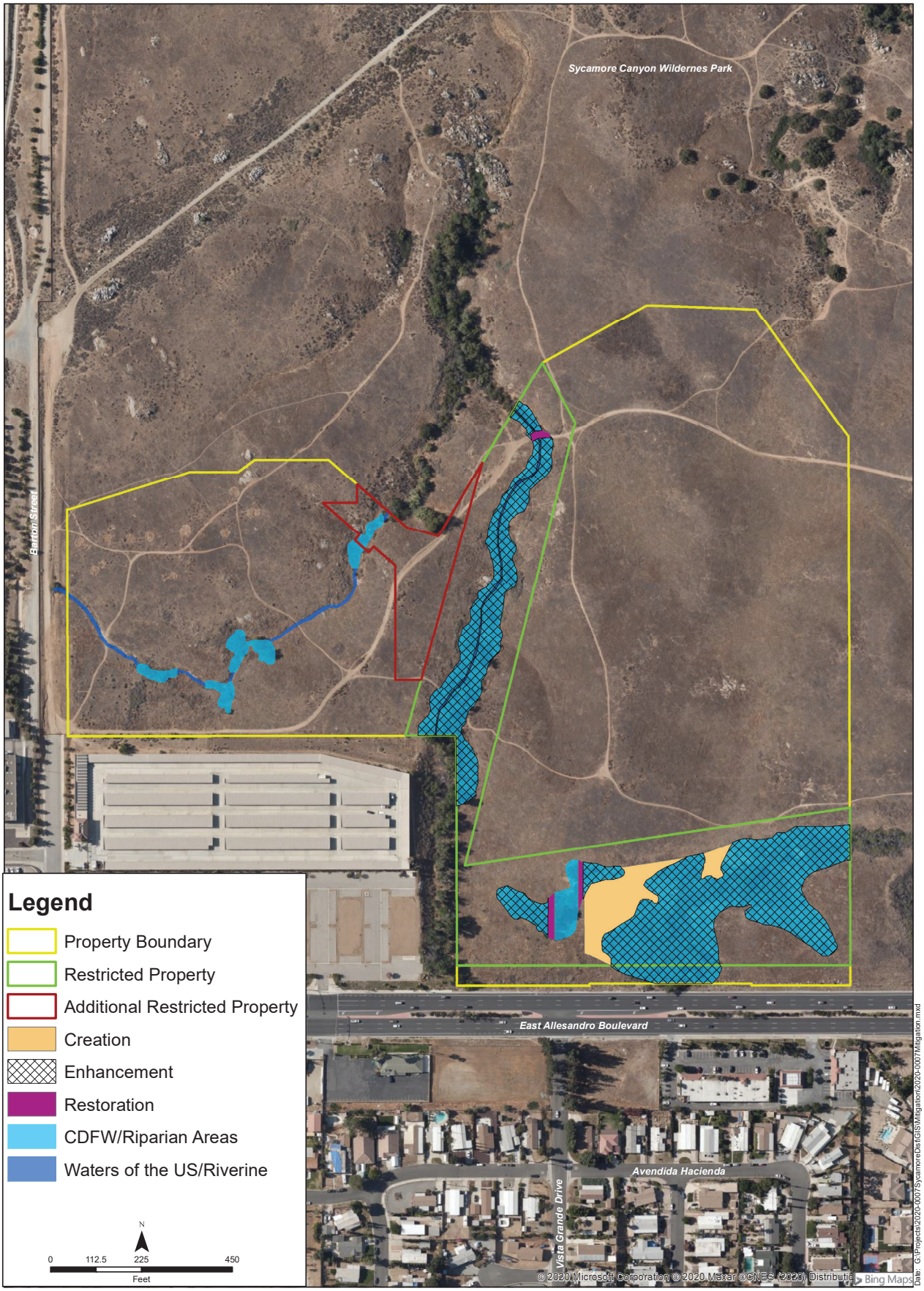
WUS - Waters of the United States

Based on the Project site plan (Figure 3.0-8 - Site Plan), impacts to riparian habitat cannot feasibly be avoided, and as such, a Project-level (Determination of Biologically Equivalent or Superior Preservation (DBESP) is required per the MSHCP.

Implementation of the Project will result in some areas being temporarily and permanently impacted, and therefore, the Project applicant is required to obtain a Section 404 Permit from USACE, Section 401 Certification from RWQCB, and Streambed Alteration Agreement from CDFW and comply with the provisions of such permits (Wood(b) pp. 28-30). Project impacts require mitigation to be reduced to less than significant levels.

As described in Section 5.3.5 – Project Design Considerations and Threshold A, above, the Project proposes to mitigate permanent and temporary impacts with creation and restoration on-site, as further detailed in the DBESP Report and Mitigation Plan (Appendix C) and in mitigation measure **MM BIO-6**. On-site mitigation will include creation of 0.61 acre of riparian woodland, of a type jurisdictional to CDFW, adjacent to the existing CDFW riparian woodland area south of the project area and north of Alessandro Blvd. In addition, the Project will enhance a total of 1.58 acres of riparian habitat within Drainage A and B and Area C, within the on-site Restricted Property/Conservation Area. Temporary impacts to 0.017 acre of riparian habitat in Drainage B will be restored. The DBESP determined that the riparian/riverine resources proposed to be enhanced and conserved in perpetuity would provide a biologically superior riparian habitat for riparian species, including LBVI. The creation of riparian habitat in Area C on the southernmost portion of the Project site would provide biologically superior habitat by connecting two patches of riparian habitats allowing for more acreage of habitat and movement opportunities for small wildlife species.

No other sensitive natural communities were identified at the Project site. As mentioned previously, most vegetation in the Project site is non-native grasslands. Impacts to WUS, WSC, riparian habitat and other sensitive natural communities will be **less than significant with mitigation measures MM BIO-2 through MM BIO-7.**



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Mitigation Plan

Figure 5.3-7

Threshold C: *Would 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?*

As discussed in Threshold B above, a jurisdictional delineation was prepared for the Project site (Wood(b)) to determine the extent and location of jurisdictional features including WUS regulated by USACE pursuant to Section 404 of the CWA. WUS are defined to include waters, streams, and wetlands that have an above-ground or below-ground connection to navigable waters, and tributaries to these waters. In non-tidal waters, the limits of jurisdiction under this definition are defined by the OHWM identified through field observation of features such as shelving and debris deposits, or beyond the OHWM to the limit of any adjacent wetlands, if present. The USACE defines a wetland by three criteria: hydrology, soils, and vegetation.

As previously shown in Figure 5.3-5 Drainages, the Project site contains three jurisdictional features, identified as Drainage A and Drainage B and a riparian area identified as Area C. None of these features are defined as "wetlands" per Section 404. While the Project will permanently impact these jurisdictional features, including 0.08 acre of WUS and 0.80 acre of WSC (Wood(b), p.25), these features regulated by USACE as defined in Section 404 of the CWA do not contain the criteria for wetlands (see Table 5.3-2). The Project will not result in impacts to protected wetlands. As discussed above in Threshold B, impacts to WUS, WSC, riparian habitat and other sensitive natural communities will be **less than significant with mitigation measures MM BIO-2 through MM BIO-7.**

Threshold D: *Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?*

Due to the Project's location adjacent to Alessandro Boulevard, a six lane, divided roadway, the Project site is not anticipated to serve as a wildlife corridor from areas to the southwest, south and southeast to the Sycamore Canyon Wilderness Park to the north. Wildlife that occurs within the site may use the existing drainages and associated riparian vegetation through the site north to the Sycamore Canyon Wilderness Park, or east to the adjacent undeveloped private property.

The new elevated driveway which crosses Area C includes two separate culvert under-crossings: one that crosses in a southwest to northeast direction with two 38-inch high x 57-inch wide arch pipes and one that crosses in a west to east direction with one 38-inch high x 57-inch wide arch pipe. This was included in the design as requested by the wildlife agencies and the RCA during the pre-application meeting at RCA (October 2018). It will provide hydrological connection and allow for wildlife to move across Area C without having to cross the driveway. Animals likely to use these under-crossings include most terrestrial amphibians, reptiles, and mammals that have been recorded onsite such as Baja California treefrog (*Pseudacris hypochondriaca*), western fence lizard (*Sceloporus occidentalis*), red-diamond rattlesnake (*Crotalus ruber*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*). Wall nesting birds such as black phoebe (*Sayornis nigricans*) and barn swallow (*Hirundo rustica*) may also utilize the culvert. (Wood(a) p. 29) No native nursery sites were identified on site. Impacts are considered **less than significant,** and no mitigation is required.

Threshold E: *Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The Project is consistent with the City's General Plan 2025 policies. Specifically, as outlined in Thresholds A and B above, the Project is consistent with **Objective LU-7:** Preserve and protect significant areas of native wildlife and plant habitat, including endangered species. Refer to Appendix B for a complete analysis of the Project's consistency with applicable General Plan 2025 policies.

In addition, the project is consistent with the following objectives of the Open Space Element of the General Plan:

- **Objective OS-1:** Preserve and expand open space and linkages throughout the City and sphere of influence to protect the natural and visual character of the community and to provide for appropriate active and passive recreational uses.

  Parcel C is proposed to be developed within a trailhead parking lot which will include improved decomposed granite parking lot, landscaping, a shade structure with benches, a bike rack, a drinking fountain (including for pets), and ADA (Americans with Disabilities Act) compliant parking spaces and sidewalk. Trail fencing, gates, and signage will also be installed to direct access, circulation and trail connection to existing trails as well as the master planned multipurpose trail on the west side of Barton Street.

  Objective OS-2: Minimize the extent of urban development in the hillsides, and mitigate any significant adverse consequences associated with urbanization.

  The Project is not located on any hillsides.

- **Objective OS-5:** Protect biotic communities and critical habitats for endangered species throughout the General Plan Area.

Additional local policies and ordinances protecting biological resources in the City of Riverside include the SKRHCP, MSHCP, Lake Matthews Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan (Lake Matthews MSHCP/NCCP), and the City's Urban Forest Tree Policy. The Project site is not within or near the Lake Matthews MSHCP/NCCP (GP 2025, Figure OS-6). The Project site is adjacent to the Sycamore Canyon Wilderness Park, which is a designated Core Reserve Area for the SKRHCP and Public Quasi Public (PQP) lands and Existing Core D of the MSHCP conservation area. Since the City is a permittee to the MSHCP, the Project is required to be compliant with all MSHCP policies. See Threshold F below for a discussion of the Project's compliance with the MSHCP.

Development of the Project site is subject to the edge treatment and other provisions of the *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan.* The SCWP SKRMP identifies appropriate edge treatments between the park and other uses. It requires a 7-foot high masonry wall edge treatment with possible substitution of a 6 foot high tubular steel fence per the City's Parks, Recreation, and Community Services Department Standard Detail No. 5520 and specifications. The fence per Standard Detail No. 5520 is preferred by the City's Parks, Recreation, and Community Service

Department to improve the visible connection to the conservation area, provide an open visible sense of security for trail users and to reduce the opportunity for graffiti. Fencing and walls around the Project site have been designed to be compliant with requirements in the SCWP SKRMP.

As previously discussed under Section 5.3-4 Project Design Considerations, the Project includes perimeter walls to minimize noise and vehicle headlights from on-site operations to adjacent sensitive uses including the Sycamore Canyon Wilderness Park and on-site conservation areas.

As shown on Figure 3.0-11 – Fencing Plan, several different fences and walls will be installed with the most northern being a 42-inch cable rail theme fence along the northern property line, adjacent to the Sycamore Canyon Wilderness Park. The 42-inch cable rail theme fence will also extend along the western side of Parcel 1 and the boundary of Parcel A, the Restricted Property/Conservation Area. The 42-inch cable rail theme fence will also run along Parcels A and B Conservation Areas southern boundary and frontage along Alessandro Boulevard and on both sides of the Parcel 1/ Building A driveway on Alessandro Boulevard. An 8-foot-high concrete screen wall will be constructed around the east, north and west sides of Building A at the outer edge of the drive aisles and parking area. A 6-foot to 8-foot-high metal fence will be placed along the outer edge of the drive aisles and parking area on the south side of Building A. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on both sides of the southern end of Building A that faces Alessandro Boulevard to screen views of the dock doors and loading areas from Alessandro Boulevard.

This 8-foot-high concrete screen wall will be installed around the northeast, east, and southeast sides of Building B, at the outer edge of the drive aisles and parking areas, adjacent to the Parcel A Conservation Area. A 6-foot to 8-foot-high metal fence will be placed along the northwestern, western, and southern sides of Building B at the outer edge of the drive aisles and parking areas. To separate the Building B northern parking lot/property line and the trail head parking lot an 8-foot-high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be installed. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on the south side of Building B facing west to Barton Street to screen views of the dock doors and loading area from Barton Street.

The City has also adopted an *Urban Forestry Policy Manual* to establish guidelines for planting, pruning, preservation, and removal of all trees in City rights-of-ways (PW). The City Public Works Department is responsible for the maintenance of all street trees planted by the Project within City right-of-way in accordance with the *Urban Forestry Policy Manual* (PW, p. 14). The Project does not propose the removal of any existing trees within public rights-of-way. Therefore, with regard to conflicts with local ordinances to protect biological resources, impacts will be **less than significant without mitigation**. The Project's consistency with the MSHCP and SKRHCP are discussed in more detail under Threshold F below.

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

Western Riverside County Multiple Species Habitat Conservation Plan

The Project site is located within the MSHCP Plan Area. The site is not located in a Criteria Cell. The Project site is flanked by PQP Lands within the Sycamore Canyon Wilderness Park, which is located directly north of the site. The MSHCP requires that projects comply with its Sections 6.1.2 (Protection of Species within Riparian/Riverine Areas and Vernal Pools), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.1.4 (Urban and Wildlands Interface), 6.3.2 (Additional Survey Needs and Procedures), Appendix C (Standard Best Management Practices), and Section 7.5.3 (Construction Guidelines). The Project's consistency with each of these sections is discussed below.

Section 6.1.2 Protection of Species within Riparian/Riverine Areas and Vernal Pools

The Project site was found to have suitable habitat for wildlife species that commonly occur in riparian/riverine habitats associated with Section 6.1.2 of the MSHCP such as LBVI. The riparian woodland habitat present within the drainages that traverse portions of the Project site along the center, southern and western area is potential breeding habitat for the State and Federally-endangered LBVI (Wood(a), p. 37-38). Focused surveys, following USFWS protocol were conducted in 2014 and 2020 for least Bell's vireo, southwestern willow flycatcher, and western yellow billed cuckoo. LBVI were detected within the riparian/riverine habitat on-site, but southwestern willow flycatcher and western yellow billed cuckoo were not. A DBESP was prepared as impacts to riparian/riverine areas and occupied LBVI habitat on-site could not be completely avoided. Since LBVI were observed, 90 percent of the occupied portions of the property that provide for long-term conservation value for the LBVI shall be conserved in a manner consistent with conservation of the vireo. In addition, Mitigation Measure **MM BIO-6** includes the enhancement and creation of in-kind riparian woodland in Area C as well as the restoration of Drainage B. Non-jurisdictional and non-riparian/riverine slopes with be restored with native seed mix. A culvert will be installed to provide a hydrological connection and for use as a wildlife corridor. The conservation area will be managed by the Rivers and Lands Conservancy or other CDFW approved entity. With implementation of **MM BIO-6** the Project is consistent with Section 6.1.2.

According to the field study conducted by Wood(a), the Project site does not contain habitat for fairy shrimp. As previously mentioned in Section 5.2.1 under Sensitive Wildlife Species, fairy shrimp occur in natural vernal pools and other less natural features such as stock ponds, road ruts, and compacted soils. Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season.

Section 6.1.3 Protection of Narrow Endemic Plant Species

The Project site is not located in a Narrow Endemic Species Survey Area, or in a Criteria Area Species Survey Area for plants, and no focused surveys for these species are required. As such, the Project is consistent with Section 6.1.3 of the MSHCP.

Section 6.1.4 Guidelines Pertaining to Urban Wildlands Interface

The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. The Project is adjacent to the Sycamore Canyon Wilderness Park, identified in the MSHCP as Existing Core D. To minimize Edge Effects MSHCP Section 6.1.4 identifies guidelines applicable to Projects adjacent to Conservation Areas. The City, as the MSHCP Permittee, is to consider these guidelines in reviewing the Project. The MSHCP Urban/Wildland Interface Guidelines address: drainage, toxics, lighting, noise, invasives, barriers, and grading as discussed below in Table 5.3-3 – Project Compliance with MSHCP Urban/Wildlands Interface Guidelines**.**

Table 5.3-3 - Project Compliance with MSHCP Urban/Wildlands Interface Guidelines

MSHCP Guidelines	Project Features
Drainage	
Proposed Developments in proximity to the MSHCP Conservation Area shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that may degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.	In the post-Project condition, Drainage A storm water runoff will continue to flow through the site via an underground 48” pipe that will cross through the Project along the northern parking lot of Building B and will continue to convey the discharge flows to concentration point 2-1 and then flows to POD-2. POD-2 is located near the northeast corner of the western development, Building B. Runoff from these areas will first surface flow into Filterras for water quality treatment prior to discharging into an underground detention system. Pollutant sources are projected to include on-site drain inlets, landscape/outdoor pesticide use, refuse areas, plazas, sidewalks, loading docks, and parking lots. The continued conveyance of stormwater and non-stormwater runoff and connectivity to Drainage B as well as Area C will not be altered and the hydrology support to the riparian/riverine areas located outside and downstream of the Project site will not be cut off or significantly reduced. The Project would be required to comply with the NPDES Statewide General Construction Permit (Order No. 09-09-DWQ). The permit requires preparation of an effective Storm Water

MSHCP Guidelines	Project Features
	Pollution Prevention Plan (SWPPP), which describes erosion and sediment control BMPs to prevent stormwater pollution during construction. The SWPPP must be prepared by a Qualified SWPPP Developer and implemented on site by a Qualified SWPPP Practitioner. Through compliance with the regulatory requirements of the NPDES Statewide General Construction Permit and on-site drainage facilities, the Project is not expected to violate any water quality standards or waste discharge requirements during construction. Once the Project is constructed, operation of the site will have the potential to generate types of pollutants. However, with the implementation of the PWQMP, the Project would follow Site Control, Source Control, and Treatment Control BMPs. Due to the Project design, the Project is consistent with the MSHCP Urban/Wildlands Interface Drainage Guidelines.
Toxics	
Land uses proposed in proximity to the MSHCP Conservation Area that use	The Project is required to implement a Project Specific Water Quality Management Plan

MSHCP Guidelines	Project Features
chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. Measures such as those employed to address drainage issues shall be implemented.	(WQMP) with Best Management Practices (BMPs) to address the Project's pollutants and preventing them from being discharged into Drainage B or Area C and offsite into downstream receiving waterbodies, including Sycamore Canyon Creek and the Santa Ana River. Implementation of mitigation measures and BMPs will also prevent the discharge of toxics. The Project does not propose to use chemicals, or generate bioproducts, such as manure, that are potentially toxic or may adversely affect wildlife species and therefore is consistent with the MSHCP Urban/Wildlands Interface Drainage Guidelines.
Lighting	
Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased.	The warehouse buildings will have nighttime lighting for security; however, the lights will be shielded downwards per Mitigation Measure **MM AES-1** and will have motion detectors and will only be turned on if and when employees are present. As stated in Mitigation Measure **MM AES-2**, a photometric study is required by the City to ensure that the light sources will be shielded to minimize off-site glare, will not direct light skyward and will be directed away from adjacent properties and public right-of-way. If lights are proposed to be mounted on buildings, down-lights shall be utilized. Light poles shall not exceed 20-feet in height. The trail head parking lot, which is located along the northern side of Building B, is a buffer between the warehouse operations and the wilderness park/preserve. The parking lot will have a gate at its entrance to control access from dusk to dawn. As vehicles would not be allowed in the parking lot between dusk and dawn there would not be any vehicle headlights shining into the park from the

MSHCP Guidelines	Project Features
	parking lot. These restrictions will allow the Project to stay consistent with the MSHCP Guidelines.
Noise	
Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards.	Construction noise is anticipated to exceed 65 dBA(A) Leq at the sensitive riparian habitat between the buildings (Drainage B). Construction noise impacts will be minimized with implementation of a mitigation measure **MM NOI-1**. As least Bell's vireo are present in the Sycamore Canyon Wilderness Park adjacent to the site and Parcel A and Parcel B within the site, construction noise impacts shall be minimized through implementation of a 12-foot temporary noise barrier. The barrier may be constructed with 1-inch plywood and provide a reduction of at least 10 dB(A) to ensure noise levels do not exceed 65 dB(A) at the Sycamore Canyon Wilderness Park and on-site conservation areas. As stated in Section 5.11 Noise, the Western Riverside County Regional Conservation Authority recommends a noise limit of 65 dB(A) Leq for construction[1]. These construction and operational limits were applied at the boundary between the Project site and the Sycamore Canyon Wilderness Park and at the edge of the on-site conservation areas. Section 9.52.040 of the Municipal Code states that the maximum noise levels from stationary noise sources at the property line of a sensitive

[1] The Riverside Municipal Code (RMC) indicates that noise project construction noise levels are considered exempt from municipal regulation of activities occur within the hours specified in section 7.35.020 (G), provided a permit has been obtained from the City as required. However, neither the City of Riverside General Plan nor RMC establish numeric maximum acceptable construction source noise levels at potentially affected receivers, either residential or sensitive biological resources. Because the Riverside GP and the RMC do not establish numeric maximum acceptable construction source noise levels a numeric threshold based on guidance from the Western Riverside County Regional Conservation Authority (RCA) is used for analysis of daytime construction impacts. A maximum acceptable construction source noise level of 65 dBA is recommended by the RCA for sensitive riparian/riverine areas.

MSHCP Guidelines	Project Features
	receptor are to remain below 45 dB(A) L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.) and are not to exceed 55 dB(A) L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.). Section 9.52.020[I] states that sound emanating from private construction projects located within on-quarter mile from an inhabited dwelling is exempt from the provisions of Chapter 9.52, if construction occurs between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May. Daytime operational noise from the warehouses would range from 32 to 48 dB(A) L_{eq} and nighttime noise levels would range from 25 to 42 dB(A) L_{eq}. Noise levels would be less than the applicable daytime and nighttime Title 7 Noise Ordinance limits at the property lines. At the edge of the Sycamore Canyon Wilderness Park and on-site conservation areas, daytime noise levels due to future Project on-site noise sources would range from 32 to 51 dB(A) L_{eq} and nighttime noise levels due to future Project on-site noise sources would range from 30 to 45 dB(A) L_{eq}. Future operational noise levels generated by the on-site noise sources would not exceed the applicable Title 7 residential noise level limits of 55 dB(A) L_{eq} during the daytime hours and 45 dB(A) L_{eq} during the nighttime hours at the property line of the adjacent Sycamore Canyon Wilderness Park and on-site conservation areas. The Project would not result in increased noise that would adversely affect sensitive wildlife and the Project is consistent with the MSHCP Urban/Wildlands Interface Guidelines.

MSHCP Guidelines	Project Features
Invasives	
When approving landscape plans for Development that is proposed adjacent to the MSHCP Conservation Area, Permittees shall consider the invasive, non-native plant species listed in Table 6-2 [of the MSHCP] and shall require revisions to landscape plans (subject to the limitations of their jurisdiction) to avoid the use of invasive species for the portions of Development that are adjacent to the MSHCP Conservation Area. Considerations in reviewing the applicability of this list shall include proximity of planting areas to the MSHCP Conservation Areas, species considered in the planting plans, resources being protected within the MSHCP Conservation Area and their relative sensitivity to invasion, and barriers to plant and seed dispersal, such as walls, topography, and other features.	The landscape plans will not include any of the species included on the MSHCP Table 6-2, Plants That Should Be Avoided Adjacent to The MSHCP Conservation Area (Wood(a) page 34-36). All non-native species will be removed and will be enhanced by replacing them with native species approved by the USFW. Drainage B will be a restoration area and also include planting native species. Subsequent irrigation will be done in all area with the most appropriate method being determined by the restoration contractor (Wood(c) page 4-6). The Project's landscape plans do not include any invasive species and therefore the Project is consistent with the MSHCP Urban/Wildlands Interface Invasive Guidelines.
Barriers	
Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms.	A 42-inch high cable rail theme fence will be located along the northern property line of Parcel 1, behind Building A, separating the Sycamore Canyon Wilderness Park and Parcel 1/Building A. A 4-foot high concrete wall with 4-foot high tubular steel metal fence on top will be constructed along the northern side of the Parcel 2/Building B site. Therefore, because the Project incorporates barriers to minimize unauthorized public access or illegal trespasses or dumping, between the Project site and the Sycamore Wilderness Park to the north, the Project is consistent with the MSHCP Urban/Wildlands Interface Barrier.

MSHCP Guidelines	Project Features
Grading/Land Development	
Manufactured slopes associated with proposed site development shall not extend into the MSHCP Conservation Area.	There is limited grading that will extend into the additional (newly proposed) Restricted Property, required for the construction of the retaining wall and storm drain outlet at the northeast corner of Building B/Parcel 2. This grading is needed to avoid the 100 linear feet of drainage course and associated riparian vegetation. Project does not propose any grading within the Sycamore Canyon Wilderness Park. Further, a temporary fence will be installed to provide a barrier during construction between the Project site and the Park area. No equipment will need to access the site from the Sycamore Canyon Wilderness Park. Therefore, the Project is consistent with the MSHCP Urban/Wildlands Interface Grading/Land Development Guidelines.

For the reasons set forth above, the Project will be compliant with Section 6.1.4 of the MSHCP.

MSHCP Section 6.3.2 Additional Survey Needs and Procedure

The Project is located in an Additional Survey Area for BUOW. Previous surveys have determined suitable habitat for BUOW on the Project site and per Section 6.3.2 of the MSHCP, focused surveys are warranted. As discussed under Threshold A, the 2018 and 2020 focused surveys demonstrated that no BUOW were identified in the Project site. BUOW is a species covered under the SSC and MSHCP. A preconstruction survey for BUOW will be conducted 30 days prior to ground disturbing activities per **MM BIO-10** below. The Project will be compliant with Section 6.3.2 of the MSHCP with implementation of this mitigation measure.

MSHCP Appendix C Standard Best Management Practices

Appendix C identifies standard BMPs to be implemented during construction of projects in proximity to the MSHCP Conservation Area. The BMPs cover issues such as biological monitoring, water pollution and erosion, defining the Project's limits to minimizing the footprint of disturbance, identification and avoidance of jurisdictional resources, and if feasible, equipment storage. With implementation of mitigation measure **MM BIO-11** below, the Project will be compliant with BMPs in Appendix C.

Section 7.5.3 Construction Guidelines

Section 7.5 of the MSHCP sets forth *Guidelines for Facilities Within the Criteria Area and PQP Lands*. Section 7.5.3 outlines construction guidelines. Because the Project does not propose any construction within an MSHCP Criteria Area or PQP lands, the construction guidelines in Section 7.5.3 are not applicable.

Stephen's Kangaroo Rat Habitat Conservation Plan

The Project site is not within an SKRHCP Core Reserve. For compliance with SKRHCP, MM BIO-8 will require the Project proponent to pay the SKR mitigation fee in effect at the time a grading permit is issued.

Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan

The Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan identifies appropriate edge treatments between the park and other uses. It requires a 7 foot high masonry wall edge treatment with possible substitution of a 6-foot tall wrought iron fence per the City of Riverside Parks, Recreation, and Community Services Department Standard Detail No. 5520 and specifications. The Standard Detail No. 5520 fence is preferred by the Parks Department to improve the visible connection to the conservation area, provide an open visible sense of security for trail users and to reduce the opportunity for graffiti.

Fencing and walls around the Project site have been designed to be compliant with requirements in the SCWP SKRMP. As shown on Figure 3.0-11 – Fencing Plan, several different fences and walls will be installed with the most northern being a 42-inch cable rail theme fence along the northern property line, adjacent to the Sycamore Canyon Wilderness Park. The 42-inch cable rail theme fence will also extend along the western side of Parcel 1 and the boundary of Parcel A, the Restricted Property/Conservation Area. The 42-inch cable rail theme fence will also run along Parcels A and B Conservation Areas southern boundary and frontage along Alessandro Boulevard and on both sides of the Parcel 1/ Building A driveway on Alessandro Boulevard. An 8-foot-high concrete screen wall will be constructed around the east, north and west sides of Building A at the outer edge of the drive aisles and parking area. A 6-foot to 8-foot-high metal fence will be placed along the outer edge of the drive aisles and parking area on the south side of Building A. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on both sides of the southern end of Building A that faces Alessandro Boulevard to screen views of the dock doors and loading areas from Alessandro Boulevard.

This 8-foot-high concrete screen wall will be installed around the northeast, east, and southeast sides of Building B, at the outer edge of the drive aisles and parking areas, adjacent to the Parcel A Conservation Area. A 6-foot to 8-foot-high metal fence will be placed along the northwestern, western, and southern sides of Building B at the outer edge of the drive aisles and parking areas. To separate the Building B northern parking lot/property line and the trail head parking lot an 8-foot-high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be installed. An 8-foot-high metal sliding gate and 15-feet

high concrete screening walls will be located on the south side of Building B facing west to Barton Street to screen views of the dock doors and loading area from Barton Street.

The Project proposes trailhead improvements at the northern terminus of Barton Street. Construction of trailhead improvements include a parking lot located north of Building B, a sidewalk, shade structure, bike rack, drinking fountains, fencing, and a fire departments access gate for consistency with the Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan.

The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan and impacts are considered **less than significant with mitigation incorporated**.

5.3.6 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures that could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4).

The following mitigation measures (MM) have been proposed for the Project to avoid and/or minimize potential impacts to sensitive biological resources.

MM BIO-1: Prior to issuance of a grading permit, a qualified biologist shall collect seed for paniculate tarplant and Robinson's pepper-grass throughout the proposed development footprint of the project. The seeds shall be stored in accordance with the biologist's recommendations until restoration efforts are commenced within the existing and additional Restricted Property/conservation area. If seed is not collected prior to grading permit issuance then topsoil, where identified by the qualified biologist, shall be salvaged and temporarily stored in accordance with the qualified biologists' recommendations until restoration efforts are commenced. On site restoration efforts shall incorporate the collected seed or salvaged topsoil.

MM NOI-1: Prior to issuance of grading and construction activities, should least Bell's vireo be present in the Sycamore Canyon Wilderness Park within 300 feet of the Project site, in Parcel A on-site conservation area, or within Parcel B on-site conservation area within 100 feet of the development footprint, construction noise impacts shall be minimized through implementation of the following measure:

1. A 12-foot high temporary noise barrier shall be installed at the perimeter of the limits of disturbance between the construction activities and the adjacent Sycamore Canyon Wilderness Park to the north and east, and the on-site conservation areas as shown in Figure 5.11-5 – Construction Barrier. The barrier shall be continuous without openings, holes, or cracks, and shall reach the ground. The barrier may be constructed with 1-inch plywood and provide a reduction of at least 10 dB(A) to ensure noise levels do not exceed 65 dB(A) L_{eq} at the Sycamore Canyon Wilderness Park and on-site conservation areas. Other barrier materials providing the same reduction shall also be permitted.

2. Heavy grade rubber mats/pads shall be used within the bed of the trucks. These mats will help attenuate initial impact noise generated when an excavator drops rock and debris into the bed of the truck. These mats must be maintained and/or replaced as necessary.
3. During all Project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards.
4. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site.
5. Equipment shall be shut off and not left to idle when not in use.
6. The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the Project site during all Project construction.
7. The Project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the Project site during construction.
8. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (7:00 a.m. to 6:00 p.m. on weekdays, and 8:00 a.m. to 5:00 p.m. on Saturdays).
9. The use of heavy equipment or vibratory rollers and soil compressors shall be limited along the Project boundaries to the greatest degree possible. It is acknowledged that some soil compression may be necessary along the Project boundaries.
10. Any jackhammers, pneumatic equipment and all other portable stationary noise sources shall be shielded, and noise shall be directed away from sensitive receptors.
11. For the duration of construction activities, the construction manager shall serve as the contact person should noise levels become disruptive to local residents. A sign should be posted at the Project site with the contact phone number. This sign shall be posted at the Alessandro Boulevard frontage as well as the Barton Street frontage.

MM BIO-2: The Project has been designed to avoid direct construction impacts to riparian plant communities to the greatest extent feasible. Avoidance and minimization measures shall be included in the Project specifications for implementation during construction to further reduce the potential for any temporary, indirect impacts to occur to these areas during construction activities, including the following:

- Trash and other debris shall be properly disposed of and not left on-site in areas where it could fall into protected habitat.
- Project boundaries shall be clearly marked with fencing, or other suitable type of marking material as directed by a qualified biologist. Vehicles and other Project construction personnel shall stay within these delineated Project boundaries.
- Sensitive areas (i.e., jurisdictional drainage features, riparian habitats, and MSHCP Conservation Areas) in proximity to the construction footprint shall be clearly marked,

with fencing or other suitable type of marking material as directed by a qualified biologist, for awareness and avoidance.

- Refueling, washing, or other vehicular maintenance activities shall occur a minimum of 100 feet away from riparian areas, including the conserved riparian habitat.
- Equipment would be maintained and checked at least on a daily basis for leaks.
- All vehicle leaks or other hazardous material leaks shall be contained and cleaned up immediately. All contaminated soil shall be removed from the site and disposed of properly.

MM BIO-3: During soil excavation, grading, or other subsurface disturbances, the construction contractor shall supervise provision and maintenance of all standard dust control BMPs to reduce fugitive dust emissions, including but not limited to the following actions:

- Water any exposed soil areas a minimum of twice per day, or as allowed under any imposed drought restrictions. On windy days or when fugitive dust can be observed leaving the construction site, additional water shall be applied at a frequency to be determined by the on-site construction superintendent.
- Pave, periodically water, or apply chemical stabilizer to construction access/egress points.
- Minimize the amount of area disturbed by clearing, grading, earthmoving, or excavation operations at all times.
- Operate all vehicles on graded areas at speeds less than 15 miles per hour.
- Cover all stockpiles that would not be utilized within three days with plastic or equivalent material, to be determined by the on-site construction superintendent, or spray them with a non-toxic chemical stabilizer.

MM BIO-4: During construction, to address potential short-term impacts to water quality within the on-site drainages from construction runoff that may carry storm water pollutants, a SWPPP shall be implemented by the construction contractor as required by the California General Construction Storm Water Permit pursuant the Regional Board regulations. The SWPPP shall identify BMPs related to the control of toxic substances, including construction fuels, oils, and other liquids. These BMPs would be implemented by the construction contractor prior to the start of any ground clearing activity, shall be subject to periodic inspections by the City and the Project's hydrological consultant, shall be maintained throughout the construction period and remain in place until all landscape and permanent BMPs are in place. BMPs shall be monitored and repaired if necessary, to ensure maximum erosion, sediment, and pollution control.

- The use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar material, within and adjacent to conserved riparian habitat shall be prohibited.

- All fiber roles,[2] straw waddles, and/or hay bales utilized within and adjacent to the Project site shall be free of non-native plant materials.
- Construction contractor shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws.
- Water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities shall not be allowed to enter the conserved riparian habitat or be placed in locations that may be subjected to high storm flows.
- Spoil sites shall not be located within jurisdictional areas and MSHCP Conservation Areas or locations that may be subjected to high storm flows, where spoil shall be washed back into the conserved riparian habitat where it would impact streambed habitat and aquatic or riparian vegetation.
- Raw cement/concrete or washings thereof, asphalt, paint, or other coating material, oil or other petroleum products, or any other substances which could be hazardous to fish and wildlife resources resulting from Project related activities shall be prevented from contaminating the soil and/or entering the conserved riparian habitat. These materials, placed within or where they may enter the conserved riparian habitat or any party working under contract to the construction contractor, shall be removed immediately.
- No equipment maintenance shall be done within or near the conserved riparian habitat where petroleum products or other pollutants from the equipment may enter these areas under any flow.
- No broken concrete, cement, debris, soil, silt, sand, bark, slash, sawdust, rubbish, or washings thereof, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the conserved riparian habitat. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the conserved riparian habitat.

MM BIO-5: Prior to issuance of grading permit, the following measures shall be incorporated into the construction documents and specifications, and implemented by the contractor, to avoid potential construction-related impacts to the conserved riparian habitat outside of the approved disturbance limits:

- Construction worker training shall be provided by a qualified biologist at the first on-site construction meeting;
- Project boundaries shall be clearly marked and or signs shall be erected near the top of slope adjacent to the conserved riparian habitat to prevent accidental/unauthorized intrusions during construction; and

[2] Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other products without welded weaves. Non-welded weaves reduce entanglement risks to wildlife by allowing animals to push through the weave, which expands when spread.

- Staging areas for storage of materials and heavy equipment, and for fueling, cleaning, or maintenance of construction vehicles or equipment, shall be prohibited within 20 feet from the top of slope adjacent to the conserved riparian habitat.

MM BIO-6: Prior to issuance of occupancy permit, in order to reduce impacts to on-site Riparian/Riverine areas and suitable habitat for LBVI, on-site mitigation shall include:

1. Enhancement of a total of 1.58 acres of riparian habitat: 0.01 acre in Drainages A, 1.34 acres in B, and 0.23 acre in Area C.
2. Create (establish) 0.61 acre of in-kind riparian woodland in Area C.
3. Restoration of 0.02 acre of riparian habitat in Drainage B.
4. The non-jurisdictional, non- riparian/riverine upland areas of slopes associated with the access road will be restored/ replanted with native seed mix.
5. The roadway/access to Parcel 1/ Building A shall include culverts to provide a hydrological connection to the riparian habitat on the east side of the roadway and a corridor for small wildlife species.
6. Revise the existing Restricted Property to include Parcel A (7.19 acres) and Parcel B (5.04 acres), with a combined area of 12.23 acres. The revised 12.23 Restricted Property shall be managed in perpetuity with an endowment funded by the developer and by a CDFW approved 3rd party (such as Rivers and Lands Conservancy “RLC”).

MM BIO-7: In order to reduce potential impacts to MSHCP covered species, payment of the MSHCP mitigation fee shall be provided to the City of Riverside prior to issuance of a grading permit for the project.

MM BIO-8: Payment of the SKRHCP fee shall be provided to the City of Riverside prior to issuance of a grading permit for the Project.

MM BIO-9: If construction activity is conducted between September 1st and January 31st, then this mitigation measure is required prior to issuance of a grading permit. Federal Migratory Bird Treaty Act (MBTA) and/or state code protect all native bird species - both common and special status. In most scenarios, MSHCP coverage does not override the nesting bird protections provided by these. Impacts to nesting birds, both direct and indirect, can be minimized or eliminated by conducting work activities outside of the local breeding season. Although nesting can occur in any month in southern California for some species, breeding in the study area, given the habitat, would primarily be expected from about 1 February through 31 August. Work from about 1 September through 31 January would avoid most negative affects to birds and nesting activity. If work must be done during the breeding season, surveys for nesting birds should occur no more than three (3) days prior to all vegetation clearing and ground disturbance. If active nests are found, they should be avoided until young have fledged. While there is no established protocol for nest avoidance, when consulted the CDFW generally recommends avoidance buffers of about 500 feet for raptors and threatened/endangered species and 100 – 300 feet for non-raptors.

Adherence to these nesting bird recommendations will also avoid and/or mitigate impacts to special status bird species known from the project site which are not covered by the MSHCP.

MM BIO-10: A focused BUOW survey must be conducted during the breeding season (four visits between 1 March - 31 August). Regardless of the result of those surveys, because of the presence of suitable habitat that could be occupied at any time, a one-day preconstruction survey must also be conducted 30 days or less before groundbreaking.

MM BIO-11: During construction standard BMPs from Volume I, Appendix C of the MSHCP shall be implemented to avoid impacts to biological resources of the MSHCP. The following standard BMPs shall be included as Environmental Requirement Notes on the final grading plans to be reviewed and approved by City Staff prior to issuance of a grading permit. The measures are as follows:

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.
2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian species identified in MSHCP Global Species Objective No. 7.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.

8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, and CDFW, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

5.3.7 Cumulative Environmental Effects

The Project site and cumulative development projects are located within the MSHCP; thus, the geographic scope for cumulative impacts to biological resources are the MSHCP plan area. As stated in Section 5.3.3.2 (Biological Resources, Related Regulations), the overall biological goal of the MSHCP is to conserve covered species and their habitats, as well as to maintain biological diversity and ecological processes while allowing for future economic growth within a rapidly urbanizing region.

Because the City and all cities within western Riverside County are signatories to the MSHCP, all projects within the City are required to comply with the MSHCP and conduct biological habitat assessments/focused surveys as necessary and to pay the MSHCP mitigation fee. Compliance

with the MSHCP provides mitigation for direct, indirect, and cumulative impacts to covered species. As required by the MSHCP, a Habitat Assessment and MSHCP Compliance Report, jurisdictional delineation, and focused surveys for LBVI and BUOW were conducted to assess potential impacts associated with the Project. Additionally, because the Project will impact riparian/riverine resources and occupied LBVI habitat a DBESP was prepared that includes on-site mitigation that will result in superior riparian habitat conditions than currently occur on the site.

The Project is required to adhere to mitigation measures **MM BIO 1** through **MM BIO 11** to reduce impacts to less than significant and ensure compliance with the MSHCP and the SKR HCP. Cumulative development projects within the MSHCP plan area and SKR HCP area will also be required to pay mitigation fees and implement additional mitigation measures will be identified on a project-specific level as they are proposed and approved. Because compliance with the MSHCP is intended to address all projects within the Western Riverside County region, it addresses and provides mitigation for cumulative impacts to biological resources for the area of coverage. (GP2025 FPEIR, p. 7-10) Therefore, because the Project and cumulative development projects are required to comply with the MSHCP and the MSHCP provides mitigation for direct, indirect, and cumulative impacts to covered species, cumulative impacts are **less than significant with mitigation**.

5.3.8 References

The following references were used in the preparation of this section of the DEIR:

ELMT	ELMT Consulting, Inc., *Sycamore Hills Distribution Center, Riverside County, California, Burrowing Owl Focused Survey Report*, September 2020 (Appendix D)
GP 2025	City of Riverside, *General Plan 2025*, certified November 2007 with subsequent amendments to various elements. (Available at http://www.riversideca.gov/planning/gp2025program/general-plan.asp, accessed February 2020.)
GP 2025 FPEIR	City of Riverside, *General Plan 2025 Program Environmental Impact Report* (SCH# 2004021108), certified November 2007. (Available athttps://riversideca.gov/cedd/planning/city-plans/general-plan-0, accessed February 2020)
Kidd	Kidd Biological, Inc., *2020 Least Bell's Vireo, Southwestern Willow Flycatcher & Yellow-Billed Cuckoo Survey Results for the Sycamore Hills Distribution Center, Riverside County, California*, August 2020 (Appendix D)
RVA	RVA, Inc. *Determination of Biologically Equivalent or Superior Preservation (DBESP) Report for Impacts to Riparian/Riverine Resources*, January 2021. (Appendix D)

PW	City of Riverside Public Works Department, *Urban Forestry Policy Manual*, August 2015. (Available at https://www.riversideca.gov/publicworks/trees/pdf/UrbanForestry-TOC.pdf, accessed February 2020.)
SCWP SKR and Dev Plan	Dangermond & Associates, O'Farrell Biological Consulting, Firewide 2000, Inc., Tierra Madre Consultants, Inc., *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan*, March 1999. (Available at http://www.riversideca.gov/planning/pdf/SpecificPlans/SycCynMnmgtPlan_Up datedConceptualPlan.pdf, accessed February 2020)
Western Riverside County MSHCP	*Western Riverside County Multiple Species Habitat Conservation Plan*, Volume 1-The Plan, Section 3. 2019 (Available at https://rctlma.org/Portals/0/mshcp/volume1/sec3.html, accessed February 2020)
Wood(a)	Wood Environmental & Infrastructure, Inc., *Sycamore Hills Distribution Center Project Biological Assessment and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Report*, September 2020 (Appendix D)
Wood(b)	Wood Environmental & Infrastructure, Inc., *Jurisdictional Delineation Report, Sycamore Hills Distribution Center, City of Riverside, Riverside County, California,* December 2020 (Appendix D)
Wood(c)	Wood Environmental & Infrastructure, Inc., *Mitigation Planting Plan, City of Riverside, Riverside County, California,* November 2018 (Appendix D)

5.4 Cultural Resources

Based on Appendix G of the *State CEQA Guidelines* and comments received during the NOP public comment period, this section evaluates the Project's potential impacts to historical resources, unique archaeological resources, tribal cultural resources, and disturbing human remains.

The following discussion is based on the *Phase I and Phase II Cultural Resource Investigations for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California*, prepared by Applied Earthworks (AE) in October 2018 and updated in July 2020; This report is included as Appendix E of this DEIR. Portions of the report are confidential by law and have been omitted from the Appendix.

5.4.1 Setting

Area of Potential Effects

The Area of Potential Effects (APE) is defined as the geographic area within which the Project has the potential to directly or indirectly cause alterations to historic properties, per CFR § 800.16(d). The APE identified in the *Phase I and Phase II Cultural Resource Investigations* for the Project includes approximately 48.64-acre Project site of vacant land. The Study Area used in the *Phase I and Phase II Cultural Resource Investigations* includes the APE/Project site and the area within a 1-mile radius of the Project site. Ground disturbance in the northern portion of the site may reach a maximum depth of 16 feet below the current grade.

Environmental Setting

The Project is within the northeastern part of the geologically complex Peninsular Ranges geomorphic province. The Peninsular Ranges are a northwest-southeast oriented complex of blocks that extend 125 miles from the Transverse Ranges and Los Angeles Basin to the tip of Baja California. The Peninsular Ranges are bounded to the east by the Colorado Desert and range in width from 30 to 100 miles. The Project is approximately 3.5 miles northeast of Lake Mathews and 1.5 miles southwest of Box Springs Mountain, within the central part of the Perris Block, a relatively stable rectangular structural unit positioned between the Elsinore and San Jacinto fault zones.

The geology in the vicinity of the Project consists largely of Cretaceous plutonic rocks that are part of the composite Peninsular Ranges batholith. East of the Project, very old alluvial fan deposits flank the west side of the San Jacinto Valley and form a low relief and nearly level plain, which are likely derived from the Val Verde Pluton and the Box Spring Mountains. Similarly, to the west is a very old alluvial fan forming the eastern side of the Santa Ana Valley that is likely also derived from the Val Verde Pluton and the western slopes of the Box Spring Mountains.

Much of the Project consists of biotite-hornblende tonalite, the principal plutonic rock type of the Val Verde Pluton. The tonalite is a relatively weathered, homogeneous, gray granitic rock that is mostly massive and occasionally foliated.

Soils within the Project, as mapped by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), are all derived from alluvium from granitic bedrock, which is usually deeply weathered. Mapped soil series with a buried A (Ab) horizon are considered to have a higher probability of a cultural resource. None of the mapped soil series has a buried A (Ab) horizon; therefore, intact and significant buried cultural deposits are unlikely. The majority of the APE consists of Ramona and Fallbrook soils. Ramona fine sandy loams are nearly level to moderately steep on terraces and fans at elevations of 250 to 3,500 feet AMSL. Fallbrook soils are gently rolling to very steep on round hills at elevations of 200 to 3,000 feet AMSL or as high as 3,500 feet AMSL on south-facing slopes. Bedrock outcrops are common in some areas. As the climate of the region is largely determined by topographic features, climate, in turn, largely dictates the character of the biotic environment exploited by native populations. The climate of the Project is characterized as Mediterranean, with hot, dry summers and cool, moist winters. It has a semi-arid precipitation regime; significant changes in temperature and moisture occur based on elevation and exposure, particularly in the nearby mountains. The average annual rainfall ranges from 9 to 16 inches and the mean annual temperature varies from 59 to 65 °F.

Prehistoric Setting

The prehistoric cultural setting of the Project provides a context for understanding the types, nature, and significance of the prehistoric cultural resources identified within the general Project. Native American occupation of the inland valleys of southern California can be divided into seven cultural periods:

- Paleoindian (ca. 12,000–9500 years before present [B.P.]);
- Early Archaic (ca. 9500–7000 B.P.);
- Middle Archaic (ca. 7000–4000 B.P.);
- Late Archaic (ca. 4000–1500 B.P.);
- Saratoga Springs (ca. 1500–750 B.P.);
- Late Prehistoric (ca. 750–410 B.P.); and
- Protohistoric (ca. 410–180 B.P.), which ended in the ethnographic period.

Due to the nature of the prehistoric archaeological bedrock milling sites identified within a 1-mile-wide radius of the Project, the prehistoric cultural setting discussed below begins at the Middle Archaic period.

The data presented herein regarding the sequence of prehistoric use, adaptation, and occupation of the interior valleys and mountain localities of southern California are summarized from a synthesis of more than 10 years of archaeological research conducted at Diamond Valley Lake as part of the Eastside Reservoir Project (ESRP), located approximately 22 miles south-southeast of the Project. For the most part, the prehistory of the inland valleys of southern California that characterizes the Project has been less thoroughly understood than that of the nearby desert and coastal regions. Prior to the ESRP cultural resources studies, no comprehensive synthesis had been developed specifically for the interior valley and mountain localities of cismontane southern California that characterizes the region.

Middle Archaic Period (ca. 7000 – 4000 B.P.)

The Middle Archaic saw a reversal of the weather patterns, which had prevailed throughout much of cismontane southern California for several millennia. By about 6000 B.P., local environmental conditions ameliorated while conditions in the deserts deteriorated, reaching maximum aridity of the postglacial period proposes that a westerly air flow pattern returned to southern California, while the monsoonal weather patterns in the deserts retreated. As a result, the inland areas may have seen increased effective moisture, while the interior deserts, no longer receiving moist monsoonal flow and now in the rainshadow of the Transverse and Peninsular Ranges, became quite arid. This suggests that cismontane southern California, including the inland valleys of San Bernardino and western Riverside counties, may have been a relatively more hospitable environment than the interior deserts during the middle Holocene. The ESRP study indicated an increase in prehistoric use and occupation after about 6000 B.P., in comparison to the earlier periods, in the inland areas of cismontane southern California. The more intensively used residential locations occur along alluvial fan margins, while less intensively used areas tend to be situated on arroyo bottoms or upland benches. This interval has been described frequently as the "Milling Stone Horizon" because of the preponderance of milling tools, such as manos and milling stones, in the archaeological assemblages of sites dated to this era. In the coastal and inland regions of southern California, this period of cultural development is marked by the technological advancements of seed grinding for flour and possibly the first use of marine resources, such as shellfish and marine mammals. The artifact inventory of this period also includes other ground stone artifacts, such as crude hammerstones, as well as flaked stone artifacts, such as scraper planes, choppers, large drills, crescents, and large leaf-shaped projectile points and knives. The artifact assemblage also includes likely nonutilitarian artifacts, such as beads, pendants, charmstones, discoidals, spherical stones, and cogged stones.

Late Archaic Period (ca. 4000 – 1500 B.P.)

The Late Archaic period was a time of cultural intensification in southern California. The beginning of the Late Archaic coincides with the Little Pluvial, a period of increased moisture in the region. Effective moisture continued to increase in the desert interior by approximately 3600 B.P. and lasted throughout most of the Late Archaic. This ameliorated climate allowed for more extensive occupation of the region. By approximately 2100 B.P., however, drying and warming increased, perhaps providing motivation for resource intensification. Archaeological site types that typify this time period include residential bases with large, diverse artifact assemblages, abundant faunal remains, and cultural features, as well as temporary bases, temporary camps, and task-specific activity areas. In general, sites showing evidence of the most intensive use tend to be on range-front benches adjacent to permanent water sources, such as perennial springs or larger streams, while less intensively used locales occur either on upland benches or on the margins of active alluvial fans.

Data from Late Archaic component archaeological sites also suggest increased sedentism during this period, with a change to a semi-sedentary land-use and collection strategy. The profusion of features, and especially refuse deposits in Late Archaic components, suggests that seasonal encampments saw longer use and more frequent reuse than during the latter part of the preceding

Middle Archaic period, with increasing moisture improving the conditions of southern California after ca. 3100 B.P. Drying and warming after ca. 2100 B.P. likely exacted a toll on expanding populations, influencing changes in resource procurement strategies, promoting economic diversification and resource intensification, and perhaps resulting in a permanent shift towards greater sedentism.

The subsistence base broadened during the Late Archaic period. The technological advancement of the mortar and pestle may indicate the use of acorns, an important storable subsistence resource. Hunted resources also presumably gained importance in the diet with an abundance of broad, leaf-shaped blades and heavy, often stemmed or notched projectile points found in association with large numbers of terrestrial and aquatic mammal bones. Other characteristic features of this period include the appearance of bone and antler implements and the occasional use of asphaltum and steatite. Most chronological sequences for southern California recognize the introduction of the bow and arrow by 1500 B.P., marked by the appearance of small arrow points and arrow shaft straighteners.

Technologically, the artifact assemblage of this period was similar to that of the preceding Middle Archaic; new tools were added either as innovations or as “borrowed” cultural items. Diagnostic projectile points of this period are still fairly large (dart point size), but also include more refined notched (Elko), concave base (Humboldt), and small stemmed (Gypsum) forms. Late in the period, Rose Spring arrow points appeared in the archaeological record in the deserts, reflecting the spread of the bow and arrow technology from the Great Basin and the Colorado River region. This projectile point type was not found at the ESRP study area, and there is no evidence suggesting that the bow and arrow had come into use at this time in the inland regions of southern California.

Saratoga Springs Period (ca. 1500 – 750 B.P.)

Because paleoenvironmental conditions were little changed from the preceding period, cultural trends in the early portion of the Saratoga Springs period were, in large part, a continuation of the developments begun during the end of the Late Archaic period. However, the Medieval Warm Period (MWP), also known as the Medieval Climate Optimum, or Medieval Climatic Anomaly, was a time of even more persistent drought, began by 1060 B.P. Significantly warmer and drier conditions ensued. These climatic changes were experienced throughout the western United States, although the inland areas of cismontane southern California may have been less affected than the desert interior. The MWP continued through the first 200 years of the Late Prehistoric period until approximately 550 B.P.

Although it has been anticipated that intensive use of the inland areas of cismontane southern California during the MWP may have been curtailed altogether, owing to inhospitable climate and concomitant decline in water and food sources, this does not appear to be the case. While land-use and procurement strategies experienced profound changes during this time, the response to deteriorating conditions was not abandonment of the inland areas, but rather intensification. Climatic conditions of warming and drying that began ca. 2100 B.P., toward the end of the Late

Archaic period, had already triggered an intensification process that established productive strategies for dealing with resource stress. With the onset of the MWP, those strategies were further refined and intensified. The focal shift of prehistoric activity from alluvial fan margins to mountain-front benches adjacent to permanent water sources, which was initiated during the Late Archaic period, continues to be seen in the Saratoga Springs component archaeological sites.

The frequency of refuse deposits and artifact and toolstone caches during the MWP is slightly higher than during the preceding Late Archaic period and much higher than during the latter portion of the subsequent Late Prehistoric period. The frequency of artifact and toolstone caches more than doubled during the Saratoga Springs period from the preceding period, while the frequency of human remains reached the highest point of any time in the archaeological record. The intentional caching of toolstone and ground stone tools suggests that people anticipated returning to the same locations. The midden-altered sediments, which appear for the first time during the Saratoga Springs period, support the continued re-use of desired locations.

Archaeological assemblages demonstrate the comparative importance of plant foods as a primary food source during the MWP than in any other prehistoric period; plant processing intensified, and acorns apparently became an important staple. Faunal assemblages also show that resource stress was accommodated with similar strategies by intensifying the use of lagomorphs and by further expanding diet breadth, adding animals (i.e., medium-sized carnivores) that were rarely consumed during other periods of prehistory. The most abundant evidence of trade also occurs during the MWP, suggesting that exchange was another mechanism for dealing with resource stress.

Late Prehistoric Period (ca. 750 – 410 B.P.)

The MWP extended into the Late Prehistoric period, ending about 550 B.P. The cultural trends and patterns of land use that characterized the MWP, including the portion that extends into the earlier part of the Late Prehistoric period were discussed above. At the end of the MWP, however, and lasting throughout the ensuing Protohistoric period, a period of cooler temperatures and greater precipitation ushered in the Little Ice Age, during which time ecosystem productivity greatly increased along with the availability and predictability of water resources.

During this time, Lake Cahuilla in the Coachella Valley began to recede. As a result, the large Patayan populations occupying its shores began moving eastward to the Colorado River basin or westward into areas such as Anza Borrego, Coyote Canyon, the Upper Coachella Valley, the Little San Bernardino Mountains, and the San Jacinto Plain. The final desiccation of Lake Cahuilla, which had occurred by approximately 370 B.P. (A.D. 1580), resulted in a population shift away from the lakebed into the Peninsular Ranges and inland valleys to the west, such as the Project area, as well as to the Colorado River regions to the east.

With the return of more mesic conditions post-550 B.P., which resulted in less resource stress, studies at five residential sites comprising 16 separate components at ESRP indicate that that people returned to a less intensive, semisedentary land-use strategy similar to that identified during the Late Archaic period. The number and frequency of artifact and toolstone caches were reduced; hearth features become slightly more common. Rock art also first appeared in

association with Late Prehistoric components that post-date the MWP. The decrease in the number of artifact and toolstone caches and the first appearance of rock art during this time suggest that residential sites are now occupied on a year-round basis.

A reduction in emphasis on plant foods—especially acorns, which require intensive preparation—is also visible in the archaeological record, and likely accounts for the reduction in refuse deposits, fire-altered rock weights, and midden development visible toward the end of the Late Prehistoric period. The reduction in mortars, pestles, and other grinding tools after the MWP suggests that the intensive procurement and processing of acorns and other plant foods was no longer as critical as previously; this pattern is further supported by a decline in the effort expended in shaping grinding tools. It is possible that the portable milling toolkit was supplemented substantially by bedrock milling features; however, bedrock features cannot be dated, and, therefore, cannot be assigned to any particular time period(s).

Percentages of projectile points also increased somewhat after the MWP. Cottonwood Triangular points began to appear in inland assemblages at this time, and Obsidian Butte obsidian (located in the southeastern Salton Sea Basin and exposed by the desiccation of Lake Cahuilla) becomes much more common, suggesting an increased focus on large mammals. However, the lower ratio of late-stage bifaces indicates that hunting methods returned to random-encounter strategies, rather than the logistical forays of the preceding period. Of particular note, faunal assemblages produced an anomalously high lagomorph index after the MWP, suggesting a very wet climatic regime with dense undergrowth well suited to cottontails. Finally, the percentage of nonutilitarian artifacts declined considerably, suggesting that trade was no longer critical for assuring food supplies.

Protohistoric Period (ca. 410 – 180 B.P.)

The productive conditions of the Little Ice Age continued throughout the Protohistoric period. Generally speaking, sedentism intensified during the Protohistoric period, with small, but apparently fully sedentary villages forming. Increased hunting efficiency (through use of the bow and arrow) and widespread exploitation of acorns and other hard nuts and berries (indicated by the renewed abundance of mortars and pestles) provided reliable and storable food resources. This, in turn, promoted greater sedentism. Related to this increase in resource utilization and sedentism are sites with deeper middens, suggesting central-based wandering or permanent habitation. These would have been the villages, or rancherias, noted by the early nonnative explorers.

The most striking change in material culture during this time is the local manufacture of ceramic vessels and ceramic smoking pipes. Although pottery was known in the Colorado Desert as long ago as 800 B.P., ceramic technology in the Project region appears to date to approximately 350 B.P. Additionally, abundant amounts of lithic raw material from Obsidian Butte were imported into the region. Cottonwood Triangular points were supplemented by Desert Side Notched points. Late in this period, some European trade goods (i.e., glass trade beads) were added to the previous cultural assemblages.

Ethnographic Setting

Archival and published reports suggest the Project area is situated where the traditional use territories of the Serrano, Cahuilla, Luiseño, and Gabrielino overlap, just south of the present City of San Bernardino. All of these cultural groups spoke languages belonging to the Takic branch of the Shoshonean family, a part of the larger Uto-Aztecan language stock. In the following sections, specific aspects of Serrano, Cahuilla, Luiseño, and Gabrielino ethnography and ethnohistory are explored.

Social Structure

Prior to the Mission period (i.e., prior to 1769), the Serrano, Cahuilla, and Luiseño, had nonpolitical, nonterritorial patrimoieties that governed marriage patterns as well as patrilineal clans and lineages. The words for these moieties mean “Coyote” and “Wildcat.” These cultural groups had political-ritual-corporate units (clans) composed of three to 10 lineages, distinctly different, named, claiming a common genitor, with one lineage recognized as the founding lineage. Clans owned a large territory in which each lineage owned a village site and specific resource areas. Clan lineages cooperated in large communal subsistence activities (e.g., animal drives and hunts, controlled burning) and in performing rituals. Founding lineages often owned the office of ceremonial leader, the ceremonial house, and a ceremonial bundle.

The Gabrielino had a more sophisticated political social structure. They, too, had a system of patrilineal lineages. Each lineage belonged to one of two “Coyote” or “Wildcat” moieties. Gabrielino lineages were capable of being split and reorganized into segmentary lineages, which served as mechanism for territorial expansion. Hunting and gathering territories were owned by the lineage; lineage membership gave individual families use rights. Unlike their Serrano, Cahuilla, and Luiseño neighbors, the Gabrielino had a hierarchically ordered social class of elite, middle class, and commoners. Class membership played a major role in determining individual lifestyles, as it depended upon both ancestry and wealth.

Subsistence and Domestic Resources

The Serrano, Cahuilla, Luiseño, and Gabrielino were, for the most part, hunting, collecting, and harvesting peoples. The Serrano, Cahuilla, and Luiseño clans were apt to own land in valley, foothill, and mountain areas, providing them with the resources of many different ecological niches. Individual lineages or families owned specific resource areas within the clan territory. As in most of California, acorns were a major staple, but the roots, leaves, seeds, and fruit of many other plants were also used. Fish, birds, insects, and large and small mammals were available. Mountain sheep (*Ovis canadensis*), deer, and antelope were some of the large mammals hunted. Now extinct in this part of California, antelope were once numerous in the area. As well, mountain lion, black bear, grizzly bear, deer, and wild boar were hunted. Similarly, the Gabrielino lineage ownership of land in valley, foothill, mountain, coastal, and estuary areas also offered a diverse array of food and other natural resources.

To gather food resources and to prepare them for eating, the Serrano, Cahuilla, Luiseño, and Gabrielino had an extensive inventory of equipment. The throwing stick and bow and arrow were

the most important hunting tools for killing game, but snares, traps, slings, decoys, disguises, and hunting blinds were also part of the hunting technology. For fishing, nets, traps, spears, hooks and lines, and fish poisons were used. Many inland villages had access to creeks and rivers and to ancient Lake Cahuilla until its last desiccation about 400 to 450 years ago, and during subsequent brief stands during the mid-1800s. Gathering required few tools: poles for shaking down pine nuts and acorns, cactus pickers, chia hooks, seed beaters, digging sticks and weights for digging sticks, and pry bars. Material culture items associated with transportation were mainly used to move food and included burden baskets, carrying nets, game bags, and saddle pads.

Food was usually stored in large storage baskets. Pottery ollas and baskets treated with asphaltum were also used to store and carry water and seeds. Wood, clay, and steatite were used to make jars, bowls, and trays. Skin and woven grass were used to make bags. Food processing required hammers and anvils for cracking nuts; mortars and pestles for grinding acorns and other hard nuts and berries; manos and metates and manos and bedrock milling slicks for grinding seeds and berries; winnowing shells and baskets; strainers; leaching baskets and bowls; knives made of stone, bone, wood, and carrizo cane; bone saws; and drying racks made of wooden poles to dry fish. Basket mortars, with asphaltum used to attach an open-bottomed basket to a mortar, were important for food processing. Food was served in wooden and gourd dishes and cups and in basket bowls that were sometimes tarred. Wood, shell, and horn were used for spoons.

In addition to gathering and hunting, the mainland Gabrielino were involved in an extensive trade network that extended as far east as the Colorado River and as far west as San Nicolas Island. With the Serrano, the Gabrielino traded shell beads, fish, sea otter skins, and soapstone vessels for deerskin and seeds; the Cahuilla received beads, soapstone, and asphaltum from the Gabrielino in exchange for food, furs, hides, obsidian, and salt. In addition to forging alliances with neighboring groups, trade and exchange was also a means of offsetting food shortages during winter months and in times of resource stress (e.g., drought).

Shelter and Community Structures

In prehistoric times, Serrano, Cahuilla, Luiseño, and Gabrielino shelters are believed to have been dome shaped; during post-contact times they tended to be rectangular. The entryway into the shelter was usually covered with hides or woven mats, and a smoke hole with a removable cover was present at the apex of the dome for smoke to escape. Serrano, Cahuilla, and Luiseño shelters were made of brush, although some were wattled and plastered with adobe mud; Gabrielino shelters were made of reed. Most of the Serrano, Cahuilla, and Luiseño domestic activities were performed outside the shelters within the shade of large, expansive ramadas; windbreaks, made of vertical poles covered with rush mats, provided open air food preparation and cooking areas at Gabrielino settlements.

Within Serrano, Cahuilla, and Luiseño villages, the chief's house was the largest and was usually next to the ceremonial house. Each village also had a men’s sweat house and several granaries. At a typical Gabrielino settlement, a yovaar, an unroofed religious structure, was built in the center

and surrounded first by the houses of the chief and elite members of society and then by the smaller houses of other community members; poor members occupied simple lean-to style structures along the outskirts of the settlement. Sweathuts and granaries were also present in Gabrielino settlements.

Religion, World View, and the Sacred

The Serrano, Cahuilla, Luiseño, and Gabrielino, like other California Indians, understand the universe in terms of power, and power, believed to be sentient and to have will, was assumed to be the principal causative agent for all phenomena. Unusual natural phenomena are viewed as especially sacred, being the repositories of concentrations of power. Mountain tops, and especially particular mountain tops, are held sacred, as are unusual rock formations, springs, and streams. Rock art sites are sacred, having been the sites of ceremonies. Burial and cremation sites are also sacred, as are many other places of residual power. In addition, various birds, but especially eagles, condors, hawks, and other birds of prey and their symbolic representations, are revered as sacred beings of great power and were sometimes ritually killed and mourned in mortuary ceremonies similar to those for human elites. For this reason, bird cremation sites are sacred.

Because of these strong beliefs, rituals were a constant factor in the life of every Native American individual. Some rituals were scheduled and routine (e.g., birth, puberty, death, mourning, and the eagle ritual and first fruits rites), whereas others were sporadic and situationally performed (e.g., deer ceremony, bird dance, enemy songs, and the rain ritual).

Historical Setting

The history of the Project area provides a context for understanding local settlement from mission lands to the development of the modern urban landscape. It is the basis for the identification of the historic property types constructed during this settlement, and the evaluation of their significance as historical resources.

California History

Exploration of the California coast in the sixteenth and seventeenth centuries was the basis for the Spanish claim to the region. In the eighteenth century, Spain recognized that to strengthen its claim, it would have to settle Alta California to preclude encroachment by the Russians and British. Therefore, in the latter half of the eighteenth-century Spain and the Franciscan Order of the Catholic Church founded a series of presidios, or military camps, and missions along the California coast, beginning at San Diego in 1769.

In 1821, Mexico opened the ports of San Diego and Monterey to foreign trade. American ships docked at California ports to purchase tallow and hides, which were known as California banknotes. Americans also settled in California, some of them becoming citizens and owners of large ranchos.

Conflicts between the Californios and the central government in Mexico City led to a series of uprisings culminating in the Bear Flag Revolt of June 1846. However, Mexican control of

California had effectively ended the year before when the Californios expelled Manuel Micheltorena, the last Mexican governor.

With the signing of the Treaty of Guadalupe-Hidalgo on February 2, 1848, California formally became an American territory, and two years later, on 9 September 1850, California became the thirty-first state in the Union. Between those two years came a large influx of Americans seeking their fortunes; the catalyst for this influx was James Marshall's 1848 discovery of gold at Sutter's Mill. The population and wealth in the early statehood years were concentrated in the northern part of the state. Ranching was the main occupation in the southern counties; the flood and drought of the 1860s brought that era to a close, and the completion of the transcontinental railroad in 1869 opened California to agricultural settlement.

Southern California was promoted as an ideal agricultural area, with fertile soil and a mild climate. Books on California painted beautiful pictures that appealed to both Americans and Europeans. There were three land booms tied to railroad construction: (1) after the transcontinental railroad was completed, enabling easy travel to California; (2) late 1870s after the Southern Pacific was completed; and, (3) 1886–1888, when the Santa Fe transcontinental line was completed. Competition between the lines incited a rate war, and both tourists and potential settlers took advantage of the low fares to come to California.

History of the City of Riverside

The Project area lies within the eastern limits of the City of Riverside. The development of Riverside, California and the growth of the citrus industry go hand in hand. Riverside was founded as a town in San Bernardino County in the 1870s and incorporated in 1883. It was located on the south bank of the Santa Ana River, its source of water. Advertised as a "Colony for California" the area was settled as an agricultural area by immigrants coming to the state to partake of the wonders listed in promotional literature. Riverside became a center of the citrus industry, and famous for its Washington navel orange. Competition with the neighboring city of San Bernardino resulted in the formation of the County of Riverside in 1893, with Riverside the seat of the newly established county.

Orange trees were first planted in Riverside in 1871, but the citrus industry for which Riverside is famous began three years later. In 1874, Eliza Tibbets received three Brazilian navel orange trees from a personal friend, William Saunders, who was a horticulturist at the USDA. The trees came from Bahia, Brazil. The Bahia Orange did not do well in Florida, but its success in southern California was phenomenal.

Tibbets planted the trees and one of them died after it was trampled by a cow during the first year. After that unfortunate incident, the other two trees were transplanted to land owned by Sam McCoy. The trees were later transplanted again; one at the Mission Inn property in 1903 by President Theodore Roosevelt, (this tree died in 1922); the other was placed at the intersection of Magnolia and Arlington avenues. Eliza Tibbets was honored with a stone marker placed with the tree. That tree is reported to still stand to this day inside a protective fence. The trees thrived in the southern California climate and the navel orange industry grew rapidly.

Citrus became the primary agricultural product of the Riverside colony. Many growers purchased bud wood and then grafted the cuttings to root stock. Within a few years, the successful cultivation of many thousands of the newly discovered Brazilian navel orange led to a California Gold Rush of a different kind: the establishment of the citrus industry, which is commemorated in the landscapes and exhibits of the California Citrus State Historic Park in Riverside and the restored packing houses in Downtown Riverside's Marketplace district. To cultivate large orchards, growers required the construction of major water conveyance systems. Beginning in the 1870s with the construction of the Southern California Colony Association's "Upper Canal" (established 1870) and the "Lower Canal" (established circa 1874), water arrived into the Riverside area from the Santa Ana River. By 1882, there were more than half a million citrus trees in California, almost half of which were in Riverside.

As orchards began to dominate Riverside area agriculture, the need for larger water transport systems grew proportionately. To help meet the demand, the Gage Canal was built, tapping the waters of the Santa Ana River and bringing much needed irrigation into the region. Chinese laborers, credited with building the railroad grade for the California Southern Railway at Box Springs Canyon (approximately 2.5 miles north of the Project) and Temecula Canyon, hand dug the canal, along with an expansive network of irrigation ditches, helping Riverside become famous for its citrus industry. Many towns had Chinese neighborhoods or "Chinatowns" and Riverside was no exception.

By 1886, water flowed from the head gates at Tequesquite Arroyo through the upper, 12-milelong portion of the canal. By 1889, water flowed through the entire 20.13-mile-long canal. Lands could now be irrigated with ease from the Santa Ana River 20 miles away to the district of Arlington Heights in the City of Riverside. By the turn of the twentieth century, a significant cultural landscape evolved that consisted of more than 12,000 acres of orange groves (the largest situated in Arlington Heights [approximately 6 miles west of the Project] and the district of Highgrove [approximately 7 miles north of the Project]).

To facilitate the transportation of citrus crops from the grower to the consumer, the railroad industry routed several main and branch lines straight into the heart of the region. The Atchison Topeka & Santa Fe, the Union Pacific, and the Southern Pacific railroads laid track in and around Riverside and built or leased large networks of packing houses, icing plants, and storage. The development of refrigerated railroad cars and innovative irrigation systems established Riverside as the state's wealthiest city per capita by 1895.

By 1940, the Riverside citrus industry had evolved into a major economic force. The 1943 U.S. Army map reveals that the Riverside/Arlington area was still a major citrus producer in the 1940s, with thousands of acres of citrus trees planted in the valley filling large tracts of land along Victoria Avenue, Dufferin Avenue, and Indiana Avenue. The post-World War II era ushered in a boom in commercial, industrial, and residential development in and near the region's urban centers, followed by the construction of several freeways linking urban areas to one another. U.S. Highway 395, which was once a two-lane road through Riverside, was expanded during the 1960s and became Interstate 15E by 1972. Now signed as Interstate 215 through the Perris Valley, this route has expanded to a four-lane divided highway. The late 1990s and early 2000s marked another

boom period in the growth of the region, in which more residential and commercial development rapidly consumed agricultural lands.

Cultural Resources Investigation and Known Historical Resources

To determine whether the Project would affect historic properties or historical resources, AE conducted a cultural resource assessment in the Project's approximately 48-acre Area of Potential Effects (APE[1]). The cultural resource assessment consisted of an archaeological literature and records search at the Eastern Information Center at the University of California, Riverside, for recorded cultural resources within a one-mile radius of the APE (Study Area); a request for a Sacred Lands Files search from the Native American Heritage Commission (NAHC); and an intensive cultural resources pedestrian survey of the Project site. (AE 2020b)

Records indicate 21 previous cultural resource studies have been previously conducted within a 1-mile radius of the APE (the Study Area[2]). One hundred percent of the APE has been surveyed previously as a result of these studies. The previous cultural resource investigations identified 179 previously recorded cultural resources within the Study Area, including 169 prehistoric archaeological sites, four (4) historical archaeological sites, four (4) isolated prehistoric artifacts, and one (1) built-environment resource (railroad grade).

All of the prehistoric archaeological resources documented in the Study Area are bedrock milling sites (some with ground stone, such as manos, and other lithics), including four within the APE (AE 2020b) as indicated in Table 5.4-1 – Cultural Resources Occurring on the Project Site.

Table 5.4-1 – Cultural Resources Occurring on the Project Site

Primary No.	Trinomial	Description
33-002486	CA-RIV-2486	Bedrock milling site
33-002487	CA-RIV-2487	Bedrock milling site
33-002488	CA-RIV-2488	Bedrock milling site
33-002489	CA-RIV-2489	Bedrock milling site

Additional sources consulted during the archaeological literature and records search include the NRHP, the Office of Historic Preservation (OHP) Archaeological Determinations of Eligibility File, the OHP Directory of Properties in the Historic Property Data File, and the City's Historic Landmark List. No historic properties or landmarks are recorded or listed within, or immediately adjacent to, the Project site.

On September 19, 2018, AE archaeologists completed an intensive pedestrian surface survey for cultural resources in the 48.64-acre Project site. The two-fold purpose of the survey was (1) to identify any new cultural resources within the Project site and (2) to examine the conditions of

[1] The APE is the approximate 48-acre Project site
[2] The Study Area includes the APE/Project site and the area within a 1-mile radius of the Project site

previously recorded resources. The survey was conducted by a two-person crew walking parallel transects spaced at 20-meter (66-foot) intervals.

The survey of the Project site resulted in the identification of three additional bedrock milling sites (CA-RIV-11772, -11770, and -11769). The four previously recorded (CA-RIV-2486, -2487, -2488, and -2489) and three newly identified resources are all distributed across the western extension of the Project site. These seven archaeological sites are generally described below.

CA-RIV-2486 (33-002486)

AE found CA-RIV-2486 to be a 58 by 35-meter bedrock milling site consisting of two granitic boulder outcrops with a total of 10 milling slicks. The two outcrops are located approximately 30 meters north-south from each other. At the time of the original 1982 recordation, CA-RIV-2486 included two granitic boulders with seven grinding slicks. When the site was revisited in 2008 for an archaeological site relocation survey for the City's Burn Training Project, a total of eight slicks on three granitic boulders was recorded. This current update identified a total of eight milling slicks on one of the granitic boulder outcrops (the 6 original slicks and 2 new slicks) and two on the other granitic boulder outcrop. The west side of the site is situated flush with the ground surface and the location of milling slicks 6 and 7 appear to have been exposed by rain. Weed abatement activities in the area surrounding the bedrock milling outcrops have removed the native plant communities that would have been found prehistorically. Further, the site's integrity has been further impaired by recreational hiking/biking trail use which has disturbed the native sediments in the immediate area south of the bedrock milling features.

CA-RIV-2487 (33-002487)

AE documented another three milling slicks, for a total of eight milling slicks, across three granitic boulder outcrops approximately 24 meters southwest of the presumed southern boundary of CA-RIV-2486. The three rock outcrops are approximately 19 and 22 meters apart from north to south. At the time of its 1982 recordation, CA-RIV-2487 included a single granitic boulder with five grinding slicks. AE's current update identified that five milling slicks are on one granitic boulder outcrop, two of the milling slicks are on the second granitic boulder outcrop, and one of the milling slicks is on the third granitic boulder outcrop at this 75 by 31-meter bedrock milling site. To the east and north the terrain is relatively unaltered. Moreover, weed abatement activities in the area surrounding the bedrock milling outcrops have removed the native plant communities that would have been found prehistorically.

CA-RIV-2488 (33-002488)

CA-RIV-2488 is a 73 by 63-meter bedrock milling site consisting of four granitic boulder outcrops with a total of 17 milling slicks. This site is approximately 33 meters southeast of the presumed south boundary of CA-RIV-2486 and approximately 48 meters east-northeast of the presumed east boundary of CA-RIV-2487. As originally recorded (McCarthy 1982c), the milling slicks are distributed in clusters across at CA-RIV-2488. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. Furthermore, weed

abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

CA-RIV-2489 (33-002489)

CA-RIV-2489 is a is a 21 by 17-meter bedrock milling site approximately 59 meters east-southeast of the presumed east boundary of CA-RIV-2488. As originally recorded (McCarthy 1982d), this site consists of one granitic boulder outcrop with a total of three milling slicks. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. Furthermore, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

CA-RIV-11772 (33-028956)

CA-RIV-11772 is a is an 18 by 25-meter bedrock milling site approximately 80 meters southeast of the south tip of CA-RIV-2487. This site consists of two granitic boulder outcrops six meters apart with a total of four milling slicks (3 on one granitic boulder outcrop and 1 on the second granitic boulder outcrop). The two rock outcrops are aligned east-west from each other. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north, the terrain is relatively unaltered. Further, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

CA-RIV-11770 (33-028955)

CA-RIV-11770 is a 19 by 16.5-meter bedrock milling site consisting of one granitic boulder outcrop with a total of two milling slicks. CA-RIV-11770 is approximately 28 meters southwest of the presumed west boundary of CA-RIV-11769 and approximately 99 meters west of the presumed west boundary of CA-RIV-2487. Some previous disturbance is evident and modern refuse is present in the area. In addition, soils around the boulder appeared somewhat loose and the boulder may not be in its original location. The integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. In addition, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature. Further, the site's integrity has been further impaired by use of the recreational hiking/biking trail to the south and a dirt road to the west, which has disturbed the native sediments in the immediate area of the site.

CA-RIV-11769 (33-028954)

CA-RIV-11769 is another bedrock milling site approximately 28 meters northeast of the presumed south boundary of CA-RIV-11770, approximately 75 meters northwest of the presumed north boundary of CA-RIV-2487, and approximately 79 meters southwest of the presumed west boundary of CA-RIV-2486. This site is 21 by 21 meters in size and consists of one granitic boulder

outcrop with one milling slick. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north, the terrain is relatively unaltered. In addition, weed abatement activities have removed the native plant communities and disturbed the ground surface area surrounding the bedrock milling feature.

As previously mentioned, AE survey personnel attempted to re-identify any cultural resources within the Project's APE, which included the entire approximately 48 acres of land constituting the Project site. All areas likely to contain or exhibit archaeologically or historically sensitive cultural resources were inspected carefully to ensure that visible, potentially significant cultural resources were discovered and documented (AE 2020b). AE evaluated each identified archaeological resource with the Project site for significance and eligibility for listing in the NRHP and/or CRHR and recommended that all seven sites are individually ineligible for listing in the NRHP, CRHR, or as a City of Riverside Cultural Resource. (AE 2020b).

Varying degrees of ground disturbance were observed within the Project site during the 2018 survey. The western portion of the Project's APE is moderately disturbed by recreational trails and vegetation removal activities. The eastern portion of the Project's APE appeared intact with little to no disturbance noted. Ground-surface visibility through the Project's APE was moderate (approximately 30 – 60 percent), with the majority of the APE covered in dry bunch grass. Vegetation in the area consists of black sage, willow, sycamore, buckwheat, and seasonal grasses. Riparian scrub obscured visibility in the drainage areas within the central and southern portion of the APE.

NAHC Sacred Lands File Search and Native American Coordination Efforts

The NAHC Sacred Lands File search indicated the presence of Native American cultural sites within the immediate Project area. The NAHC recommended that other sources of cultural resources be contacted for information on Native American cultural resources and provided a list of regional Native American tribal representatives who may have knowledge of cultural resources within the Project area. Tribal communities listed on the NAHC list included the Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Mission Indians, Cabazon Band of Cahuilla Mission Indians, Cahuilla Band of Indians, Los Coyotes Band of Cahuilla and Cupeño Indians, Morongo Band of Mission Indians, Ramona Band of Cahuilla, Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseño Indians, and the Torres-Martinez Desert Cahuilla Indians. All of these tribes were contacted by AE on October 2, 2018 (AE 2020b).

A second round of correspondence was sent by AE on October 16, 2018; by this date, four responses had been received. The Cahuilla Band of Indians noted Tribal concerns that cultural resources may be unearthed during construction and requested the presence of cultural monitors during all Project-related ground-disturbing activities. The Morongo Band of Mission Indians indicated the Project is within a sensitive area for tribal cultural resources associated with the Tribe and similarly requested the presence of a cultural monitor during all Project-related ground-disturbing activities. The Cabazon Band of Mission Indians indicated the Project is located outside of the Tribe's current reservation boundaries, and that the tribe has no specific archival

information on the site indicating it may be a sacred/religious site or site of Native American traditional cultural value. The Santa Rosa Band of Cahuilla Indians stated the Tribe will defer further consultation and monitoring for the Project to the Soboba Band of Luiseño Indians.

In addition to AE's communication with local Native American tribes and individuals, the City initiated formal government-to-government Assembly Bill 52 (AB 52) consultation with various Native American tribes who have interests in the Project area. The City's consultation efforts with Native American tribes are further discussed in Section 5.13 Tribal Cultural Resources.

5.4.2 Related Regulations

The Project is subject to the full authority of federal historic preservation laws and regulations, namely Section 106 of the NHPA and its implementing regulations (36 CFR Part 800). Several state and local laws also guide actions that concern cultural resources. These include CEQA (Public Resources Code 21000 et seq.), Public Health and Safety Code (HSC), Public Resources Code (PRC), the GP 2025, and the City of Riverside Municipal Code.

5.4.2.1 Federal Regulations

National Historic Preservation Act

Federally issued permits may require a project to be considered an "undertaking" per 36 CFR Section 800.16(y), subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. The NHPA established a national policy for historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the federal, state, and local levels. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the position of State Historic Preservation Officer, provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes in preserving their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

The NHPA established the NRHP as "an authoritative guide to be used by federal, state, and local governments, private groups, and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR Section 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. If a cultural resource is determined to be an eligible historic property under 36 CFR Section 60.4, then Section 106 requires that the effects of the proposed undertaking be assessed and considered in planning the undertaking. Ordinarily, cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; and properties that are primarily commemorative in nature are not considered eligible for the NRHP, unless they satisfy certain conditions.

NRHP Criteria

Determination of NRHP eligibility for cultural resources prior to making a finding of effect is made according to the following criteria of evaluation (36 CFR 60.4):

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history;
>
> B. that are associated with the lives of persons significant in our past;
>
> C. that embody the distinctive characteristics of a type, period, method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack distinction; or
>
> D. that has yielded, or is likely to yield, information important to prehistory or history.

A property must meet one or more of these specific criteria to qualify as a good representative of a significant historical theme or pattern. It must be associated with important historical events or persons (Criteria A and B); convey important technical, aesthetic, or environmental values (Criterion C); or have potential to provide important scientific or scholarly information (Criterion D). Unless a site is of exceptional importance, it is not eligible for listing in the NRHP until it is 50 years of age. (AE(a), pp. 27-28)

Associative values are identified within the context of local, regional, and national history. Historical research is required to evaluate significant historical associations under Criteria A, B, and C. Criterion D, which is most often applied to archaeological sites, requires specification in terms of an archaeological context and research design. In addition to archaeological research potentials, sites may possess public and ethnic values which should be considered when evaluating significance. Moreover, archaeological sites may have broader public significance insofar as they can serve to educate the public about important aspects of national, state, and local history. These criteria, by which the NRHP eligibility of a resource is judged, are essential because they “indicate what properties should be considered for protection from destruction or impairment” (36 CFR 60.2). Any action, as part of an undertaking, which could affect a significant cultural resource is subject to review and comment under Section 106 of the NHPA. (AE 2020b)

5.4.2.2 State Regulations

California Register of Historical Resources

State law (Public Resources Code Section 5024.10 et seq.) adds a level of protection for cultural resources by requiring evaluations of the significance of historical resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the State *CEQA Guidelines*. These criteria are similar to those used in federal law.

The California Register of Historic Resources (CRHR) is maintained by the State Office of Historic Preservation (OHP). Properties listed, or formally designated eligible for listing, on the NRHP are automatically listed on the CRHR, as are state historical landmarks and points of interest. The OHP also administers the California Historical Resources Information System (CHRIS), which includes properties designated under local ordinances or identified through local historical resource surveys.

CRHR Criteria

For purposes of CEQA, a historical resource is any object, building, structure, site, area, place, record, or manuscript listed or eligible for listing in the CRHR (California Public Resources Code [PRC] Section 21084.1). A resource is eligible for listing in the CRHR if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

The California Code of Regulations (CCR) further provides that cultural resources of local significance are CRHR-eligible (Title 14 CCR, Section 4852).

California Environmental Quality Act

CEQA requires the lead agency to determine whether the proposed development project will have a significant effect on the environment. According to State *CEQA Guidelines* Section 15064.5(b), only those resources determined to be "historical resources," that is, listed or eligible for listing in the CRHR or determined a historical resource by the lead agency, are considered subject to potential significant adverse impacts. CEQA recognizes that historical resources are part of the environment, and that a project "that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC Section 21084.1). The State *CEQA Guidelines* state, "A project with an effect that may cause a substantial adverse change in significance of an historical resource is a project that may have a significant effect on the environment" (State *CEQA Guidelines* Section 15064.5(b)). A "substantial adverse change" is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (State *CEQA Guidelines* Section 15064.5(b)(1)). The significance of a historical resource is materially impaired when a project affects "those physical characteristics of an historical resource that convey its historical significance" (State *CEQA Guidelines* Section 15064.5(b)(2)(a)).

Sections 21083.2 and 21084.1 of the State *CEQA Statute* deal with the definitions of unique and non-unique archaeological resources and historical resources respectively. Section 21083.2 directs the lead agency to determine whether the project may have a significant effect on unique archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the environmental impact report shall address the issue of those resources. Section 21084.1 directs the lead agency to determine whether the project may have a significant effect on historical resources, irrespective of the fact that these historical resources may not be listed or determined to be eligible for listing in the CRHR, a local register of historical resources, or they are not deemed significant pursuant to criteria set forth in PRC Section 5024.1(g).

Unique Archaeological Resources Criteria

CEQA requires the lead agency to consider whether a project will have a significant effect on unique archaeological resources and to avoid unique archaeological resources when feasible or mitigate any effects to less-than-significant levels per PRC Section 21083.2. The State *CEQA Statutes* (PRC Section 21083.2(g)) define a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important or prehistoric or historic event or person.

Human Remains

According to Section 15064.5 of the State *CEQA Guidelines*, all human remains are a significant resource. This section also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are discussed within PRC Section 5097.

California Public Resources Code 5097.98

California Senate Bill 297 (1982) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. It has been incorporated into Section 15064.5(e) of the State *CEQA Guidelines*.

California Health and Safety Code Section 7052 and 7050.5

Section 7052 of the California Health and Safety Code states that disturbance of Native American cemeteries is a felony. Section 7050.5 of the California Health and Safety Code requires that

construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are found to be Native American, the coroner must contact NAHC.

5.4.2.3 Local Regulations

Riverside General Plan 2025

The City of Riverside General Plan 2025 (GP 2025) was adopted in 2007 and addresses the seven state-mandated elements of general plans (land use, housing, circulation, open space, conservation, noise, and safety) (City of Riverside 2007). The General Plan is intended to achieve the land use, circulation, and other goals of the City in order to reflect the community's current values for growth over the long term.

With regard to cultural resources, the Historic Preservation Element of the City of Riverside General Plan contains seven objectives with associated policies to protect the City's historical and archaeological resources. These include:

Objective HP-1: To use historic preservation principles as an equal component in the planning and development process.

> **Policy HP-1.3:** The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable state and federal cultural resources protection and management laws in its planning and project review process.

Objective HP-2: To continue an active program to identify, interpret and designate the City's cultural resources.

Objective HP-3: To promote the City's cultural resources as a means to enhance the City's identity as an important center of Southern California history.

Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting, and development activities.

Objective HP-5: To ensure compatibility between new development and existing cultural resources.

Objective HP-6: To actively pursue funding for a first-class historic preservation program, including money needed for educational materials, studies, surveys, staffing, and incentives for preservation by private property owners.

Objective HP-7: To encourage both public and private stewardship of the City's cultural resources.

Riverside Municipal Code

Title 20 of the Riverside Municipal Code (RMC) is the primary body of local historic preservation laws. The purpose of Title 20 is to promote the public health, safety, and general welfare by providing for the identification, protection, enhancement, perpetuation and use of improvements, buildings, structures, signs, objects, features, sites, places, areas, districts, neighborhoods,

streets, works of art, natural features, and significant permanent landscaping having special historical, archaeological, cultural, architectural, community, aesthetic, or artistic value in the City. Title 20 of the Riverside Municipal Code established procedures for preserving, protecting, and designating significant cultural resources should the resource be considered a historic/cultural resource (RMC).

Chapter 20.50 defines eligible cultural resources as:

> *A cultural resource or historic district which has been determined by the Historic Preservation Officer or Qualified Designee, Board, or City Council to meet the City's designation criteria pursuant to a survey prepared by a professional meeting the Secretary of the Interior's standards which either documents the resource, records the resource on the State Department of Parks and Recreation survey forms, or has been so designated by the California State Historic Preservation Officer.*

Applications for eligible cultural resources are reviewed by the City's Cultural Heritage Board and ultimately approved by City Council. Further, in accordance with Title 20, a Certificate of Appropriateness is required to alter, demolish or relocate properties that are designated or determined eligible for designation as a City Cultural Resource. A Certificate of Appropriateness is also required for new construction within historic districts and neighborhood conservation areas. The Project does not meet these criteria, and as such, a Certificate of Appropriateness is not required for this Project.

Chapter 20.50 defines a landmark as:

> *Any Improvement or Natural Feature that is an exceptional example of a historical, archaeological, cultural, architectural, community, aesthetic or artistic heritage of the City, retains a high degree of integrity, and meets one or more of the following criteria:*
>
> 1. *Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;*
> 2. *Is identified with persons or events significant in local, state, or national history;*
> 3. *Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;*
> 4. *Represents the work of a notable builder, designer, or architect, or important creative individual;*
> 5. *Embodies elements that possess high artistic values or represents a significant structural or architectural achievement or innovation;*
> 6. *Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning, or cultural landscape;*

7. *Is one of the last remaining examples in the City, region, state, or nation possessing distinguishing characteristics of an architectural or historical type or specimen; or*
8. *Has yielded or may be likely to yield, information important in history or prehistory.*

An Improvement or Natural Feature meeting one or more of the above criteria, yet not having the high degree of integrity to qualify as a Landmark, may qualify as a Structure or Resource of Merit (see subsection below).

An Improvement or Natural Feature meeting one or more of the above criteria, yet not formally designated as a Landmark by the City Council, may be an eligible Landmark.

Chapter 20.50 defines a Structure or Resource of Merit as:

Any Improvement or Natural Feature which contributes to the broader understanding of the historical, archaeological, cultural, architectural, community, aesthetic, or artistic heritage of the City, retains sufficient integrity, and:

1. *Has a unique location or singular physical characteristics or is a view or vista representing an established and familiar visual feature of a neighborhood community or of the City;*
2. *Is an example of a type of building which was once common but is now rare in its neighborhood, community or area;*
3. *Is connected with a business or use which was once common but is now rare;*
4. *A Cultural Resource that could be eligible under Landmark Criteria no longer exhibiting a high level of integrity, however, retaining sufficient integrity to convey significance under one or more of the Landmark Criteria;*
5. *Has yielded or may be likely to yield, information important in history or prehistory, or*
6. *An improvement or resource that no longer exhibits the high degree of integrity sufficient for Landmark designation, yet still retains sufficient integrity under one or more of the Landmark criteria to convey cultural resource significance as a Structure or Resource of Merit (Ord. 7248 §5, 2014; Ord. 7206 §24, 2013; Ord. 7108 §1, 2010).*

Historic Districts

The City of Riverside defines a Historic District as:

1. *A concentration, linkage, or continuity of cultural resources, where at least fifty percent of the structures or elements retain significant historic integrity (a 'geographic Historic District'), or*
2. *A thematically-related grouping of cultural resources which contributes to each other and are unified aesthetically by plan or physical development, and which have been*

designated or determined eligible for designation as a historic district by the Historic Preservation Officer, Board, or City Council, or is listed in the National Register of Historic Places or the California Register of Historic Resources, or is a California Historical Landmark or a California Point of Historical Interest (a 'thematic Historic District').

In addition to either 1 or 2 above, the area also:

3. *Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;*
4. *Is identified with persons or events significant in local, State, or national history;*
5. *Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;*
6. *Represents the work of notable builders, designers, or architects;*
7. *Embodies a collection of elements of architectural design, detail, materials or craftsmanship that represent a significant structural or architectural achievement or innovation;*
8. *Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning;*
9. *Conveys a sense of historic and architectural cohesiveness through its design, setting, materials, workmanship or association; or*
10. *Has yielded or may be likely to yield, information important in history or prehistory.*

Riverside County Municipal Code

Historic Preservation Districts

Per Section 15.72.010 of the Riverside County Municipal Code, the Board of Supervisors finds that the protection, preservation, enhancement, perpetuation, and use of resources of historic, architectural, archaeological, engineering, and cultural merit within Riverside County is necessary and required in the interest of health, safety, social and cultural enrichment, and general welfare to the public. As used in Chapter 15.72 – Historic Preservation Districts, Section 15.72.040 defines the following:

H. "Contributing resource." Any historic resource that significantly contributes to the historical nature of a historic preservation district.

Q. "Historic resource." Any building, structure, façade, landmark, site, area, place, feature, sign, landscape accessory, or other object which are significant in historic, archaeological, engineering, scientific, cultural, architectural, social, political, or military value to the citizens of the County, the Southern California region, the State of California, or the nation which may be determined eligible for designation pursuant to the provisions of this ordinance or which may be eligible for listing or designation on any current or future state or federal register of historic resources.

Riverside County General Plan

Multipurpose Open Space Element

Cultural Resources

Per the Riverside County General Plan (Riverside County 2015), cultural resources are evidence of past human activity that become important for scientific, historic, and/or religious reasons to communities, descendant groups, and individuals. They may include objects, buildings, structures, sites (particularly archaeological sites), areas, places, records, or manuscripts associated with history. Some examples of cultural resources are pioneer homes, buildings, or old wagon roads; structures with unique architecture or designed by a notable architect; prehistoric Native American village sites; pioneering ethnic settlements; historic or prehistoric artifacts or objects; rock inscriptions; human burial sites; battlefields; railroad water towers, railways and bridges; prehistoric trails; early mines or important historic industrial sites.

Cultural resources may also include places that have historic or traditional associations or that are important for their natural resources like places where Native Americans have gathered plants for the purpose of making baskets or medicines, places where religious or ceremonial activities have occurred, or places where a significant historic event has occurred. Some of these places may not have physical evidence of their use, but rather may only be recognized through oral history or archival documentation. Other such places may include numerous artifacts and/or ruins above or below ground.

Cultural resources are nonrenewable resources and often yield unique information about past societies and environments, and provide answers for modern day social, scientific, and heritage concerns. The consideration and preservation of important examples of history within Riverside County benefits the public by maintaining historic identity and a sense of place and tradition.

Sycamore Canyon Business Park Specific Plan

The Project site is located within the Sycamore Canon Business Park Specific Plan (SCBPSP) area. Originally adopted in 1984, the SCBPSP stipulates the development of a planned industrial park consisting of approximately 920 acres of industrial and commercial uses within a 1,400-acre Specific Plan area. The SCBPSP calls for a multipurpose use of the area that includes industrial, industrial support, retail business and offices, and open space. Since its approval, the Specific Plan has been subject to a number of amendments.

5.4.3 Project Design Considerations

Project design considerations have been made in efforts to minimize and/or avoid potential impacts to the cultural resources identified on site. Figure 3.0-8 Tentative Parcel Map and Figure 3.0-9 Site Plan, in Section 3.0 Project Description, provide visual references for the locations of Project parcels and Project features (i.e., the proposed warehouse buildings) described below. The Project, as described below, has been designed in order to be least impactful to cultural resources.

Project design considerations have been made in efforts to minimize and/or avoid potential impacts to the tribal cultural resources identified on site. The Project, as described below, has been designed in order to be least impactful to tribal cultural resources.

There are 14 bedrock outcrops with milling features located on Parcel 2 and Parcel C. The Project has been designed to minimize the removal of these resources to the greatest extent possible, while accommodating the construction of Building B and associated parking, and the trailhead parking lot. No bedrock outcrops with milling features, or other cultural resources, were identified that would require removal for the construction of Building A or associated parking.

These Project design considerations include the following:

- Car and vanpool parking spaces along the west side of Building B has been designed to avoid and preserve the single bedrock outcrop and a total of two milling slicks that comprise feature CA-RIV-11770.
- The detention basin area at the southeast side of Building B has been designed to avoid and preserve a total of two bedrock outcrops with a total of three milling slicks that comprise CA-RIV-11772.
- The northeast side of Building B is angled and the parking along the northeast portion of Building B has been designed to avoid two of four bedrock outcrops and three of 17 milling slicks that comprise feature CA-RIV-2488.
- The proposed trailhead parking lot (Parcel C) has been designed with a curved drive aisle and parking along the northern portion of Building B has been designed to avoid and preserve two bedrock outcrops and 10 milling slicks that comprise feature CA-RIV-2486.
- The bedrock outcrop and total of three milling slicks that comprise feature CA-RIV-2489 within the conservation area (Parcel A), will be avoided and preserved.

In summary, a total of eight out of fourteen bedrock outcrops, 22 of 36 milling slicks, and four of seven complete milling sites will be avoided and preserved.

5.4.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Therefore, significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines are utilized. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed Project would:

- (Threshold A) cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5;
- (Threshold B) cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5;

- (Threshold C) disturb any human remains, including those interred outside of formal cemeteries.

5.4.5 Environmental Impacts

Threshold A: *Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?*

Four previously recorded archaeological sites were re-identified and three newly identified resources were documented during the 2018 survey. As discussed, all of the prehistoric archaeological resources documented within a one-mile radius of the Project's APE are bedrock milling sites (some with ground stone, such as manos, and other lithics), including the four previously recorded sites and the three additional sites within the Project's APE. As will be discussed in further detail under Threshold B below, there are four criteria that a resource must meet to be eligible for listing on the NRHP and CRHR. As will be further discussed under Threshold B, the seven sites were not found to be eligible for listing under NRHP Criterion A-D or CRHR criterion 1-4 and do not constitute a significant historic resource. Additionally, the site does not contain any built structures nor remnants of built structures that could be evaluated as potential historic resources. Moreover, a review of the EIC archaeological literature and records, NRHP, OHP Archaeological Determinations of Eligibility File, OHP Directory of Properties in the Historic Property Data File, and the City's Historic Landmark List indicated that no historic properties or landmarks are recorded or listed within, or immediately adjacent to, the Project's APE. Therefore, as no significant historical resources are within, or immediately adjacent to, the Project site, the Project will not result in a substantial adverse change in the significance of a historical resource and impacts would be **less than significant without mitigation**.

Threshold B: *Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*

As discussed in Section 5.3.1, the intensive pedestrian survey conducted in October 2018 resulted in the re-identification of four archaeological resources that had previously been recorded within the Project site: CA-RIV-2486, -2487, -2488, and -2489. Three newly identified resources were also documented during the survey: CA-RIV-11772, -11770, and 11769. The 2018 report that evaluated these seven resources found that none of the resources appeared to meet eligibility requirements for listing on the CRHR, NRHP, or as a City Cultural Resource, as discussed in the following paragraphs. As outlined in 5.4.4 above, a total of eight out of fourteen bedrock outcrops within Parcels 2 (Building B), A, and C will be avoided and remain intact. Based on feedback from the consulting tribes appropriate design features to avoid indirect impacts to these resources have also been incorporated into the design, including setbacks, retaining walls, fencing, re-directed runoff, etc.

CA-RIV-2486 (33-002486)

Archaeological data from the earlier work at CA-RIV-2486, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not

individually meet any of the criteria for listing on the NRHP or CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2486 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-2486 is not considered eligible for listing under Criterion D/4. CA-RIV-2486 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City. While CA-RIV-2486 does not meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4 Project Design Considerations above, in response to discussion and feedback from City staff and consulting Tribes, the Project’s conceptual site plan has been revised to avoid, both directly and indirectly, the two boulder outcrops with milling features that compose CA-RIV-2486.

CA-RIV-2487 (33-002487)

Archaeological data from the earlier work at CA-RIV-2487, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2487 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-2487 is not recommended as eligible for listing under Criterion D/4. CA-RIV-2487 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an “exceptional example” of an archaeological

resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City.

CA-RIV-2488 (33-002488)

Archaeological data from the earlier work at CA-RIV-2488, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2488 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-2488, with four bedrock outcrops and 17 milling slicks, is not recommended as eligible for listing under Criterion D/4. CA-RIV-2488 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City. Though CA-RIV-2488 does not meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4 Project Design Considerations above, in response to feedback from City staff and consulting Tribes, the Project’s conceptual site plan has been revised to avoid, both directly and indirectly, two of the four bedrock outcrops with milling features that compose CA-RIV-2488.

CA-RIV-2489 (33-002489)

Archaeological data from the earlier work at CA-RIV-2489, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2489 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests

that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-2489 is not recommended as eligible for listing under Criterion D/4. CA-RIV-2489 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an "exceptional example" of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the "broader understanding" of the archaeological heritage of the City. Although CA-RIV-2489 does not meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4 Project Design Considerations above, in response to discussion and feedback from City staff and consulting Tribes, the Project's conceptual site plan has been revised in order to avoid, both directly and indirectly, the bedrock outcrop with milling features composing CA-RIV-2489.

CA-RIV-11772 (33-028956)

Archaeological information obtained during the current cultural resource survey and testing indicate that CA-RIV-11772 does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA RIV-11772 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past; therefore, it is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-11772 is not recommended as eligible for listing under Criterion D/4. CA-RIV-11772 also does not appear to meet the criteria as a City Cultural Resource. It is not considered a Cultural Heritage Landmark as it is not an "exceptional example" of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the "broader understanding" of the archaeological heritage of the City. Though CA-RIV-11772 does not meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4 Project Design Considerations above, in response to discussion and feedback from City staff and consulting Tribes, the Project's conceptual site plan has been revised in order to avoid, directly and indirectly, the two bedrock outcrops with milling features composing CA-RIV-11772.

CA-RIV-11770 (33-028955)

Archaeological information obtained during the current cultural resource survey and testing indicate that CA-RIV-11770 does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-11770 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past; therefore, it is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggest that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-11770 is not recommended as eligible for listing under Criterion D/4. CA-RIV-11770 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City. While CA-RIV-11770 does not meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4 Project Design Considerations above, in response to discussion and feedback from City staff and consulting Tribes, the Project’s conceptual site plan has been revised in order to avoid, directly and indirectly, the bedrock outcrop with milling features composing CA-RIV-11770.

CA-RIV-11769 (33-028954)

Archaeological information obtained during the current cultural resource survey and testing indicate that CA-RIV-11769 does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA RIV-11769 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past; therefore, it is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive

results regarding chronology (AE 2020b). As such, CA-RIV-11769 is not recommended as eligible for listing under Criterion D/4. CA-RIV-11769 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an "exceptional example" of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the "broader understanding" of the archaeological heritage of the City.

Historic Resource Eligibility

Federal and State Regulations

As discussed in Sections 5.4.2.1 and 5.4.2.2, there are four criteria that a resource must meet to be eligible for listing on the NRHP and CRHR. As the preceding paragraphs discuss, the seven sites were not found to be eligible for listing under NRHP Criterion A-D or CRHR criterion 1-4 and do not constitute a significant historic resource. However, the findings of the current study indicate that the sites may be considered contributing elements to a subsistence-based procurement and processing cultural landscape or historic district for their historical associations with broad patterns of national, local, or regional history (Criterion A/1); for possible associations with the lives of significant persons in the past who are important to local, California or national history (Criterion B/2); and for the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion D/4). Through AB 52 and Section 106 consultation between the City, USACE, and interested Tribes, Soboba and Pechanga have identified the Project area as a tribal cultural place. Soboba has requested a Tribal Cultural Landscape (TCL) study be prepared for the Project and Pechanga has requested a Tribal Cultural Resource/Traditional Cultural Property (TCR/TCP) study be prepared for the Project. AE was contracted to prepare a TCL study to explore these findings with Soboba and to coordinate with Pechanga to prepare a TCR/TCP study for the Project. A more detailed discussion of these studies and the City's consultation with Native American tribes, as well as analysis of potential impacts to tribal cultural resources, is contained in Section 5.13 Tribal Cultural Resources.

Local Regulations

The resources located at the Project site do not constitute eligible cultural resources as outlined in Title 20 of the City's Municipal Code. They cannot be considered a Cultural Heritage Landmark as they are not an "exceptional example" of an archaeological resource. Furthermore, the sites also lack the data potential to contribute important information to the "broader understanding" of the archaeological heritage of the City (AE 2020b).

Conclusion

As discussed, the above described archaeological sites were determined ineligible for listing on the NRHP, CRHR, or as a City Designated Cultural Resource. While impacts to these sites would thus be less than significant due to their ineligibility, to minimize and/or avoid possible impacts to potentially undiscovered/unknown archaeological resources, the Project would implement the mitigation measures MM CUL-1 through MM CUL-9 outlined in Section 5.4.7 below.

Further, as discussed in Sections 5.4.4 and in the preceding paragraphs above, the Project includes design considerations in response to City staff and Tribe feedback that would avoid a total of eight (8) bedrock outcrops with milling features within Parcels 2, A, and C. As discussed, the archeological sites these bedrock outcrops with milling features compose have been determined ineligible for listing; thus, instances in which bedrock outcrops are not able to be avoided in order to develop the Project would not result in a substantial adverse change in the sites' significance.

Therefore, as none of the sites are eligible for listing, with the avoidance of bedrock outcrops where possible, and with the implementation of mitigation measures MM CUL-1 through MM CUL-9, the Project would not result in a substantial adverse change in the significance of an archaeological resource and impacts would be **less than significant with mitigation**.

Threshold C: *Would the Project disturb any human remains, including those interred outside of formal cemeteries?*

As indicated in the Archaeological Site Records included in the 2020 report, no human remains were observed at any of the aforementioned seven archaeological sites within the Project's APE during the 2018 field surveys. In the unlikely event of an accidental discovery of human remains in a location other than a formal cemetery, the process under Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and Public Resources Code Section 5097.98 would be followed. As no human remains were observed during the 2018 study and it is unlikely human remains would be discovered, implementation of the Project would not disturb any human remains, including those interred outside of formal cemeteries and potential impacts would be **less than significant without mitigation**.

5.4.6 Proposed Mitigation Measures

MM CUL-1: Prior to grading permit issuance, if there are any changes to project site design and/or proposed grades, the Applicant and the City shall contact consulting tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural resources and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities.

MM CUL-2 Archaeological Monitoring: At least 30 days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities take place, the developer/applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

1. The project archaeologist, in consultation with consulting tribes, the Developer, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the plan shall include:
    a. Project grading and development scheduling;
    b. The development of a schedule in coordination with the developer/applicant, the project archaeologist, and for designated Native American Tribal Monitors from the consulting tribes for grading, excavation, and ground-disturbing activities on the site, including the scheduling, safety requirements, duties, scope of work, and project archeologist and Native American Tribal Monitors' authority to stop and redirect grading activities;
    c. The protocols and stipulations that the Applicant, tribes, and project archaeologist/paleontologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits, or nonrenewable paleontological resources that shall be subject to a cultural resources evaluation;
    d. In conjunction with the Archeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources.
    e. Treatment and final disposition of any archeological and cultural and paleontological resources, sacred sites, if discovered on the project site; and
    f. The scheduling and timing of the Cultural Sensitivity Training noted in mitigation measure MM-CUL-5.

MM CUL-3: Native American Monitor: Prior to issuance of grading permit, the developer/permit applicant shall engage each of the consulting tribe(s) regarding Native American Monitoring. The developer/permit applicant shall provide evidence to the City that they have reached an agreement with each of the consulting tribe(s) regarding the following:

a. The treatment of known cultural resources;
b. The treatment and final disposition of any tribal cultural resources, sacred sites, human remains or archaeological and cultural resources inadvertently discovered on the Project site;
c. Project grading, ground disturbance (including but not limited to excavation, trenching, cleaning, grubbing, tree removals, grading and trenching) and development scheduling; and
d. The designation, responsibilities, and participation of professional Tribal Monitor(s) during grading, excavation and ground disturbing activities.

If the developer/permit applicant and the consulting tribe(s) are unable to reach an agreement, the mitigation measure shall be considered satisfied if the developer/permit applicant provides sufficient documented evidence that they have made a reasonable good faith effort to reach an agreement, as determined by the City, with the consulting tribes with regards to items a-d, as listed above).

MM CUL-4 Treatment and Disposition of Cultural Resources: In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. Consulting Tribes Notified: within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. Consulting tribe(s) will be allowed access to the discovery, in order to assist with the significance evaluation.
2. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on site. The removal of any artifacts from the project site shall require the approval of the Consulting Tribes and all resources subject to such removal must be thoroughly inventoried with a tribal monitor from each consulting tribe to oversee the process; and
3. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same:
    a. Preservation-In-Place of the cultural resources, if feasible as determined through coordination between the project archeologist, developer/applicant, and consulting tribal monitor(s). Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources in perpetuity.
    b. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed, with an exception that sacred items, burial goods and Native American human remains are excluded. No cataloguing, analysis, or other studies may occur on sacred items, human remains, and grave goods. Any reburial process shall be culturally appropriate. List of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV report shall be prepared by the project archeologist and shall be filed with the City under a confidential cover and not subject to a Public Records Request. The Tribe(s) should be able to access these areas in the future through enforceable agreement;
    c. If reburial is not feasible, a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation;
    d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60

days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Riverside, Eastern Information Center, and consulting tribes.

MM CUL-5 Cultural Sensitivity Training: The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

MM CUL-6 Fencing of the Avoided Sites: Prior to any earthmoving activities, the current boundaries of the avoided sites (CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489) will be fenced and identified as an Environmental Sensitive Area (ESA). The project applicant will ensure that appropriate temporary fencing is installed i.e., orange fabric/barrier fencing) to prevent any unintentional disturbances to CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489 during any earthmoving activities on the project site. The fencing will be installed before clearing and grubbing and will not be removed until all earthmoving activities have been completed and the wall in Parcel 4 has been constructed. The project archaeologist and Tribal Monitor(s) will be on site to monitor the fence installation and removal and will conduct daily inspections of the fencing to make sure that it is intact and has not been breached.

If the project archaeologist and/or Tribal Monitor(s) identify a breach of the fence, i.e., removal, cut, depressed, driven over or intentionally breached in any way, all work within a 25-foot buffer shall cease and the Project Applicant, City, project archaeologist and the Monitoring Tribe(s) shall meet and confer as to the best method to repair the fencing. The person(s) responsible for the breach and the Construction Supervisor (or appropriate supervisory personnel) shall be required to retake the sensitivity training provided at the beginning of construction, in addition to any other remedies considered appropriate.

MM CUL-7 Relocation of Impacted Sites: Prior to any grading in the associated areas, the Project Applicant shall meet with the Project Archaeologist and the Consulting Tribe(s) in order to assess CA-RIV-11769, CA-RIV-2487, and two milling slicks within CA-RIV-2488 to determine the suitability for relocation to a permanent open space area. The Consulting Tribe(s) shall work with the Project Archaeologist, Project Applicant, and the grading contractor or appropriate personnel to ensure that every effort is made to relocate the Features safely and to discuss the most appropriate methods for relocation. Using professional archaeological methods, the milling slicks associated with Sites CA-RIV-11769, CA-RIV-2487, and CA-RIV-2488 shall be relocated to the planned open space area in the northern portion of the Project site. The Tribe(s) should be able to access these areas in the future through enforceable agreement. Before construction activities may resume in the affected area, any visible artifacts shall be recovered and recorded, and the features recorded using professional archaeological methods. The current Department of Parks

and Recreation forms for the sites shall be updated, detailing which features were relocated, the process taken, and updated maps using sub meter GIS technology to document the new location of each feature. The relocation information shall be included in a Phase IV Monitoring Report. The site record should clearly indicate that the Features are not in their original location and why they were relocated.

MM CUL-8 Long-Term Preservation Plan: Prior to occupancy, a Long-Term Preservation Plan (LTPP) shall be prepared among the City, Land Owner, and Consulting Tribe(s). The LTPP should include the following:

a. Description of archaeological resources
b. Documentation of resources of concern, such as high-resolution photographs or similar
c. Listing of Preservation Actions to Date
d. The determination of responsibility for care, maintenance, and guidance in the event preserved resources [CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489] should be vandalized or damaged. This section should also address responsibility for regular site condition assessments to determine if resources are being affected by project construction and later operations.

MM CUL-9 Controlled Grade: Sites CA-RIV-11769, CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, CA-RIV-2487, CA-RIV-2488, and CA-RIV-2489 will be impacted during grading and construction activities and the soils surrounding them will be disturbed. Prior to any grading in the associated areas, the Project Applicant, the Consulting Tribes, and the City will formalize a written agreement to identify the area that will be subject to “Controlled Grading” during construction of the Project. The Pechanga Tribe, the Project Applicant, and the City will develop an exhibit that outlines the area subject to controlled grading, and that area will be highlighted on the rough grading plans, precise grading plans or other off-site improvement plans that may impact this site. “Controlled Grading” shall include, without limitation, the slow and deliberate excavation and removal of soils employing the smallest reasonable cuts in certain areas using light scrapers (for example Caterpillar 623 or 627), dozers (for example D6- D8), front end loaders, excavators, skip loaders, dump trucks, and motor graders. A controlled grading plan will be monitored by the Project Archeologist and Tribal Monitor(s) to ensure the systematic removal of the ground surface surrounding these features are monitored to allow for the identification of resources. Results of all controlled grading activities shall be included in the Phase IV monitoring report.

A STANDARD CONDITION OF APPROVAL WILL INCLUDE THE FOLLOWING – CONSISTENT WITH STATE LAW:

Discovery of Human Remains: In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the

time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts.

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98.

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

5.4.7 Cumulative Environmental Effects

The geographic scope for cumulative impacts to cultural resources is defined by the cultural setting and territory of the prehistoric and historic people who occupied the area of southern California in which the City is located. Western Riverside County was part of the territory of the Cahuilla and perhaps Luiseno people. Cumulative projects in the Project area and other development in western Riverside County could result in the progressive loss of as-yet unrecorded archaeological resources. This loss, without proper mitigation, would be an adverse cumulative impact.

Cumulative projects within the City have the potential to impact cultural resources; however, to reduce impacts to significant historical and archeological resources, the City's General Plan and General Plan EIR incorporate policies and programs to protect and/or document these resources as part of the City's development review process and mitigation measures that require preparation of technical studies, coordination with native American tribes, and the presence of monitors if necessary. Therefore, the General Plan EIR concluded that with adherence to and implementation of General Plan policies, mitigation measures, and standard Federal, State, and City regulations, cumulative impacts to historical resources, archaeological resources, and paleontological resources will be less than significant with mitigation.

No historical resources, or archaeological resources eligible for listing, were found within the Project site. Should any resources be discovered during construction activities, potential impacts to resources will be minimized or avoided with the implementation of recommended mitigation

measures. With implementation of the mitigation measures MM CUL-1 through MM CUL-9, the Project will have a less than significant impacts on cultural resources. Although the bedrock outcrops with milling sites are not archaeological resources deemed eligible for listing, the Project was designed to avoid, and allow to remain intact, eight out of fourteen bedrock outcrops within Parcels 2, A, and C. Based on feedback from the consulting tribes appropriate design features to avoid indirect impacts to these resources have also been incorporated into the design, including set-backs, retaining walls, fencing, re-directed runoff, etc. As Project specific impacts to six archaeological resources not eligible for listing are less than significant and eight resources are being avoided and left in place, the Project will have a less than significant cumulative impact on cultural resources. Likewise, as discussed in the City's General Plan EIR, cumulative development projects within the City (and the project is consistent with the General Plan) will have a less than significant impact on cultural resources. Therefore, cumulative impacts will be **less than significant with mitigation incorporated.**

5.4.8 References

The following references were used in the preparation of this section of the DEIR:

AE 2020a	Applied EarthWorks, *Paleontological Resource Assessment for the Sycamore Hills Distribution Center Project*, January 2020.
AE 2020b	Applied EarthWorks, *Phase I and Phase II Cultural Resource Investigations for the Sycamore Hills Distribution Center Project*, September 2020.
GP 2025 FPEIR	City of Riverside, *General Plan 2025 Program Environmental Impact Report* (SCH# 2004021108), certified November 2007. (Available at https://www.riversideca.gov/planning/gp2025program/)
RMC	City of Riverside, *Municipal Code*, Title 20. (Available at https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTIICOOR_TIT20CURE)
SCBP	City of Riverside, *Sycamore Canyon Business Park Specific Plan*, adopted April 10, 1984, as amended through Amendment No. 14, January 23, 2007. (Available at https://www.riversideca.gov/planning/cityplans-csp-sycanbp.asp)

5.5 Energy

This section analyzes the effects of the Project related to energy based upon Appendix G of the *State CEQA Guidelines*, the analysis in the IS/NOP prepared for the Project (Appendix A), and comments received during the NOP public review period. The analysis herein is additionally based on the *Energy Analysis (EA)* prepared by Urban Crossroads in September 2020 (Appendix F).

5.5.1 Setting

This section provides an overview of the existing energy conditions in the Project area and region.

Existing Energy Setting

Energy use can affect air quality and other natural resources adversely. Energy is primarily categorized in three areas: electricity, used in buildings and cities for lighting and other services; natural gas used for building heating, cooking, and other industrial processes; and fuels used for transportation. Fossil fuels used for any of these types of energy must be burned to create electricity that powers homes and commercial/industrial buildings, to create heat, and to power vehicles. The burning or combusting of fuels releases pollutants and greenhouse gas (GHG) emissions. Many factors affect the level of impact from fuels. When used in transportation, the impact from energy is corresponds to the fuel efficiency of cars, trucks, and public transportation; the mode of travel, such as auto, carpool, and public transit; and miles traveled by these modes as well as the type of fuel. Construction and routine operation and maintenance of transportation infrastructure also consume energy as do residential, commercial, and industrial land uses. This typically occurs through the use of natural gas for heating, cooking, and industrial processes along with the use of electricity.

California Energy Use Overview

As outlined in the EA, the most recent data for the State for estimated total energy consumption is from 2017, and 2018 for natural gas consumption. This data was released by the U.S. Energy Information Administration's (EIA's) California State Profile and Energy Estimates in 2020. The EIA uses British Thermal Units (BTU) as a unit of energy content. A BTU is a measure of the heat content of fuels or energy sources. It is the quantity of heat required to raise the temperature of one pound of liquid water by one degree (1°) at the temperature that water has its greatest density. The State Profile Energy Estimates included:

- Approximately 7,881 trillion BTU of energy was consumed; and
- Approximately 2,137 billion cubic feet of natural gas was consumed.

The California Energy Commission's (CEC) Transportation Energy Demand Forecast 2018-2030 was released in order to support the 2017 Integrated Energy Policy Report. The Transportation energy Demand Forecast 2018-2030 lays out graphs and data supporting their projections of the State's future transportation energy demand. The projected inputs consider expected variable

changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand included:

- Gasoline demand in the transportation sector is expected to decline from approximately 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030; and
- Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.7 billion diesel gallons in 2015 to approximately 4.7 billion in 2030.

The most recent data provided by the EIA for energy use in the State by demand sector is from 2017 and is reported as follows:

- Approximately 40.2 percent transportation;
- Approximately 23.1 percent industrial;
- Approximately 18.0 percent residential; and
- Approximately 18.7 percent commercial.

In 2018, total system electric generation for the State was 285,488 gigawatt hours (GWh). The State's massive electricity in-state generation system generated approximately 194,842 GWh which accounted for approximately 68 percent of the electricity it uses; the rest was imported from the Pacific Northwest (14 percent) and the U.S. Southwest (18 percent). Natural gas is the main source for electricity generation, at 47 percent of the total in-state electric generation system power as shown in Table 5.5-1. (EA p. 4)

Table 5.5-1– Total Electricity System Power (California 2018)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	California Power Mix (GWh)	Percent California Power Mix
Coal	294	0.15%	399	8,740	9,433	3.30%
Large Hydro	22,096	11.34%	7,418	985	30,499	10.68%
Natural Gas	90,691	46.54%	49	8,904	99,644	34.91%
Nuclear	18,268	9.38%	0	7,573	25,841	9.05%
Oil	35	0.02%	0	0	35	0.01%
Other	430	0.22%	0	9	439	0.15%
Renewables	63,028	32.35%	14,074	12,400	89,502	31.36%
Biomass	*5,909*	*3.03%*	*772*	*26*	*6,707*	*2.35%*
Geothermal	*11,528*	*5.92%*	*171*	*1,269*	*12,968*	*4.54%*
Small Hydro	*4,248*	*2.18%*	*334*	*1*	*4,583*	*1.61%*
Solar	*27,265*	*13.99%*	*174*	*5,094*	*32,533*	*11.40%*
Wind	*14,078*	*7.23%*	*12,623*	*6,010*	*32,711*	*11.46%*
Unspecified Sources of Power	N/A	N/A	17,576	12,519	30,095	10.54%
Total	**194,842**	**100%**	**39,517**	**51,130**	**285,488**	**100%**

An updated summary of, and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below:

- The State was the seventh-largest producer of crude oil among the 50 states in 2018, and, as of January 2019, it ranked third in oil refining capacity.
- The State is the largest consumer of jet fuel among the 50 states and accounted for one-fifth of the nation's jet fuel consumption in 2018.
- The State's total energy consumption is second highest in the nation, but, in 2018, the State's per capita energy consumption was the fourth-lowest, due in part to its mild climate and its energy efficiency programs.
- In 2018, the State ranked first in the nation as a producer of electricity from solar, geothermal, and biomass resources and fourth in the nation in conventional hydroelectric power generation.
- In 2018, large- and small-scale solar photo voltaic PV and solar thermal installations provided 19 percent of the State's net electricity generation.

As indicated above, the State is one of the nation's leading energy-producing states, and the State's per capita energy use is among the nation's most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the Project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project. (EA pp. 5-6)

Electricity

Electricity will be provided to the Project by Riverside Public Utilities (RPU). RPU provides electric power to more than 109,000 metered electric customers throughout Riverside. Per the IEPC, as of December 2017, RPU served 97,400 residential, 11,000 small and medium commercial, and 850 industrial customers. RPU's overhead distribution network consists of 513 miles of distribution circuits (feeders) of 4 and 12 kV circuits. RPU's underground network consists of 817 miles of 15 and 5 kV class cables. Based on the Power Content Label (PCL), RPU derives electricity from varied energy resources including geothermal, solar, wind, coal-fired, hydro-powered, and nuclear resources. Internal generation is provided by the Riverside Energy Resource Center power plant which provides 192-megawatt (MW) gas-fired power used to offset power shortages. (EA p. 6) RPU's energy portfolio is continuing to be shaped by the new regulatory mandates especially in regard to greenhouse gases. More renewable energy in the form of wind and solar has been added to RPU's portfolio. To accommodate energy demands, a future contract with CalEnergy for more geothermal energy has been established. In 2017, RPU met its procurement targets as mandated by SB X1-2 for compliance period 1. Compliance periods 2 and 3 have also been met, however no notices have been released. It is projected that with the increase in renewable energy in RPU's energy portfolio, there will be excess renewable energy available for purchase. In 2020, RPU sold 157.5 GWh in excess sales.

Table 5.5-2 – RPU 2019 Power Content Mix identifies RPU's specific proportional shares of electricity sources in 2019. As indicated in Table 5.5-2, the 2019 RPU Power Mix has renewable energy at 37.6 percent of the overall energy resources.

Table 5.5-2 – RPU 2019 Power Content Mix

Energy Resources	2019 RPU Power Mix
Eligible Renewable	37.6%
Biomass & waste	0.1%
Geothermal	22.5%
Eligible Hydroelectric	0.0%
Solar	11.8%
Wind	3.2%
Coal	29.2%
Large Hydroelectric	1.3%
Natural Gas	4.1%
Nuclear	4.9%
Other	0.0%
Unspecified Sources of power*	22.9%
Total	100%

* "*"Unspecified sources of power" refers to electricity from transactions that are not traceable to specific generation sources.

Natural Gas

The usage associated with natural gas use was calculated using the CalEEMod version 2016.3.2 model. The following summary of natural gas resources and service providers, delivery systems, and associated regulation is excerpted from information provided by the California Public Utilities Commission (CPUC).

> *"The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.*
>
> *The vast majority of California's natural gas customers are residential and small commercial customers, referred to as "core" customers, who accounted for approximately 32 percent of the natural gas delivered by California utilities in 2012. Large consumers, like electric generators and industrial customers, referred to as "noncore" customers, accounted for approximately 68 percent of the natural gas delivered by California utilities in 2012.*

The [C]PUC regulates the California's utilities' natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. In 2012, State customers received 35 percent of their natural gas supply from basins located in the Southwest, 16 percent from Canada, 40 percent from the Rocky Mountains, and 9 percent from basins located within the California. California gas utilities may soon also begin receiving biogas into their pipeline systems.

Natural gas from out-of-state production basins is delivered into the California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to State consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Questar Southern Trails and Mojave Pipeline. Another pipeline, the North Baja – Baja Norte Pipeline, takes gas off the El Paso Pipeline at the California/Arizona border, and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, the CPUC often participates in FERC regulatory proceedings to represent the interests of California natural gas consumers.

Most of the natural gas transported via the interstate pipelines, as well as some of the State-produced natural gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large noncore customers take natural gas directly off the high-pressure backbone pipeline systems, while core customers and other noncore customers take natural gas off the utilities' distribution pipeline systems. The CPUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82 percent of the total amount of natural gas delivered to California's gas consumers in 2012.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, and currently receive all of their natural gas from the SoCalGas system (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area). Some other municipal wholesale customers are the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Some of the natural gas delivered to California's customers may be delivered directly to them without being transported over the regulated utility systems. For example, the Kern River/Mojave pipeline system can deliver natural gas directly to some large customers, "bypassing" the utilities' systems. Much of California-produced natural gas is also delivered directly to large consumers.

PG&E and SoCalGas own and operate several natural gas storage fields that are located in northern and southern California. These storage fields, and four independently owned storage utilities – Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill

Ranch Storage – help meet peak seasonal natural gas demand and allow California's natural gas customers to secure natural gas supplies more efficiently. (A portion of the Gill Ranch facility is owned by PG&E).

California's regulated utilities do not own any natural gas production facilities. All of the natural gas sold by these utilities must be purchased from suppliers and/or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the FERC in the mid-1980's and is determined by "market forces." However, the PUC decides whether California's utilities have taken reasonable steps in order to minimize the cost of natural gas purchased on behalf of their core customers."

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. Biogas is produced from biomass, which is organic material from plants and animals and is a renewable source of energy. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State. (EA pp. 7-9)

The Southern California Gas Company (SoCalGas) provides natural gas service to the City, including the Project site (GP 2025, p. OS-52). As a public utility, SCG is under the jurisdiction of California Public Utilities Commission (CPUC). SoCalGas receives gas supplies from several sedimentary basins in the Western U.S and Canada. Supplies for Southern California are primarily received from the El Paso Natural Gas pipeline and some volumes also on Transwestern pipeline. Due to energy efficiency programs and statewide efforts to reduce greenhouse gas emissions there are declines in the demand of natural gas by an average of 1.7 percent per year. In March 2019, SCG announced a plan to replace 20 percent of its traditional natural gas with renewable natural gas by 2030.

Transportation Fuel

In March 2018, the Department of Motor Vehicles (DMV) identified 35 million registered vehicles in the State, and those vehicles (as noted previously) consume an estimated 19 billion gallons of fuel each year. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 170,000 miles of highways and major roadways, more than 27 million passenger vehicles and light trucks, and almost 8 million medium- and heavy-duty vehicles. While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. Petroleum comprises about 92 percent of all transportation energy use, excluding fuel consumed for aviation and most marine vessels. Nearly 19 billion gallons of on-highway fuel are burned each year, including 15.1 billion gallons of gasoline (including ethanol) and 3.9 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2019, Californians also used 253 million therms of natural gas as a transportation fuel, or the equivalent of 202 million gallons of gasoline. (EA p. 9)

5.5.2 Related Regulations

Programs and policies at the federal, state, and local levels have emerged to enhance the previous trend towards energy efficiency; these are discussed in the following section.

5.5.2.1 Federal Regulations

Energy Policy and Conservation Act

Enacted in 1975, this legislation established fuel economy standards for new light-duty vehicles (autos, pickups, vans, and sport-utility vehicles). The law placed responsibility on the National Highway Traffic and Safety Administration, a part of the U.S. Department of Transportation, for establishing and regularly updating vehicle standards. The United States Environmental Protection Agency (USEPA) administers the Corporate Average Fuel Economy program, which determines vehicle manufacturers' compliance with existing fuel economy standards. Since the inception of the program, the average fuel economy for new light-duty vehicles steadily increased from 13.1 miles per gallon (mpg) for the 1975 model year to 30.7 mpg for the 2014 model year and can increase to 54.5 by 2025.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility and address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

Energy Policy and Conservation Act

Enacted in 1975, this legislation established fuel economy standards for new light-duty vehicles (autos, pickups, vans, and sport-utility vehicles). The law placed responsibility on the National Highway Traffic and Safety Administration, a part of the U.S. Department of Transportation, for establishing and regularly updating vehicle standards. The United States Environmental Protection Agency (USEPA) administers the Corporate Average Fuel Economy program, which

determines vehicle manufacturers' compliance with existing fuel economy standards. Since the inception of the program, the average fuel economy for new light-duty vehicles steadily increased from 13.1 miles per gallon (mpg) for the 1975 model year to 30.7 mpg for the 2014 model year and can increase to 54.5 by 2025.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 was designed to improve vehicle fuel economy and help reduce nationwide dependence on foreign oil. It expands the production of renewable fuels, reducing dependence on oil, and confronting global climate change. Specifically, it increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard by requiring fuel producers to use at least 36 billion gallons of biofuel in 2022 and reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020.

5.5.2.2 State Regulations

At the state level, the CEC and CPUC are two agencies with authority over different aspects of energy. CPUC regulates privately-owned utilities in the energy, rail, telecommunications, and water sectors. CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. California is exempt under federal law from setting State fuel economy standards for new on-road motor vehicles. Major State energy-related laws and plans are discussed below.

California Energy Commission (CEC)

The CEC was formed by Assembly Bill (AB) 1575 and is the State's primary energy policy and planning agency. AB 1875, which was adopted in 1975 in response to the oil crisis of the 1970s, also requires EIRs to consider wasteful, inefficient, and unnecessary consumption of energy and was the driving force behind the creation of Appendix F to the *CEQA Guidelines*. CEC was established to address the State's energy challenges and is responsible for the creation of the State Energy Plan. The State Energy Plan identifies the emerging trends related to energy supply, demand, conservation, public health and safety and the maintenance of a healthy economy. The State Energy Plan recommends that the State assist in the transformation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the fewest environmental and energy costs. The State Energy Plan also identifies a number of strategies, including providing assistance to public agencies and fleet operators, encouraging urban designs that reduce vehicle miles traveled, and accommodating pedestrian and bicycle access.

California Public Utilities Commission (CPUC)

CPUC regulates investor-owned electric and natural gas utilities operating in the State, including SoCalGas. The CPUC regulates natural gas rates and natural gas services, including in-State transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering, and billing. CPUC policy on natural gas infrastructure and capacity is to: 1) allow gas utilities to gain better access to new sources of supply, develop a diverse supply

portfolio, and have adequate storage capacity for core procurement requirements; 2) ensure adequate, diverse utility natural gas pipeline and storage infrastructure for utilities and consumers; 3)assure delivery of supplies with a high degree of certainty, especially for core customers; 4) minimize transmission constraints; 5) provide access to a diverse portfolio of supplies; 6) reduce the likelihood of price spikes; 7) allow more gas to be stored when prices are low; 8) allow customers to match supplies with requirements; and 9) obtain fair access to utility transmission systems for suppliers and pipelines.

State of California Energy Plan

The State Energy Plan identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The State Energy Plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the Plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

California Energy Code

The California Energy Code (Title 24, Part 6 of the California Code of Regulations (CCR)) adopted Building Energy Efficiency Standards were first adopted in 1978 and have been updated periodically since then. The standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. The goal is to reduce energy costs for owners, increase reliability and availability of electricity for the State, improve building occupant comfort, and reduce environmental impact.

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to AB 2076 (Chapter 936, Statutes of 2000), the CEC and CARB prepared and adopted a joint-agency report, *Reducing California's Petroleum Dependence*. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. One performance-based goal for AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC's 2003 and 2005 Integrated Energy Policy Reports, the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

Integrated Energy Policy Report

Senate Bill 1389 requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the State's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code § 25301a]). The CEC

prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2018 IEPR was adopted February 20, 2019, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in the State. The 2018 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast.

Senate Bill X1-2: California Renewable Energy Resources Act

In 2011, the Governor signed SB X1-2, which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 33 percent of their electricity supply from renewable sources by 2020. The CPUC and CEC implement the statewide RPS program through rulemakings and monitoring the activities of electric energy utilities in the State.

Senate Bill 1078: California Renewables Portfolio Standard Program

SB 1078 (Chapter 516, Statutes of 2002), and as expanded under SB X1-2, establishes an RPS for electricity supply. The initial RPS program only required electrical corporations to provide 20 percent of their supply from renewable sources by increasing its total procurement at least one percent each year to reach the 20 percent goal. SB X1-2 expanded this law by making it applicable to all retail sellers of electricity and required procurement from eligible renewable energy resources to 33 percent by 2020.

Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. This act also requires doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

Assembly Bill 1493: Reduction of Greenhouse Gas Emissions

AB 1493 (Chapter 200, Statutes of 2002), known as the Pavley Bill, amended Health and Safety Code sections 42823 and added 43018.5 requiring CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.

Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statutes of 2005) required the CEC to prepare a state plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with CARB and in consultation with other federal, state, and local agencies.

The SAF Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan, Executive Order S-06-06

Executive Order (EO) S-06-06, April 25, 2006, establishes targets for the use and production of biofuels and biopower, and directs State agencies to work together to advance biomass programs in California, while providing environmental protection and mitigation. The EO establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050. EO S-06-06 also calls for the state to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so that the State can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 Plan and provides a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste;
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications;
- Create jobs and stimulate economic development, especially in rural regions of the State; and
- Reduce fire danger, improve air and water quality, and reduce waste.

California Code Title 24, Part 6, Energy Efficiency Standards

California Code of Regulations, Title 24, Part 6, is the State's Energy Efficiency Standards for Residential and Non-residential Buildings. The CEC established Title 24 in 1978 in response to a legislative mandate to create uniform building codes to reduce the State's energy consumption and provide energy efficiency standards for residential and non-residential buildings. The standards are updated on an approximately three-year cycle to allow consideration and possible incorporation of new efficient technologies and methods.

In July 2019, the CEC updated Title 24 standards with more stringent requirements effective 180 days from publication. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Buildings whose permit applications are dated on or after January 1, 2020, must comply with the 2019 Standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG

emissions. The building efficiency standards are enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided these standards exceed those provided in Title 24.

California Green Building Standards Code (2019), California Code of Regulations Title 24, Part 11

The State's green building code, referred to as CalGreen, was developed to reduce GHG emissions from buildings, promote environmentally responsible, cost-effective, healthier places to live and work, reduce energy and water consumption, and respond to the environmental directives of the administration. The most recent version of CalGreen (July 2019) lays out the minimum requirements for newly constructed residential and non-residential buildings to reduce GHG emissions through improved efficiency and process improvements. It also includes voluntary tiers to encourage building practices that improve public health, safety, and general welfare by promoting a more sustainable design. "Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit". (CalGreen Standards Code Title 24 Part 11 Chapter 1 Section 101.11).

California Air Resources Board

CARB has a number of regulations and standards that seek to limit emissions from mobile sources and pollution from specific types of operation or source pollution. These policies indirectly impact energy consumption. These include:

- In-Use Off-Road Diesel Rule: Imposes limits on idling, restricts the addition of older vehicles, and requires the retirement or replacement of older engines depending on their fleet size category.
- Phase 1 Medium- and Heavy-Duty Engine and Vehicle GHG Emission Standards: establishes standards for new medium- and heavy-duty engines and vehicles sold in the State.
- Advanced Clean Cars Plan: Coordinates regulating smog-causing pollutants and GHG emissions through developing more stringent emissions standards for vehicles and improving the number of zero-emission vehicles on the roadways

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939) made all California cities, counties, and approved regional solid waste management agencies responsible for enacting plans and implementing programs to divert 25 percent of their solid waste by 1995 and 50 percent by 2000. Additional legislation mandates 50 percent diversion requirements be achieved every year. (CalRecycle, 2018). The bill also repealed the California Waste Management Board consisting of 9 members and replaced it with the California Integrated Waste Management Board consisting of 6 full time members.

5.5.2.3 Local Regulations

City of Riverside General Plan 2025

The City's General Plan 2025 contains objectives and policies that seek to reduce energy use in the City and to provide renewable energy sources. The Open Space and Conservation Element and Public Facilities Element contain energy conservation items. Objectives and policies that relate to the Project include:

Open Space and Conservation Element

Objective OS-8: Encourage the efficient use of energy resources by residential and commercial users.

Policy OS-8.1: Support the development and use of non-polluting, renewable energy sources.

Policy OS-8.2: Require incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects pursuant to Title 24 and encourage the installation of conservation devices in existing developments.

Policy OS-8.3: Encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources.

Policy OS-8.4: Incorporate solar considerations into development regulations that allow existing and proposed buildings to use solar facilities.

Policy OS-8.5: Develop landscaping guidelines that support the use of vegetation for shading and wind reduction and otherwise help reduce energy consumption in new development for compatibility with renewable energy sources (i.e., solar pools).

Policy OS-8.6: Require all new development to incorporate energy efficient lighting, heating and cooling systems pursuant to the Uniform Building Code and Title 24.

Policy OS-8.9: Encourage construction and subdivision design that allows the use of solar energy systems.

Policy OS-8.10: Support the use of public transportation, bicycling and other alternative transportation modes in order to reduce the consumption of nonrenewable energy supplies.

Policy OS-8.11: Support public education programs for City residents and businesses to provide information on energy conservation and on alternative to nonrenewable energy resources.

Policy OS-8.12: Require bicycle parking in new non-residential development.

Public Facilities and Infrastructure Element (PF)

Objective PF-6: Provide affordable, reliable, and, to the extent practical, environmentally sensitive energy resources to residents and businesses.

Policy PF-6.1: Continue to support the development of green power and expand the use of green power in the City's energy portfolio.

Policy PF-6.3: Promote and encourage energy conservation.

Policy PF-6.4: Encourage energy-efficient development through its site plan and building design standard guidelines.

Policy PF-6.5: Promote green building design.

City of Riverside Economic Prosperity Action Plan and Climate Action Plan

The City's Restorative Growthprint- Climate Action Plan (RRG-CAP), adopted in 2016, identifies strategies for reducing GHG emissions in the City in order to comply with State regulations as detailed in Section 4.7, *Greenhouse Gas Emissions.* Many of the measures and strategies in the Restorative Growthprint-Climate Action Plan seek to reduce energy consumption, which subsequently reduces GHG emissions. The CAP contains GHG reduction measures organized into four primary sectors:

- Energy: Promote energy efficiency and renewable energy for municipal operations and the community
- Transportation and Land Use: Measures to reduce single-occupancy travel, increase non-motorized travel, improve transit access, encourage alternative fuels, and promote sustainable growth patterns
- Water: Measures to reduce water demand by community and municipal operations and to conserve potable water
- Solid Waste: Measures to reduce solid waste during construction and operational activities

Green Action Plan

The 2012 Green Action Plan (GAP 2012) is a product of the City's Clean & Green Task Force, which was created to: build upon the policies of the City's General Plan 2025; ensure that the green design guidelines would be developed and followed; provide a framework for sustainability pilot projects; and initiate partnerships among regional agencies and nearby cities. The Task Force first created the Sustainability Policy Statement (SPS), a document featuring eight main categories: Save Water, Keep it Clean, Make it Solar, Make it Shady, Clean the Air, Save Fuel, Make it Smart and Build Green. Once the SPS was adopted, the Green Action Plan was created to serve as a guidebook that would tie specific tasks to the policies of the SPS. The Green Action Plan focuses on seven key areas of city life: Energy, GHG Emissions, Waste, Urban Design, Urban Nature, Transportation and Water.

The City formed a Green Accountability Performance (GAP) Committee to carry out the tasks and within just two years nearly each of the plan's 38 tasks had been accomplished. The GAP Committee was reimagined to focus on healthy communities, and Riverside was awarded its designation by the Unites States Center for Disease Control and Prevention (CDC) as an Emerald City, an honor that has gained the City national acclaim. Healthy Communities is the GAP's eighth

focus area, with 19 goals and over 50 additional tasks. The Heathy Communities strategies strengthen the Green Action Plan as setting a clear path to sustainability and serving as a living document that reflects the growth of the green movement, the progression of renewable energy, and the fresh ideas of the GAP Committee (GAP 2012).

The Green Action Plan's goals related to energy are aimed at focusing the City's power resources mix at reliable renewable energy or using less energy and include the following:

Goal 1: Increase the use of non-greenhouse gas (GHG) emitting energy by 2020 to 50% with at least 33% coming from renewable sources.

Goal 2: Save 1% of communities load annually based on a 2004 baseline and reduce the City's peak electrical load demand by 10% overall.

Goal 3: Install at least 20MW of photovoltaic (PV) systems by 2020.

5.5.3 Project Design Considerations

The Project includes a number of features that would reduce Project-related energy use both during construction and operation.

Sustainability Features

As described in DEIR Section 3.2.5 (Sustainability Features), the Project would meet or exceed all applicable standards under the State's Green Building Code Title 24 standards. This will be accomplished by incorporating, at minimum, the following sustainability features or other features that are equally efficient:

Energy Efficiency

- Design building shells and components, such as electrical systems, windows, and roof systems to comply with the provisions of the Title 24 standards for nonresidential buildings. The Project would be constructed in accordance with energy efficiency standards effective at the time building permits are issued. The effective date of the 2019 Building Energy Efficiency Standards was January 1, 2020, and it is anticipated that nonresidential buildings will use approximately 30 percent less energy due to lighting upgrades under the revised standards.
- Use of Energy Star products such as appliances, building products, heating and cooling equipment, appliances, and other energy-efficient equipment will be utilized.
- Install efficient lighting and lighting control systems. Light-emitting diodes (LEDs) will be installed for outdoor lighting, which will incorporate motion sensors that turn lighting off when not in use.
- Install skylights on the rooftops, 2.5% of roof area of both buildings and incorporate the use of natural lighting.
- Achieve construction energy efficiencies and energy conservation through bulk purchase, transport, and use of construction materials. Use of materials in bulk reduces energy

demands associated with preparation and transport of construction materials as well as transport and disposal of construction waste.

- The Project proposes conventional industrial uses that are not inherently energy intensive and reflect contemporary energy efficient/energy conserving designs and operational programs.

Renewable Energy

- Design buildings to have "solar ready" roofs that will structurally accommodate later installation of rooftop solar panels. Building operators providing rooftop solar panels will submit plans for solar panels prior to occupancy.

Water Conservation and Efficiency

- Create water-efficient landscapes in compliance with the City's Water Efficient Landscape and Irrigation Ordinance in 19.570.
- Surface parking lots will be landscaped in accordance with City standards to reduce heat island effect.
- Install water-efficient irrigation systems and devices according to the City's Water Efficient Landscape and Irrigation Ordinance 19.570, which complies with the California Department of Water Resources Model Efficient Landscape Ordinance.
- Design buildings to be water-efficient; install water-efficient fixtures and appliances.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Solid Waste Measures

- Sort, recycle, and divert from landfills Project-related construction and demolition waste in accordance with mandatory regulatory requirements.
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

Transportation and Motor Vehicles

- Limit idling times of construction vehicles to no more than five minutes in accordance with CCR, Title 13, Motor Vehicles, section 2449(d)(3) Idling.
- Implement sidewalks to facilitate and encourage pedestrian and access, which would reduce vehicle miles traveled (VMT) and associated energy consumption.

- Provide a total of 39 electric vehicle (EV) parking stalls (24 within Parcel 1 for Building A and 15 within Parcel 2 for Building B) to encourage the use of low or zero-emission vehicles.
- Provide a total of 13 clean air/van pool parking stalls (8 within Parcel 1 for Building A and 5 within Parcel 2 for Building B) to support and encourage ridesharing.
- Promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations in accordance with the California Green Buildings Standards Code Sections 5.710.6.2.1 and 5.710.6.2.2.
- The building operator will support and encourage ridesharing and transit for the construction crew.

On-Site Equipment and Loading Docks

- The Project will require building operators (by contract specifications) to turn off equipment, including heavy-duty equipment, motor vehicles, and portable equipment when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in duration. All facilities will post signs requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations.

Construction

- Require construction equipment to turn off when not in use.
- Use “green” building materials where feasible, such as those materials that are resource-efficient and recycled and manufactured in an environmentally conscious way.
- During grading, heavy-duty construction equipment (i.e., excavators, graders, scrapers, dozers, tractor/loader/backhoes, etc.) shall be CARB/U.S. Environmental Protection Agency Tier 3 certified. All construction equipment is subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation. This regulation, which applies to all off-road diesel vehicles 25 horsepower or greater, limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment and phases out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements.[1]

5.5.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the *State CEQA Guidelines*. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the *State CEQA Guidelines*. The Environmental Checklist prepared by the City for the Project (Appendix A) indicates that impacts related to the Project may be considered potentially significant if the Project would:

[1] Air Quality Analysis for the Sycamore Hills Distribution Project, page 34, contained in Appendix C of this EIR.

- (Threshold A) Result in potentially significant environmental impact due to wasteful, inefficient, unnecessary consumption of energy resources, during project construction or operation (Threshold A);
- (Threshold B) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency (Threshold B).

In addition, Appendix F of the *State CEQA Guidelines* (22), states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

5.5.5 Environmental Impacts

Threshold A: *Would the Project result in potentially significant environmental impact due to wasteful, inefficient, unnecessary consumption of energy resources, during project construction or operation?*

Construction Energy Demand

The Project would require site preparation, grading, building construction, paving, and architectural coating. All construction would be typical for the region and building types. Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 5.5-3; eight-hour daily use of all equipment is assumed. Per the Project's Energy Analysis (Appendix F), fuel consumption calculations are based on all construction equipment being diesel-powered, which is standard practice consistent with industry standards. Additionally, Table 5.5-4 provides estimated fuel consumption generated by construction worker trips from light duty autos (LDAs), with the aggregated fuel economy of LDA models as generated by EMFAC2017 for LDA model years ranging from 1974 to 2022. Further, Tables 5.5-5 and 5.5-6 provide construction vendor fuel consumption estimates from Medium-Heavy-Duty-Trucks (MHDTs) and Heavy-Heavy-Duty-Trucks, respectively. It is assumed 50 percent of all vendor trips would be from MHDTs and 50 percent from HHTDs. MHDT and Heavy-Heavy-Duty Trucks (HHDT) vehicle fuel efficiencies for model years 1974 to 2022 were estimated utilizing information generated within EMFAC2017. (EA pp. 15-19)

As shown in Tables 5.5-3 through 5.5-6, estimated Project fuel consumption for construction equipment, worker trips, and vendor trips totals approximately 110,704 gallons of fuel over the course of the Project's construction period. Project construction equipment would consume an estimated 51,839 gallons of diesel fuel (Table 5.5-3), which represents a "single-event" diesel fuel demand that would not require an ongoing or permanent commitment of diesel fuel resources for construction equipment purposes. Moreover, Project construction worker trips during construction

would consume approximately 36,442 gallons of fuel (Table 5.5-4), which would similarly represent a "single-event" gasoline fuel demand that would not require an ongoing or permanent commitment of fuel resources for construction worker trips purposes. Further, MHDT vendor trips would consume an estimated 9,280 gallons of diesel fuel (Table 5.5-5) and HHDT vendor trips would consume an estimated 13,143 gallons of diesel fuel (Table 5.5-6), totaling 22,423 gallons of vendor trip fuel consumption during construction. In similar fashion, Project construction vendor trips would represent a "single-event" diesel fuel demand that would not require an ongoing or permanent commitment of diesel fuel resources for vendor trips purposes. (EA pp. 15-19)

Table 5.5-3 – Construction Equipment Fuel Consumption Estimates

Activity/Duration	Equipment	Horsepower Rating	Quantity	Usage Hours	Load Factor	hp-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Site Preparation (18 days)	Rubber Tired Dozers	247	3	8	0.40	2,371	2,307
	Tractors/Loaders/ Backhoes	97	4	8	0.37	1,148	1,117
Grading (47 days)	Excavators	158	2	8	0.38	961	2,441
	Graders	187	1	8	0.41	613	1,558
	Rubber Tired Dozers	247	1	8	0.40	790	2,008
	Scrapers	367	2	8	0.48	2,819	7,161
	Tractors/Loaders/ Backhoes	97	2	8	0.37	574	931
Building Construction (243 days)	Cranes	231	1	7	0.29	469	4,512
	Forklifts	89	3	8	0.20	427	4,110
	Generator Sets	84	1	8	0.74	497	4,785
	Tractors/Loaders/ Backhoes	97	3	7	0.37	754	7,252
	Welders	46	1	8	0.45	166	1,593
Paving (18 days)	Pavers	130	2	8	0.42	874	1,039
	Paving Equipment	132	2	8	0.36	760	904
	Rollers	80	2	8	0.38	486	578
Architectural Coating (111 days)	Air Compressors	78	1	6	0.48	225	668
Construction Fuel Demand (Gallons Diesel Fuel)							***51,839***

Table 5.5-4 – Construction Worker Fuel Consumption Estimates

Construction Activity	Worker Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2021					
Site Preparation (18 days)	18	14.7	4,763	30.64	155
Grading (47 days)	20	14.7	13,818	30.64	451
Building Construction (132 days)	253	14.7	490,921	30.64	16,020
2022					
Building Construction (111 days)	253	14.7	412,820	31.57	13,075
Architectural Coating (55 days)	15	14.7	3,969	31.57	126
Paving (22 days)	128	14.7	208,858	31.57	6,615
Construction Worker Fuel Consumption					36,442

Table 5.5-5 – Construction Vendor Fuel Consumption Estimates – MHDT

Construction Activity	Vendor Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Vendor					
2021					
Building Construction (132 days)	50	6.9	45,540	8.88	5,127
2022					
Building Construction (111 days)	50	6.9	38,295	9.22	4,153
Total Fuel Consumption – Vendor (MHDT)					9,280

Table 5.5-6 – Construction Vendor Fuel Consumption Estimates – HHDT

Construction Activity	Vendor Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Vendor					
2021					
Building Construction (132 days)	50	6.9	45,540	6.30	7,224
2022					
Building Construction (111 days)	50	6.9	38,295	6.47	5,920
Total Fuel Consumption – Vendor (HHDT)					13,143

Equipment utilized for Project construction would conform to CARB regulations and California emissions standards, and the Project would utilize construction contractors which practice compliance with applicable CARB regulations regarding retrofitting, repowering, or replacement of diesel off-road equipment. CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Additionally, California Code of Regulations (CCR) Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Moreover, idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption during construction. (EA pp. 15-19)

Further, construction energy efficiencies and energy conservation would be achieved indirectly through energy efficiencies realized from bulk purchase, transport, and use of construction materials. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as transport and disposal of construction waste. (EA pp. 15-19)

Thus, the Project would not involve the inefficient, wasteful, unnecessary use of energy during construction, and accordingly, the construction-phase impact related to energy consumption would be less than significant.

Operational Energy Demand

Project operations energy consumption would include transportation energy demands (energy consumed by employee and patron vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

Transportation Energy Demands

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. Per the Project's Energy Analysis (Appendix F), EMFAC2017 was run for LDA, Light-Heavy-Duty-Trucks (LHDT1 and LHDT2), MHDT, and HHDT vehicle classes within the California sub-area for the 2023 operational year. Tables 5.5-7 through 5.5-11 provide estimated Project-generated vehicle traffic annual fuel consumption for each vehicle class analyzed for the Project, and Table 5.5-12 provides the total estimated Project-generated traffic annual fuel consumption for all vehicles. (EA pp. 20-22)

Table 5.5-7 – Project-Generated LDA Vehicle Traffic Annual Fuel Consumption

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
4,706,914	32.59	144,438

Table 5.5-8 – Project-Generated LHDT1 Traffic Annual Fuel Consumption

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
641,896	13.81	46,497

Table 5.5-9 – Project-Generated LHDT2 Traffic Annual Fuel Consumption

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
795,202	14.18	56,075

Table 5.5-10 – Project-Generated MHDT Traffic Annual Fuel Consumption

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
973,358	9.59	101,532

Table 5.5-11 – Project-Generated HHDT Traffic Annual Fuel Consumption

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
1,412,631	6.84	206,523

Table 5.5-12 – Total Project-Generated Traffic Annual Fuel Consumption (All Vehicles)

Vehicle Type	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	4,706,914	144,438
LHDT1	641,896	46,497
LHDT2	795,202	56,075
MHDT	973,358	101,532
HHDT	1,412,631	206,523
Total (All Vehicles)	8,530,001	555,065

As summarized in Table 5.5-12, the total estimated annual fuel consumption from Project-generated VMT would be 555,065 gallons of fuel, which would be provided by current and future commercial vendors. Project trip generation and VMT generated by the Project are consistent with industrial uses of similar scale and configuration, as reflected in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, 2017, and CalEEMod. As such, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption. Moreover, the Project would be subject to any Federal and State regulatory actions regarding enhanced fuel economies and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells), which would likely decrease future gasoline fuel demands per VMT. (EA pp. 20-22)

Additionally, the location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, which would act to reduce regional vehicle energy demands.

Further, the Project would implement sidewalks and promote the use of bicycles as an alternative means of transportation, which would facilitate pedestrian and bicycle access and, accordingly, would reduce VMT and associated energy consumption. Thus, Project transportation energy demands as they relate to operational demands would not result in the inefficient, wasteful, or unnecessary consumption of energy, and potential impacts would be less than significant. (EA pp. 20-22)

Facility Energy Demands

Energy use in buildings is divided into energy consumed by the built environment, and energy consumed by uses that are independent of the construction of the building, such as plug-in appliances. In the State, CALGreen; CCR, Title 24, Part 11 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.). (EA pp. 22-23)

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. The annual natural gas and electricity demands of the Project are summarized in Tables 5.5-13 and 5.5-14. The Project facility operational energy demands are estimated at 1,224,290 kBTU/year of natural gas and 1,423,320 kWh/year of electricity. (EA pp. 22-23)

Table 5.5-13 – Project Annual Operational Natural Gas Demand Summary

Natural Gas Demand	kBTU/year
High-Cube Transload Short-Term Warehouse	1,224,290
Total Project Natural Gas Demand	1,224,290
kBTU/yr = kilo-British thermal units per year	

Table 5.5-14 – Project Annual Operational Electricity Demand Summary

Electricity Demand	kWh/year
Parking lot	76,230
High-Cube Transload Short-Term Warehouse	1,423,320
Total Project Electricity Demand	1,499,550

Uses proposed by the Project are not inherently energy intensive, and the Project's energy demands in total would be comparable to, or less than, other industrial projects of similar scale and configuration. Moreover, the Project proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs, and would comply with the 2019 Title 24 Standards, which include incorporating contemporary design features. Further, the Project's energy demands can be accommodated within the context of available resources and energy systems and would therefore not cause or result in the need for additional energy producing or transmission facilities. (EA pp. 22-23) Thus, the Project's facility energy demands as they relate to Project operational energy demands would not result in the inefficient, wasteful, or unnecessary consumption of energy, and any potential impacts would be **less than significant**.

Threshold B: *Would the Project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?*

As listed in Section 5.5.2.2, Project's plans for renewable energy or energy efficiency are consistent with the State of California Energy Plan, California Code of Regulations, Title 24, Part 6, the State's Energy Efficiency Standards for Residential and Non-residential Buildings, and the California Integrated Waste Management Act of 1989 (AB 939). Section 5.2.2.3 Regional Regulations, Project-applicable energy plans are also consistent with the objectives and policies of the GP 2025's Open Space and Conservation and Public Facilities and Infrastructure Elements, and the City's RRG-CAP and Green Action Plan. Discussions of the Project's consistency with the General Plan 2025, RRG-CAP and Green Action Plan is provided below.

Consistency with State of California Energy Plan

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access takes advantage of existing infrastructure systems and promotes land use compatibilities through the introduction of industrial uses on a business/office park-designated site. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan. (EA pp. 27-28)

As conditioned, the Project will be required to comply with both California Building Code Title 24 Part 6 (Building Energy Efficiency Standards) and Part 11 (CALGreen Code). The Project's features include reusing and recycling construction and demolition waste, interior and exterior storage areas for recyclables and green waste, recycling containers in public areas, and education materials about reducing waste and available recycling services. As such the Project will not conflict with or obstruct implementation of California Integrated Waste Management Act of 1989 (AB 939).

General Plan 2025

The Project is consistent with the objectives and policies in the Open Space and Open Space Element, including those that encourage efficient use of energy resources. The Project is consistent with the objectives and policies in the Public Facilities and Infrastructure Element, including those with the purpose of providing superior water service to customers, maintaining sufficient levels of wastewater and storm drainage service, and provide to the extent practical, environmentally sensitive energy resources. Refer to Appendix B for the analysis of the Project's consistency with applicable General Plan 2025 Open Space and Conservation and Public Facilities and Infrastructure Element policies.

Consistency with the Riverside Restorative Growthprint and Climate Action Plan (RRG-CAP)

In addition to meeting the SCAQMD screening thresholds, the Project was evaluated for consistency with the strategies and actions contained in the RRG-CAP (see Section 5.4.2.4). To achieve the City's GHG emission reductions, the City's RRG-CAP includes reduction measures

for each category of GHG emissions: transportation, energy, water, and solid waste. The RRG-CAP reduction measures further support the goals of SB 32 and the measures in the 2017 Scoping Plan. Table 5.7-8 summarizes the Project's consistency with RRG-CAP measures.

Table 5.5-15 – Project Consistency with RRG-CAP GHG Reduction Measures

Number	Strategy/Goal	Project Consistency
State and Regional Energy Measures		
The following are state and regional measures that are expected to reduce GHG emissions associated with the energy sector.		
SR-1	**Renewable Portfolio Standard (RPS)** Utilities must secure 33 percent of their power from renewable sources by 2020.	The Project would be served by Riverside Public Utilities, which has achieved 36 percent renewables as of 2017. The Project's energy related GHG emissions would decrease as Riverside Public Utilities increases its renewables procurement beyond 2020 towards the 2030 goal of 50 percent. The Project would not conflict or interfere with RPS.
SR-2	**2013 California Building Energy Efficiency Standards (Title 24, Part 6)** Mandatory energy efficiency standards for buildings.	The Project would be constructed in accordance with energy efficiency standards effective at the time building permits are issued. The current 2019 Energy Code is estimated to decrease energy consumption by 30 percent for non-residential buildings when compared to the 2016 Title 24 Energy Code.
SR-3	**HERO Residential Program** Financing for homeowners to make energy efficient, renewable energy, and water conservation improvements.	The Project is not a residential Project, and therefore, this measure does not apply to the Project.
SR-4	**HERO Commercial Program** Financing for business owners to make energy efficient, renewable energy, and water conservation improvements.	The HERO Commercial program is a public-private partnership administered by Western Riverside Council of Governments (WRCOG) and provides financing for energy and water improvements to business owners. As the Project is a new warehouse construction, this measure does not apply to the Project. The Project would not conflict with WRCOG's implementation of the HERO program.
State and Regional Transportation Measures		
The following are state and regional measures that are expected to reduce GHG emissions associated with the transportation sector.		
SR-6	**Pavley and Low Carbon Fuel Standard** Requirements for vehicles to use cleaner fuels.	This measure is implemented at the state level. Project mobile-source GHG emissions would be reduced through implementation of these measures. The Project would not conflict with implementation.
SR-7	**Metrolink Expansion** Additional Metrolink transit service provided to Western Riverside County.	Identified in SCAG's 2012 RTP/SCS, the Metrolink Perris Valley Line will be extended from Riverside to Perris in Western Riverside County. The General Plan identifies that the alignment would include a station east of the Project site at I-215 and Alessandro Boulevard. The Project would not interfere with Metrolink

Number	Strategy/Goal	Project Consistency
		expansion. Future employees could use the expansion to commute to the Project site.
SR-8	**Express Lanes** Additional express lanes added along major freeways in western Riverside County.	The Project would not interfere with construction of additional freeway express lanes. Project vehicle traffic would benefit from decreased freeway congestion.
SR-9	**Congestion Pricing** Expansion of the toll lanes along SR-91.	This measure does not apply directly to the Project. The Project would not interfere with the expansion of SR-91 toll lanes.
SR-10	**Telecommuting** Work arrangement in which employees do not commute to a central place to work.	The Project is a high-cube warehouse which would require employees to physically fulfill and transport goods. This measure does not apply to the Project.
SR-11	**Goods Movement** Efficiency movement of goods through inland southern California.	The Project would support the region's role as a major hub for importing and exporting goods. To implement this measure, at the state level more standards are being implemented to increase vehicle efficiencies and the 2020 RTP/SCS and SCAQMD are supporting greater penetration of low-emission trucks in the region. The estimated GHG reductions associated with this measure account for the region's "share" of SCAG and SCAQMD's anticipated investments. The Project would benefit from reductions associated with regional investments. Further, by providing additional warehouse space in the region, the Project could reduce truck VMT by providing a hub closer to the region than further warehouses.
SR-12	**Electric Vehicle Plan and Infrastructure** Facilitate electric vehicle use by providing necessary infrastructure.	For the City of Riverside, this measure would be implemented by providing both public and private charging facilities, and by updating development codes to encourage or facilitate charging stations. The Project would install conduits for vehicle charging stations. The Project would not interfere with implementation of this measure and would be constructed in accordance with development codes in place at the time building permits are issued.
State Solid Waste Measures		
The following state measure is expected to reduce GHG emissions associated with the solid waste sector.		
SR-13	**Construction & Demolition Waste Diversion** Meet mandatory requirement to divert 50 percent of construction & demolition (C&D) waste from landfills by 2020 and exceed requirement by diverting 90 percent of C&D waste from landfills by 2035.	Project-related C&D waste would be sorted, recycled, and diverted from landfills in accordance with mandatory regulatory requirements.
Local Energy Measures		

Number	Strategy/Goal	Project Consistency
The following are local measures that can be implemented to reduce GHG emissions associated with the energy sector.		
E-1	**Traffic and Street Lights** Replace traffic and streetlights with high-efficiency bulbs.	The Project would not interfere with implementation of this measure.
E-2	**Shade Trees** Strategically plant trees at new residential developments to reduce the urban heat island effect.	This measure applies to residential development and does not apply to the Project.
E-3	**Local Utility Programs – Electricity** Financing and incentives for business and homeowners to make energy efficient, renewable energy, and water conservation improvements.	To implement this measure, Riverside Public Utilities offers a selection of rebates and other incentives to assist property owners (residential and commercial) with the installation of energy- and water-saving products. This measure does not directly apply to the Project. However, the Project would be constructed in accordance with the Energy Code in place at the time building permits are issued, which would require the Project to be more energy efficient than existing development. The Project would also reduce water consumption in accordance with CalGreen.
E-4	**Renewable Energy Production on Public Property** Large-scale renewable energy installation on publicly owned property and in public rights-of-way.	This measure encourages the City to seek opportunities to install renewable energy projects on public property, public facilities and in public rights of way. This measure does not apply to the Project.
E-5	**UC Riverside Carbon Neutral Program** Collaborate with UC Riverside to achieve a carbon neutral campus.	The Project is not associated with UC Riverside. This measure does not apply to the Project.
E-6	**Riverside Public Utilities Technology Grants** Riverside Public Utilities grant programs to foster research, development and demonstration of innovative solutions to energy problems.	Riverside Public Utilities offers energy technology grant programs to help foster the development of innovative solutions to energy problems. This measure does not apply to the Project.
Local Transportation Measures		
The following are local measures that can be implemented to reduce GHG emissions associated with the transportation sector.		
T-1	**Bicycle Infrastructure Improvements** Expand on-street and off-street bicycle infrastructure, including bicycle lanes and bicycle trails.	Adjacent to the project site, Alessandro Boulevard is a Class 2 bicycle facility. The Project driveway would connect to Alessandro Boulevard and the existing bicycle lanes to provide access to the Project site. Additionally, the project would include the construction of a new parking lot to provide access to the Sycamore Canyon Wilderness Park trails with bicycle racks. Additionally, the project would include secure bicycle parking at each building.
T-2	**Bicycle Parking**	The Project would include secure bicycle parking at each building (at the northwest

Number	Strategy/Goal	Project Consistency
	Provide additional options for bicycle parking.	corner and entrance of Building B and at the southeast corner and entrance of Building A).
T-3	**End of Trip Facilities** Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters.	The Project would include secure bicycle parking at each building (at the northwest corner and entrance of Building B and at the southeast corner and entrance of Building A). Additionally, Building A would have eight (8) clean air/van pool parking spaces and 24 electric vehicle parking stalls, and Building B would have five (5) clean air/van pool parking spaces and 15 electric vehicle parking stalls. The charging stations for the electric vehicle parking stalls would be provided by the future tenant.
T-4	**Promotional Transportation Demand Management** Encourage Transportation Demand Management strategies.	The Project site is served by two existing bus routes and is also required to construct sidewalk capable of accommodating an ADA-compliant bench and pole bus stop as a condition of approval. Route 20 runs along Alessandro Boulevard adjacent to the Project site, providing service from Magnolia Center to Moreno Valley. Route 208 is a CommuterLink Express Route providing service from Temecula to the Riverside Metrolink. Consistent with Transportation Demand Management strategies, future employees would be encouraged to use these routes as an alternative form of transportation. The Project would also provide secure bicycle parking.
T-5	**Traffic Signal Coordination** Incorporate technology to synchronize and coordinate traffic signals along local arterials.	This measure is the responsibility of the Public Works Department and is currently in progress. The measure does not apply to the Project. The Project would not interfere with implementation of this measure.
T-6	**Density** Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.	Single and multi-family residential neighborhoods are located south and west of the Project site. The Project would create new employment opportunities for nearby residents. In Riverside County, the 2014 jobs-housing balance was 1.28 jobs to household, which exceeds the 2040 projection of 1.10 jobs to household.
T-7	**Mixed-Use Development** Provide for a variety of development types and uses.	The Project is not a mixed-use development. Nonetheless, the Project would not conflict with this strategy/goal and would create new employment opportunities for near-by residents, and future employees could utilize near-by commercial and retail business, in support of this measure.
T-8	**Pedestrian Only Areas**	This measure refers to urban, nonmotorized pedestrian use areas within central business

Number	Strategy/Goal	Project Consistency
	Encourage walking by providing pedestrian-only community areas.	districts and major activity centers. Nonetheless, the Project would include a donation of land for a trailhead parking lot with improvements such as a shade structure with benches, bike rack, and drinking fountain. Trail fencing, gates, and signage would also be installed to direct access, circulation, and connection to existing trails. Thus, the Project would encourage walking/pedestrian use and would support this measure.
T-9	**Limited Parking Requirements for New Development** Reduce requirements for vehicle parking in new development projects.	Limiting parking requirements would encourage modes of transportation other than single-occupancy vehicles, thereby reducing VMT and GHG emissions. The City's current Zoning Code authorizes a reduction in the number of required parking spaces for mixed-use development and/or stand-alone uses in mixed-use zones subject to the approval of a shared parking arrangement. The Project is not a mixed-use development; however, the applicant is requesting a variance to reduce the number of parking spaces based on the operational characteristics of the uses.
T-10	**Bus Rapid Transit Service** Implement bus rapid transit service in the subregion to provide alternative transportation options.	The Project site is served by two existing bus routes. Route 20 runs along Alessandro Boulevard adjacent to the Project site, providing service from Magnolia Center to Moreno Valley. Two Route 20 bus stops are located immediately adjacent to the Project site along the southern boundary on Alessandro Boulevard. Route 208 is a CommuterLink Express Route providing service from Temecula to the Riverside Metrolink. Additionally, the Project would be required to construct a sidewalk capable of accommodating an ADA-compliant bench and pole bus stop as a condition of approval. Future employees could use the above-described routes as an alternative form of transportation. The Project would not interfere with the City's efforts to implement additional bus rapid transit.
T-11	**Voluntary Transportation Demand Management (TDM)** Encourage employers to create TDM programs for their employers.	Future employees would be encouraged to use existing public transit routes as an alternative form of transportation.
T-12	**Accelerated Bike Plan Implementation** Accelerate the implementation of all or specified components of a jurisdiction's adopted bike plan.	The City adopted a Bicycle Master Plan in 2007. Alessandro Boulevard is a Class 2 bicycle facility. The project driveway would connect to Alessandro Boulevard and the existing bicycle lanes to provide access to the Project site. Additionally, the northerly

Number	Strategy/Goal	Project Consistency
		terminus of Barton Street that is identified as a "minor trailhead" would be developed with a trailhead parking lot, and improvements would include a bike rack. Thus, the Project would provide secure bicycle parking and would not interfere with implementation of the City's Bicycle Master Plan.
T-13	**Fixed Guideway Transit** By 2020, complete feasibility study and by 2025 Introduce a fixed route transit service in the jurisdiction.	This measure applies specifically to the City's efforts on the "Riverside Reconnects" Streetcar feasibility study. The measure does not apply to the Project.
T-14	**Neighborhood Electric Vehicle Programs** Implement development requirements to accommodate Neighborhood Electric Vehicles and supporting infrastructure.	This measure does not apply to the Project. However, the Project would install conduits for vehicle charging stations.
T-15	**Subsidized Transit** Increase access to transit by providing free or reduced passes.	The tenants are unknown at this stage of Project design and, therefore, a commitment cannot be made that the future tenants would provide free or reduced transit passes to their employees. However, the Project would not interfere with the ability for future tenants to provide transit passes.
T-16	**Bike Share Program** Create nodes offering bike sharing at key locations throughout the City.	This measure encourages bike sharing implemented by third-party vendors The measure does not apply to the Project. However, the Project would include secure bicycle parking, and would not interfere with bike sharing in the region.
T-17	**Car Share Program** Offer Riverside residents the opportunity to use car sharing to satisfy short-term mobility needs.	Similar to bike sharing, car sharing is offered by third-party vendors. This measure does not apply to the Project, and the Project would not interfere with car sharing programs in the region.
T-18	**SB 743 as Alternative to LOS** Use SB 743 to incentivize development in the downtown and other areas served by transit.	The Project is not located in the downtown; therefore, this measure does not apply to the Project. The Project would be served by RTA Routes 20 and 26 currently operating along Alessandro Boulevard as the Project would be required to construct a sidewalk capable of accommodating an ADA-compliant bench and pole bus stop as a condition of approval. Therefore, the Project would be consistent with this strategy/goal.
T-19	**Alternative Fuel and Vehicle Technology Infrastructure** Promote the use of alternative fueled vehicles such as those powered by electric, natural gas, biodiesel, and fuel cells by Riverside residents and workers.	The Project would install conduits for vehicle charging stations.
T-20	**Eco-Corridor**	The Project is not located in a potential Eco-Corridor as identified in the RRG-CAP

Number	Strategy/Goal	Project Consistency
	Create a geographically defined area(s) featuring best practices in sustainable urban design and green building focused on supporting both clean-tech and green businesses.	Measure T-20: Eco-Corridor/Green Enterprise Zone section. This measure does not apply to the Project.
Local Water Measures		
The following local measure is expected to reduce GHG emissions associated with the water sector.		
W-1	**Water Conservation and Efficiency** Reduce per capita water use by 20 percent by 2020.	As discussed in previous sections, the project would be required to reduce indoor water consumption by 20 percent in accordance with CalGreen.
Local Solid Waste Measures		
The following are local measures that can be implemented to reduce GHG emissions associated with the solid waste sector.		
SW-1	**Yard Waste Collection** Provide green waste collection bins community-wide.	This measure applies to residential uses; therefore, the measure does not apply to the Project.
SW-2	**Food Scrap and Paper Diversion** Divert food and paper waste from landfills by implementing commercial and residential collection program.	This measure applies to residential and commercial uses; therefore, the measure does not apply to the Project. However, the Project would include recycling storage and would divert waste from landfills in accordance with AB 341.
Local Agriculture Measures		
The following are local measures that can be implemented to reduce GHG emissions associated with the urban forest and the local food and agricultural sectors.		
A-1	**Local Food and Agriculture** Promote local food and agricultural programs.	The Project is not associated with food or agricultural uses; therefore, this measure does not apply to the Project.

As discussed in Table 5.7-8 above, the Project would be consistent with applicable RRG-CAP measures. The City's Green Action Plan goals related to energy are aimed at focusing the City's power resources mix at reliable renewable energy or using less energy. The Project is not responsible for and cannot change the City's power resources mix; however, as outlined in 5.5.3 Project Design Considerations, it includes many features to reduce energy use. Thus, the Project would not conflict with or obstruct applicable existing energy standards and regulations, and any potential impacts would be **less than significant without mitigation**.

Appendix F (22) CEQA Guidelines

- *Decreasing overall per capita energy consumption;*
- *Decreasing reliance on fossil fuels such as coal, natural gas and oil; and*
- *Increasing reliance on renewable energy sources.*

Energy efficient/energy conserving design features and operational programs that would be implemented under the Project are summarized below. As noted in the following discussions, energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and

vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title24, California Green Building Standards Code). The Project incorporates a series of measures that generally reduce energy demand associated with the Project. The Project will comply with the 2019 Title 24 Standards.

The Project would also not result in a substantial increase in demand for transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure (other than site-adjacent and on-site connects to local utilities).

Additionally, the Project annual fuel consumption estimates analyzed herein represents the likely potential maximums that would occur for the proposed Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

The amount of fuel consumed by the Project can also be expected to decrease as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

On this basis, the Project would decrease overall per capital energy consumption, reliance on fossil fuels such as coal, natural gas, and oil, and increases reliance on renewable energy sources.

In addition to consistency with State and Local Plan for renewable energy or energy efficiency, the Project is also consistent with the following federal regulations:

Consistency with ISTEA

Transportation and access to the Project site is provided primarily by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because Southern California Association of Governments (SCAG) is not planning for intermodal facilities on or through the Project site. (EA p. 27)

Consistency with TEA-21

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access takes advantage of existing infrastructure systems, and systems and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21. (EA p. 27)

Consistency with IEPR

Electricity would be provided to the Project by RPU and natural gas is provided by SoCalGas. RPU's Strategic Plan: 2017-2021 and SoCalGas 2018 Corporate Sustainability Report builds on existing state programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the 2018 IEPR. Additionally, the Project will comply with the applicable Title 24 standards which would ensure

that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. As such, development of the proposed Project would support the goals presented in the 2018 IEPR. (EA p. 27)

5.5.6 Proposed Mitigation Measures

As the Project does not exceed any of the energy significance thresholds and any potential impacts are expected to be **less than significant, without implementation of mitigation measures**.

5.5.7 Cumulative Environmental Effects

The planned and pending cumulative development projects near the Project site include residential development, warehouses, commercial, office, and public facilities. Each of the proposed developments would increase the consumption of energy and energy demand in the region. Energy consumption by the cumulative projects would be regulated by Energy Efficiency Standards embodied in Title 24 of the California Building Code, which apply to new construction of both residential and non-residential buildings, and indirect energy reduction measures from GHG reduction policies. Thus, because the Project and the cumulative development are required to comply with Title 24 of the California Building Code, they would not result in the wasteful use of energy. Therefore, cumulative impacts are **less than significant**.

5.5.8 References

The following references were used in the preparation of this section of the DEIR:

California Gas and Electric Utilities 2018	California Gas and Electric Utilities, *California Gas Report Decision D.95.01-039*, 2018. (Available at https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf)
CEC 2018a	California Energy Commission, "Electricity Consumption by Entity." Accessed February 2020. (Available at https://ecdms.energy.ca.gov/elecbyutil.aspx)
CEC 2018b	California Energy Commission, "Gas Consumption by Entity." Accessed February 2020. (Available at https://ecdms.energy.ca.gov/gasbyutil.aspx)
City of Riverside 2007	City of Riverside, *General Plan 2025*, Riverside, CA. November 2007. (Available at https://www.riversideca.gov/planning/gp2025program/general-plan.asp)
GAP 2012	City of Riverside, *Green Action Plan*. 2012. (Available at http://greenriverside.com/pdf/Green_Action_Plan%202012.pdf)

IERP 2019	California Energy Commission, *Adopted 2019 Integrated Energy Policy Report* (Available online at https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2019-integrated-energy-policy-report, accessed December 2020)
RPU 2015	Riverside Public Utilities, *RPU 101*, Riverside, CA. August 2015. (Available at https://www.riversideca.gov/utilities/PDF/RPU_101_Web_2015.pdf)
RPU 2018	Riverside Public Utilities, *2018 Integrated Resource Plan* Available at https://www.riversideca.gov/utilities/about-rpu/pdf/RPU_Full_IRP_2018_Final.pdf, accessed December 2020)
RRG-CAP	Riverside Restorative Growthprint, Economic Prosperity Action Plan and Climate Action Plan, January 2016. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/other-plans/2016%20Riverside%20Restorative%20Growthprint%20Economic%20Proposerity%20Action%20Plan%20and%20Climate%20Action%20Plan.pdf)
TEDF 2017	California Energy Commission, Transportation Energy Demand Forecast, 2018-2030 (Available at https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=17-IEPR-05, accessed December 2020)
Urban Crossroads 2020	Urban Crossroads, *Sycamore Hills Distribution Center Energy Analysis*, September 9, 2020.

5.6 Geology and Soils

Based on Appendix G of the *State CEQA Guidelines*, the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public comment period, this section will evaluate the potential impacts related to geology and soils.

The analysis in this section is based, in part, on the *Geotechnical Engineering Investigation* prepared by NorCal Engineering Soils and Geotechnical Consultants prepared on March 29, 2019, and updated July 2020 (Appendix G), the *Report of Preliminary Deep Percolation Testing, APN 263-060-022, Riverside, California* prepared by GeoMat Testing Laboratories, Inc., July 2019 (Appendix G) and the *Paleontological Resource Assessment* prepared by Applied EarthWorks (AE), Inc., September 2020 (Appendix G).

5.6.1 Setting

The Project site is located in the eastern portion of the City of Riverside, east of Barton Street, west of Sycamore Canyon Boulevard, and north of Alessandro Boulevard, within the Sycamore Canyon Business Park Specific Plan. (Figure 3.0-3 – Project Location Map). The Project site is within the southwestern quarter of Section 9, Township 3 South, Range 4 West, as shown on the Riverside East, California, United States Geological Survey (USGS) 7.5-minute quadrangle (see Figure 3.0-2 – Vicinity Map). The Project site is currently undeveloped and vacant, but has been used historically as open space. The topography consists of natural rolling terrain descending gradually from a west to east direction. Numerous outcrops of granitic rock are located throughout the property. The Project site is covered with a low to moderate growth of vegetation consisting of natural grasses and weeds (NorCal Engineering, p.2). Disturbed non-native grassland dominates the site with a few ephemeral drainages, some with riparian vegetation, transecting the site. The Project site includes two drainages considered Waters of the U.S. (WUS) (AE, p. 1) (see Figure 5.3-5 – Drainages).

The Project site contains an existing area of approximately 11.6 acres legally designated as “Restricted Property” (see Figure 3.0-3). The Restricted Property area supports a jurisdictional drainage and associated riparian habitat and was required as a condition of the Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers for construction of the Grove Community Church at an off site location, approximately one mile southwest.

Site Geology

The City lies within the northern end of the Peninsular Ranges, approximately 12 miles south of the intersection with the Transverse Range. The Santa Ana Mountains are approximately 15 miles south and southwest of the City, while the San Jacinto Mountains are approximately 10 miles east and northeast of the City. The San Bernardino Mountains are about 20 miles north of the City.

Exploratory trenches were conducted by a backhoe during the geotechnical engineering investigation (Appendix F). Results from the investigation demonstrated that the bedrock is beneath the upper soils at a depth of 1 to 5 feet below ground surface. The bedrock was noted to be massive and observed to be slightly to highly weathered and dense to very dense. The overall engineering characteristics of the earth material were relatively uniform with each excavation.

Site Soils

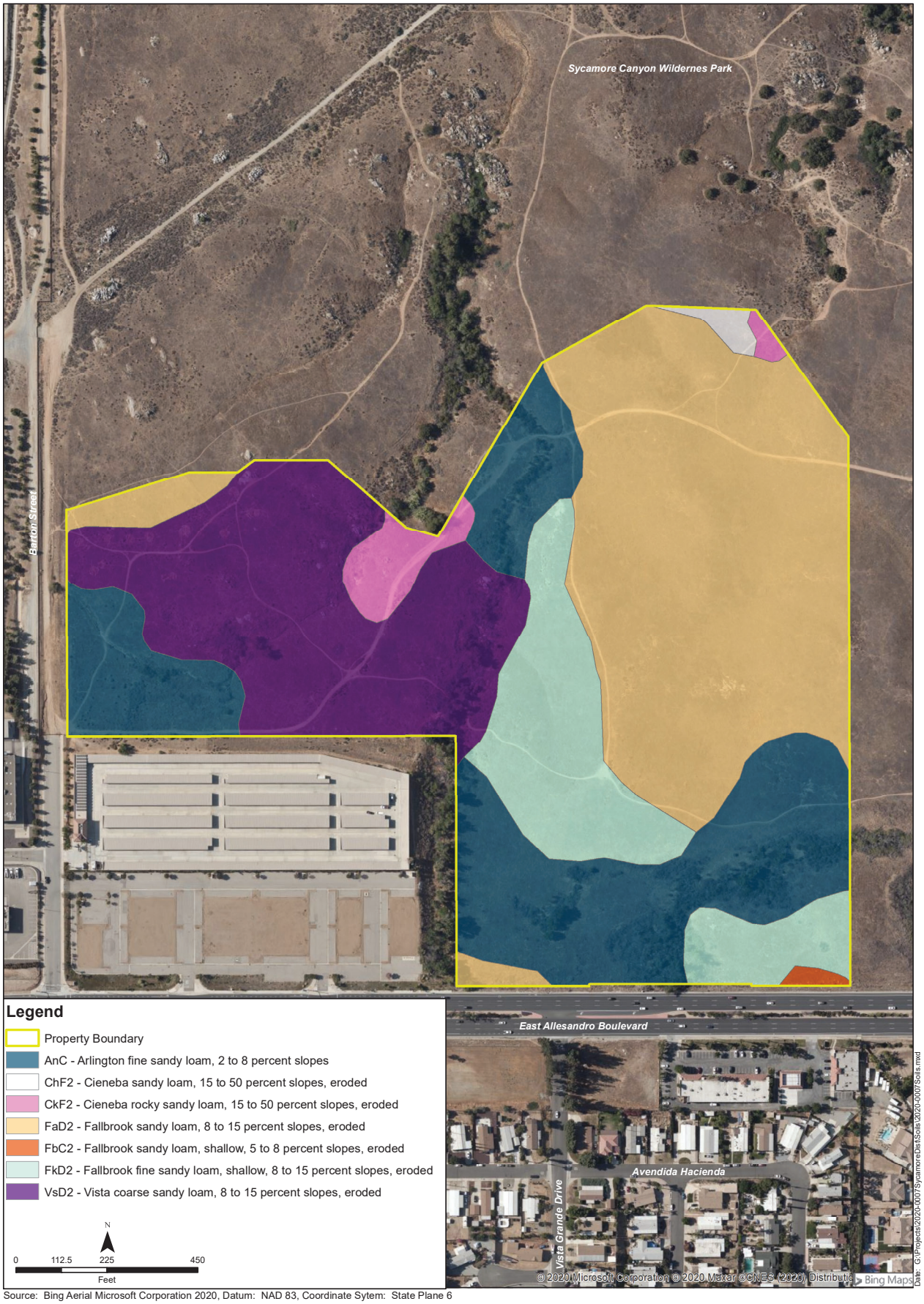
Data acquired during the geotechnical engineering investigation consisted of the placement of 21 subsurface exploratory trenches by a backhoe to depths ranging between 5 to 15 feet below current ground elevations. The exploratory trenches revealed the existing raw materials containing fill and soil. The soils encountered are described as follows:

- **Fill soil:** is classified as a brown, fine to coarse grained earthy material used to fill in a depression or hole in the ground to artificially change the grade or elevation. Silty sand is classified as a soil mixture with coarse grains and fine grains. Silty sand was encountered across the site to depths ranging from 1 to 1.5 feet below ground surface. Silty sand was noted to be loose and moist.
- **Natural:** materials are classified as a natural undisturbed soil usually brown, fine to coarse grained. Silty sand was encountered beneath the upper fill soils. The native soils as encountered were observed to be a medium dense to dense and moist.
- **Bedrock:** A granitic bedrock classifying as a grey brown, fine to coarse grained, silty sand (decomposed granite) was encountered beneath the upper soils at a depth of 1 to 5 feet below ground surface. The bedrock was noted to be massive and observed to be slightly to highly weathered and dense to very dense.

The United States Department of Agriculture (USDA) online Web Soil Survey 9 (based on the 1971 *Soil Survey of Western Riverside Area, California*) was reviewed to determine the soil types mapped occurring within the study area. Soil types mapped by USDA within the study area showed no overlap with soils found on the National List of Hydric Soils. The National List of Hydric Soils was developed by the National Technical Committee for Hydric Soils to develop a database (USDA). The study area crosses seven different soil series 9 as shown in Figure 5.6-1 – Soils Map including (Wood, p. 14):

- Arlington fine sandy loam (AnC)- This well-drained soil occurs on alluvial fans and terraces with 2 to 8 percent slopes. It is composed of fine sandy loam and the parent material is composed of alluvium dominantly from granitic rocks.
- Cieneba sandy loam, eroded (ChF2)-This somewhat excessively drained soil occurs on uplands with 15 to 50 percent slopes. It is composed of sandy loam on the surface and the parent material is composed of coarse grained igneous rock.
- Cieneba rocky sandy loam, eroded (CkF2)-This somewhat excessively drained soil occurs on uplands with 15 to 50 percent slopes. It is composed of rocky sandy loam on the surface and the parent material is composed of coarse grained igneous rock.
- Fallbrook sandy loam, eroded (FaD2) – This well-drained soil occurs on uplands with 8 to 15 percent slopes. It is composed of sandy loam and developed on granodiorite and tonalite.

- Fallbrook sandy loam, shallow, eroded (FbC2) – This well-drained soil occurs on uplands with 5 to 8 percent slopes. It is composed of sandy loam and developed on granodiorite and tonalite.
- Fallbrook fine sandy loam, shallow, eroded (FkD2) – This well-drained soil occurs on uplands with 8 to 15 percent slopes. It is composed of fine sandy loam and developed on granodiorite and tonalite.
- Vista coarse sandy loam, eroded (VsD2) – This well-drained soil occurs on uplands with 8 to 15 percent slopes. It is composed of coarse sandy loam and developed on weathered granite and granodiorite.



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Soils Map

Figure 5.6-1

Groundwater

The overall engineering characteristics of the earth material were relatively uniform with each excavation. Groundwater was not encountered to the depth of the trenches ranging between 5 to 15 feet below current ground elevations and no caving occurred. (NorCal Engineering, p. 3) The depth of trenches was limited due to the shallow depth of very dense bedrock. Per the City of Riverside General Plan Public Safety Element Figure PS-2 – Liquefaction Zones, the site is not situated in an area on generalized liquefaction susceptibility and therefore, the historical groundwater depth is greater than 50 feet.[1]

Seismicity and Faulting

The proposed development lies outside of any Alquist-Priolo Earthquake Fault Zone. The Alquist-Priolo Earthquake Fault Zone specifies types of faults and specific faults that are considered sufficiently active and well defined as to constitute a potential hazard to structures from surface faulting or fault creep. Since the Project is outside of the Alquist-Priolo Earthquake Fault Zone, the potential for damage due to direct fault rupture is considered unlikely (NorCal Engineering, p. 5). While no known active or potentially active faults traverse the City and its Sphere of Influence, several faults in the region have the potential to produce seismic impacts within the City. Three significant faults pass within 20 miles of the City as shown on Figure 5.6-2 – Faultline Map (GP 2025).

- The San Jacinto Fault, which runs as close as 8.7miles from the Project site., is capable of producing up to a 7.0 magnitude earthquake. This fault runs more than 125 miles, from northwest of El Centro in Imperial County to northwest of San Bernardino, passing through the intersection of Interstates 10 and 215, the City of Loma Linda, and the Box Springs Mountains (GP 2025, p. PS-3).
- The San Andreas Fault runs along the southwest margin of the San Bernardino Mountains and is approximately 17 miles from the Project site The San Andreas Fault extends 600 miles, from Eureka in Northern California's Humboldt County to the Mexican border. The San Andreas Fault is estimated to be capable of producing up to an 8.3 magnitude earthquake. One of the more direct impacts that an earthquake of this magnitude could have on the City is the disruption of potable water supplies to the City. The City's primary water supplies come from a series of wells located north of the City, with the water lines from these sources running directly across segments of the San Andreas Fault (GP 2025, p. PS-3).
- The Elsinore Fault is approximately 15 miles from the Project Site. The fault begins approximately 4 miles west of Lake Mathews and the City of Corona, extending south into the City of Lake Elsinore. This northwest-southwest trending fault is capable of producing up to a 6.0 magnitude earthquake. Northwest of the City of Corona, the Elsinore Fault splits into two segments and forms the two upper strands of the Elsinore Fault. The two

[1] Email correspondence from Scott Spensiero, NorCal Engineering, on January 5, 2021

segments are known as the Whittier Fault and the Chino Fault. The 25 mile Whittier fault runs in the southwestern direction and is capable of producing up to a 7.2 magnitude earthquake. The 13 mile Chino Fault runs in the northeastern direction and is capableof producing up to a 7.0 magnitude earthquake (GP 2025, p. PS-3).

Although no Alquist-Priolo fault or active or potentially active fault has been mapped at the surface within the City, one northwest-southeast trending unnamed fault (identified as County Fault on GP 2025 Figure PS-1) approximately 12 miles from the Project site is projected towards the southwest corner of the City's Sphere of Influence boundary, south of Lake Mathews (GP 2025, p. PS-4). Ground shaking originating from earthquakes along other active faults in the region is expected to induce lower horizontal accelerations due to smaller anticipated earthquakes and/or greater distances to other faults (NorCal Engineering, p. 5).