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Regulatory Services

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SUBJECT: Jurisdictional Delineation of the Stoneridge Commerce Center and the Northerly and Southerly Offsite Truck Route Road Improvements and Use Project [SP00239A01], an Approximate 711-Acre Study Area, Located near the City of Perris, Riverside County, California.

Dear Mr. Hardy:

This letter report summarizes our preliminary findings of U.S. Army Corps of Engineers (Corps), Santa Ana Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW) jurisdiction for the above-referenced property.[1]

The Stoneridge Commerce Center and Northerly/Southerly Offsite Truck Route Road Improvements and Use Project [SP00239A01] (Project/Study Area) comprises approximately 614 acres onsite and 96.69 acres off-site near the City of Perris, Riverside County [Exhibit 1-Regional Map]. The 614-acre portion of the Project is located within Sections 13, 14,16, and 23 of Township 4 South, Range 3 West, of the U.S. Geological Survey (USGS) 7.5" Perris, California topographic quadrangle map (dated 1967 and photorevised in 1979) [Exhibit 2A–Project Vicinity Map] and is bordered by Ramona Expressway to the north, open agricultural land and the San Jacinto River to the east, Nuevo Road to the south, and undeveloped land to the west.

[1] This report presents our best effort at estimating the subject jurisdictional boundaries using the most up-to-date regulations and written policy and guidance from the regulatory agencies. Only the regulatory agencies can make a final determination of jurisdictional boundaries.

The Northerly and Southerly Off Site Road Improvement and Use Areas are located within Sections 6, 7, 18, 22, 27, 28, 32, and 33, Township 4 South, Range 3 West, as well as Sections 19, 30, and 31 of Township 3 South and Range 3 West, Section 36 of Township 3 South and Range 4 West, and Section 31 of Township 4 South and Range 4 West of the U.S. Geological Survey (USGS) 7.5" quadrangle map Perris, California, Steele Peak, California, and Sunnymead, California) [Exhibit 2B- Northerly and Southerly Off Sites Vicinity Map]. This area consists of the off-site use of portions of Perris Boulevard, Harley Knox Boulevard, Morgan Street, Placentia Avenue, Indian Avenue, Dunlap Drive, San Jacinto Avenue, Nuevo Road, and Redlands Avenue within the existing paved portion of each roadway, other than a small expansion of roadway at the intersection of Nuevo Road and Dunlap Drive, and the intersection of Dunlap Drive and San Jacinto Avenue to accommodate the use of the area for truck traffic southerly of the Project site.

In November 2019, September 2020, and April 2021, regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the Project site to determine the presence and limits of (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act (CWA), (2) Regional Board jurisdiction pursuant to Section 401 of the CWA and Section 13260 of the California Water Code (CWC), and (3) CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600-1617 of the Fish and Game Code.

Enclosed are 1,250-scale maps [Exhibits 3A through 3C] and 100-scale maps [Exhibits 3D and 3E] that depict the areas of Corps, Regional Board and CDFW jurisdiction. Photographs to document the topography, vegetative communities, and general widths of each of the waters are provided as Exhibit 4.

Corps jurisdiction at the Project site totals 23.27 acres, of which 22.45 acres consist of wetland waters of the U.S. and 0.82 acre consists of non-wetland waters of the U.S. A total of 8,314 linear feet of stream is present. This includes 1,394 linear feet of wetland stream and 6,920 linear feet of ephemeral, non-wetland stream.

Regional Board jurisdiction at the Project site totals 23.311 acres, of which 22.45 acres consist of State wetlands and 0.861 acre consists of non-wetland waters. A total of 9,142 linear feet of stream is present. This includes 1,394 linear feet of wetland stream and 7,748 linear feet of ephemeral, non-wetland stream. Of the total 23.311 acres, approximately 23.27 acres comprise Corps jurisdiction/waters of the U.S. and the remaining 0.041 acre represents Regional Board jurisdiction/waters of the State only.

CDFW jurisdiction at the Project site totals approximately 26.151 acres and includes all areas within Corps and/or Regional Board jurisdiction. Of this total, 22.95 acres consist of riparian stream, and 3.201 acres consist of non-riparian stream. A total of 9,142 linear feet of stream is

present. This includes 2,034 linear feet of riparian stream and 7,108 linear feet of ephemeral, non-riparian stream.

I. METHODOLOGY

Prior to beginning the field delineation, a color aerial photograph, a topographic base map of the property, the previously cited USGS topographic map, and a soils map were examined to determine the locations of potential areas of Corps, Regional Board, and CDFW jurisdiction. Suspected jurisdictional areas were field checked for evidence of stream activity and/or wetland vegetation, soils and hydrology. Where applicable, reference was made to the 2008 Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (OWHM Manual)[2] to identify the width of Corps jurisdiction and suspected federal wetland habitats on the site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual[3] (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement).[4] Reference was also made to the 2019 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (State Board Wetland Definition and Procedures) to identify suspected State wetland habitats.[5] While in the field the potential limits of jurisdiction were recorded with a sub-meter Trimble GPS device in conjunction with a color aerial photograph using visible landmarks.

The National Cooperative Soil Survey (NCSS) has mapped the following soil types as occurring in the general vicinity of the project site and Southerly Off Sites area (Exhibits 5A and 5B):

- Arlington fine sandy loam, deep, 2 to 8 percent slopes (AoC)
- Cieneba sandy loam, 8 to 15 percent slopes, eroded (ChD2);
- Cieneba rocky sandy loam, 8 to 15 percent slopes, eroded (CkD2);
- Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded (CkF2);
- Domino fine sandy loam, saline-alkali (Dt);
- Domino silt loam, saline-alkali (Dv);
- Domino silt loam, strongly saline-alkali (Dw);

[2] U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States
[3] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.
[4] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
[5] State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.

- Exeter sandy loam, 0 to 2 percent slopes (EnA);
- Exeter sandy loam, 2 to 8 percent slopes, eroded (EnC2);
- Exeter sandy loam, deep, 0 to 2 percent slopes (EpA);
- Exeter sandy loam, deep, 2 to 8 percent slopes, eroded (EpC2);
- Exeter very fine sandy loam, 0 to 5 percent slopes (EwB);
- Exeter very fine sandy loam, deep, 0 to 5 percent slopes (EyB);
- Fallbrook sandy loam, 8 to 15 percent slopes, eroded (FaD2);
- Fallbrook fine sandy loam, 2 to 8 percent slopes, eroded (FfC2);
- Greenfield sandy loam, 0 to 2 percent slopes (GyA);
- Greenfield sandy loam, 2 to 8 percent slopes, eroded (GyC2);
- Hanford coarse sandy loam, 0 to 2 percent slopes (HcA);
- Hanford coarse sandy loam, 2 to 8 percent slopes (HcC);
- Hanford coarse sandy loam, 8 to 15 percent slopes, eroded (HcD2);
- Hanford fine sandy loam, 0 to 2 percent slopes (HgA);
- Monserate sandy loam, 8 to 15 percent slopes, eroded (MmD2);
- Pachappa fine sandy loam, 0 to 2 percent slopes (PaA);
- Pachappa fine sandy loam, 2 to 8 percent slopes, eroded (PaC2);
- Ramona sandy loam, 0 to 2 percent slopes (RaA);
- Ramona sandy loam, 0 to 5 percent slopes, severely eroded (RaB3)
- Ramona sandy loam, 5 to 8 percent slopes, eroded (RaC2);
- Ramona very fine sandy loam, 0 to 8 percent slopes, eroded (ReC2);
- Riverwash (RsC);
- Traver loamy find sand, eroded (Tp2);
- Vista coarse sandy loam, 8 to 15 percent slopes, eroded (VsD2);
- Vista rocky coarse sandy loam, 2 to 35 percent slopes, eroded (VtF2);
- Water (W);
- Willows silty clay (Wf);
- Willows silty clay, saline-alkali (Wg);
- Willows silty clay, strongly saline-alkali (Wh); and
- Willows silty clay, deep, strongly saline-alkali (Wn).

II. JURISDICTION

A. Army Corps of Engineers

Pursuant to Section 404 of the CWA, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

> *(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
> *(2) All interstate waters including interstate wetlands;*
> *(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:*
> *(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
> *(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or*
> *(iii) Which are used or could be used for industrial purpose by industries in interstate commerce...*
> *(4) All impoundments of waters otherwise defined as waters of the United States under the definition;*
> *(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;*
> *(6) The territorial seas;*
> *(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.*
> *(8) Waters of the United States do not include prior converted cropland.*[6] *Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.*

[6] The term "prior converted cropland" is defined in the Corps' Regulatory Guidance Letter 90-7 (dated September 26, 1990) as "wetlands which were both manipulated (drained or otherwise physically altered to remove excess water from the land) and cropped before 23 December 1985, to the extent that they no longer exhibit important wetland values. Specifically, prior converted cropland is inundated for no more than 14 consecutive days during the growing season…." [Emphasis added.]

> *Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.*

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

> *...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

1. Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intrastate) waters. On September 12, 1985, the U.S. Environmental Protection Agency (EPA) asserted that Corps jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of "waters of the United States" in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the CWA.

The written opinion notes that the court's previous support of the Corps' expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc*.) was for a wetland that abutted a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

> *In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.*

Therefore, we believe that the court's opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the CWA (regardless of any interstate commerce connection). However, the Corps and EPA have issued a joint memorandum which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

2. Rapanos v. United States and Carabell v. United States

On June 5, 2007, the EPA and Corps issued joint guidance that addresses the scope of jurisdiction pursuant to the CWA in light of the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* ("Rapanos"). The chart below was provided in the joint EPA/Corps guidance.

For project sites that include waters other than Traditional Navigable Waters (TNWs) and/or their adjacent wetlands or Relatively Permanent Waters (RPWs) tributary to TNWs and/or their adjacent wetlands as set forth in the chart below, the Corps must apply the significant nexus standard.

For "isolated" waters or wetlands, the joint guidance also requires an evaluation by the Corps and EPA to determine whether other interstate commerce clause nexuses, not addressed in the SWANCC decision are associated with isolated features on project sites for which a jurisdictional determination is being sought from the Corps.

The agencies will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months)
- Wetlands that directly abut such tributaries

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters
- Significant nexus includes consideration of hydrologic and ecologic factors

3. Wetland Definition Pursuant to Section 404 of the Clean Water Act

The term "wetlands" (a subset of "waters of the United States") is defined at 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...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland Delineation Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Arid West 2016 Regional Wetland Plant List[7][8]);

- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

[7] Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. Arid West 2016 Regional Wetland Plant List. Phytoneuron 2016-30: 1-17. Published 28 April 2016.

[8] Note the Corps also publishes a National List of Plant Species that Occur in Wetlands (Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016.); however, the Regional Wetland Plant List should be used for wetland delineations within the Arid West Region.

- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

B. Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States[9] and waters of the State. Waters of the United States are defined above in Section II.A and waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code 13050[e]).

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. Clean Water Act Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

1. State Wetland Definition

The State Board Wetland Definition and Procedures define an area as wetland as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.*

[9] Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code or Regulations title 23, section 3831(w)). This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army Corps of Engineers (Corps) to be "waters of the U.S." in an approved jurisdictional determination; "waters of the U.S." identified in an aquatic resource report verified by the Corps upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of "waters of the U.S." or any current or historic federal regulation defining "waters of the U.S." under the federal Clean Water Act.

The following wetlands are waters of the State:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;*[10] *and*
3. *Artificial wetlands*[11] *that meet any of the following criteria:*

a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
b. Specifically identified in a water quality control plan as a wetland or other water of the state;
c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):

i. Industrial or municipal wastewater treatment or disposal,
ii. Settling of sediment,
iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
iv. Treatment of surface waters,
v. Agricultural crop irrigation or stock watering,
vi. Fire suppression,
vii. Industrial processing or cooling,
viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
ix. Log storage,

[10] "Created by modification of a surface water of the state" means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.
[11] Artificial wetlands are wetlands that result from human activity.

x. Treatment, storage, or distribution of recycled water, or
xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
xii. Fields flooded for rice growing.[12]

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

C. California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1617 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a stream (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW also defines a stream as "a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators."

It is important to note that the Fish and Game Code defines fish and wildlife to include: all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

[12] Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board's authority to issue or waive waste discharge requirements or take other actions as applicable.

III. RESULTS

The majority of the Project site is situated between Ramona Expressway to the north and Nuevo Road to the south. The San Jacinto River and agricultural land occur to the east. Open space and rock outcrops occur to the west with a residential development beyond. Based on historical aerial photography dating back to the 1960s, the Project site has been developed for agricultural uses resulting in extensive ground disturbances and hydrologic alterations. Existing conditions have varied over the last few years as the northern half of the Project site has mainly been utilized for agriculture, while the southern half is maintained by regular mowing and disking. Due to the decades of agriculture practices and disturbances throughout the Project site, hydrology has been modified as a result. However, the topography conveys storm flows in a general west to east direction, depending on rainfall amounts, through the site towards the San Jacinto River drainage.

The San Jacinto River is within the southeastern Project boundary and is classified as an ephemeral-to-intermittent drainage, only flowing as the result of storm water, snow melt, and/or nuisance flow from the surrounding areas. It flows in the southwest direction through the southeast Project site and under the Nuevo Road Bridge adjacent to the Eastern Municipal Water District (EMWD) land. The San Jacinto River and adjacent riparian scrub occurs within the southeastern portion of the site. No other blue-line drainages occur within the Study area, but the Project site does support non-vegetated earthen ephemeral drainages.

The northerly and southerly off-site portion of the Project occurs between Nuevo Road to the north, San Jacinto Avenue to the south, Dunlap Drive to the east, and Redlands Avenue to the west, as well as portions of Perris Boulevard, Harley Knox Boulevard, Morgan Street, Placentia Avenue, Indian Avenue, and consists of the use of these existing roadways for truck traffic. The Project would result in the use of existing roadways, which are generally paved. There will only be two areas totaling 0.37-acre that would require additional road improvement to allow for truck traffic. These areas are located at the intersection of Nuevo Road and Dunlap Drive, and at the intersection of Dunlap Drive and San Jacinto Avenue. Improvements will be limited to the 0.37-acre area needed for truck use of each roadway.

A summary of jurisdiction associated with the Project site is discussed below.

A. Corps Jurisdiction

Corps jurisdiction at the Project site totals 23.27 acres, of which 22.45 acres consist of federal wetland waters of the U.S. and 0.82 acre consists of non-wetland waters of the U.S. A total of 8,314 linear feet of stream is present. This includes 1,394 linear feet of wetland stream and 6,920 linear feet of ephemeral, non-wetland stream.

Corps jurisdiction is limited to eight features, referenced herein as the San Jacinto River, Disturbed Alkali Playa, and Drainages A-F. These features are considered ephemeral-to-intermittent features that are subject to Corps jurisdiction under Section 404 of the CWA.

The Project site also contains two roadside ditches and two erosional features. The ditches were excavated wholly in and drain only upland areas and the erosional features lack an OHWM and are characterized by infrequent duration flow. As these features do not carry a relatively permanent flow of water, they are not subject to Corps jurisdiction under Section 404 of the CWA.

A graphic depicting the limits of Corps jurisdiction is provided as Exhibit 3A and site photographs are provided as Exhibit 4. Table 1 below summarizes Corps jurisdiction at the Project site, followed by a description of each feature.

Table 1: Corps Jurisdiction

Drainage Name	Corps Non-Wetland Waters (Acres)	Corps Wetland Waters (Acres)	Total Corps Jurisdiction (Acres)	Total Length (Linear Feet)
Waters of the U.S.				
San Jacinto River	0	1.15	1.15	1,394
Disturbed Alkali Playa	0	21.30	21.30	N/A
Drainage A	0.06	0	0.06	640
Drainage B	0.29	0	0.29	1,482
Drainage C	0.16	0	0.16	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.27	0	0.27	2,625
TOTAL	**0.82**	**22.45**	**23.27**	**8,314**

San Jacinto River

Corps jurisdiction associated with the San Jacinto River totals 1.15 acres, all of which consist of wetland waters of the U.S. A total of 1,394 linear feet of stream is present.

The San Jacinto River is an ephemeral-to-intermittent stream entering the Project in the southern portion of the site along its eastern boundary. The San Jacinto River flows from northeast to southwest across the Project for approximately 1,394 feet before exiting the Project site beneath Nuevo Road. The drainage exhibits an OHWM approximately 75 feet wide as evidenced by the presence of water marks, sediment deposits, and debris.

Vegetation within and along the banks of the San Jacinto River is primarily dominated with riparian species including black willow (*Salix gooddingii*), tamarisk (T*amarix* ssp.), and mulefat (*Baccharis salicifolia*), with herbaceous species including common spikerush (*Eleocharis palustris*) and toothed dock (*Rumex dentatus*). Non-native species such as summer mustard, foxtail barley, and annual brome grasses are also dominant along the banks of the river.

Based on the presence of a restrictive layer preventing penetration of the upper 12 inches, a soil profile was not obtainable. However, the area is mapped as containing Riverwash and saline-alkali silty clay soils and meets the indicators for wetland hydrology. In addition, areas within and adjacent to the channel support a prevalence of riparian/wetland vegetation; therefore, hydric soils are assumed present.

<u>Disturbed Alkali Playa</u>

Corps jurisdiction associated with Disturbed Alkali Playa totals 21.30 acres, all of which consist of wetland waters of the U.S. This feature is within the historical floodplain of the San Jacinto River and exhibits sign of temporary inundation during the wet season as evidenced by the presence of surface soil cracks during the dry season and impenetrable clay soils. This feature contains high concentrations of alkali salts and is currently mapped by the NCSS as containing (Wn) - *Willows silty clay, deep, strongly saline alkali* soils.

While decades of agriculture practices and disturbances throughout the site have modified onsite conditions, site topography continues to convey storm flows in a general west to east direction, depending on rainfall amounts, through the site towards the San Jacinto River. Since this playa is both adjacent to, and hydrologically connected to, the San Jacinto River, it is subject to Corps jurisdiction under Section 404 of the CWA.

The playa contains a mosaic of patchy Facultative (FAC) or wetter alkali-adapted species, including silverscale saltbush (*Atriplex argentea*), alkali weed (*Cressa truxillensis*), bush seepweed (*Suaeda nigra*), heliotrope (*Heliotropium curassavicum*), alkali mallow (*Malvella leprosa*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), and San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*). Additional non-native species occur in this area as well including foxtail barley (*Hordeum murinum*), summer mustard (*Hirschfeldia incana*), Jimsonweed (*Datura wrightii*), prickly lettuce (*Lactuca serriola*), and doveweed (*Croton*

setiger). Due to the presence of wetland hydrology and alkaline soils, this area meets the criteria for hydric vegetation.

Based on the presence of a restrictive layer preventing penetration of the upper 12 inches, a soil profile was not obtainable. However, the area is mapped as containing silty clay and silty clay strongly saline-alkali soils and meets the indicators for wetland hydrology; therefore, hydric soils are assumed present.

Drainage A

Corps jurisdiction associated with Drainage A totals 0.06 acre, none of which consists of wetland waters of the U.S. A total of 640 linear feet of stream is present.

Drainage A is direct ephemeral tributary to the San Jacinto River. This feature enters the off-site portion of the Project in the south at Pico Road and flows along the south side of Nuevo Road from east to west for approximately 640 feet before discharging into the eastern bank of the San Jacinto River. The drainage exhibits an OHWM ranging from three to five feet wide as evidenced by the presence of water marks, a defined bed and bank, and debris wracks. This feature is an earthen channel with ephemeral characteristics for the majority of its length but does receive irrigation run-off and nuisance flow from the neighboring greenhouse to the south and agriculture fields in the general Project vicinity. Furthermore, EMWD has several pump stations along the south of Nuevo, which may leak or discharge surface or ground water flows into Drainage A. Based on the presence of nuisance flow in the downstream extent of this feature and its direct connection to the river, this feature is subject to Corps jurisdiction pursuant to Section 404 of the CWA.

Vegetation associated with this feature is comprised primarily of non-native upland species, including summer mustard, foxtail barley, and annual brome grasses. Additional species near the confluence with the San Jacinto River include two-three arroyo willow trees and a single tamarisk.

No soils pits were excavated in Drainage A due to a predominance of upland vegetation and ephemeral nature of the drainage.

Drainage B

Corps jurisdiction associated with Drainage B totals 0.29 acre, none of which consists of wetland water of the U.S. A total of 1,482 linear feet of drainage is present.

Drainage B is an ephemeral stream originating in the western portion of the Project site. Drainage B flows from west to east for approximately 1,482 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage B pass into a tributary to the San Jacinto River. The majority of Drainage B has been disturbed and disked away as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits an OHWM ranging from three to 10 feet wide as evidenced by changes in soil characteristics and is unvegetated.

Adjacent upland vegetation is comprised primarily of sparsely distributed Riversidean sage scrub including California buckwheat (*Eriogonum fasciculatum,* UPL), but also includes Rancher's fireweed (*Amsinckia menziesii*), skunk brush (*Rhus trilobata*), summer mustard, giant wild-rye (*Leymus condensatus*), and non-native grasses and herbs.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage C

Corps jurisdiction associated with Drainage C totals 0.16 acre, none of which consists of wetland waters of the U.S. A total of 1,626 linear feet of drainage is present.

Drainage C is an ephemeral drainage originating in the western portion of the Project site. Drainage C flows from west to east for approximately 1,626 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage C pass into a tributary to the San Jacinto River. The majority of Drainage C has been disturbed and disked away and as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits an OHWM ranging from two to 10 feet wide as evidenced by changes in soil characteristics.

Adjacent upland vegetation is comprised primarily of ruderal vegetation that is routinely disked for weed abatement, as was the case during the field study. For areas where vegetation was still discernable, dominant plant species observed include stinknet (*Oncosiphon piluliferum*), puncture vine (*Tribulus terrestris*), London rocket (*Sisymbrium irio*), red-stemmed filaree (*Erodium cicutarium*), cheese weed (*Malva parviflora*), fiddleneck, ripgut grass, red brome, tocalote, Russian thistle, and doveweed. Sparsely distributed Riversidean sage scrub species occurring adjacent to the head waters include California buckwheat, California sagebrush (*Artemisia californica*), and brittlebush (*Encelia farinosa*).

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage D

Corps jurisdiction associated with Drainage D totals 0.01 acre, none of which consists of wetland waters of the U.S., and a total of 70 linear feet of drainage is present.

Drainage D is a disturbed earthen feature located in the northern portion of the site that conveys brief ephemeral flow during high storm events. This feature originates at an outfall pipe that conveys run-off from the Ramona Expressway and extends in a southeasterly direction for approximately 70 linear feet, at which point, flow sign is no longer discernible. During wet years, this feature ultimately drains to the San Jacinto River. Drainage D exhibits an OHWM averaging four (4) feet wide as evidenced by changes in soil characteristics and defined channel banks. This feature was completely dry during our field investigation and is generally unvegetated. Upland vegetation adjacent to this feature includes Russian thistle and disturbed buckwheat scrub.

Areas south of this feature have been disturbed as part of ongoing dry farming activities. During the September 2020 site visit, GLA biologists observed a watermelon (*Citrullus lanatus*) agriculture field being actively managed on the Project site. Agriculture practices have been noted on the Project site historically and are subject to varying crop types and acreages.
No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage E

Corps jurisdiction associated with Drainage E totals 0.03 acre, none of which consists of wetland waters of the U.S. A total of 477 linear feet of drainage is present.

Drainage E is an ephemeral feature entering the Project via a dirt access road adjacent to Ramona Expressway. Drainage E flows southeasterly for approximately 477 feet, at which point, flow sign is no longer discernible. The majority of this feature been disturbed as part of ongoing dry farming activities on site was completely dry during our field investigation. During wet years, this feature ultimately drains to the San Jacinto River. Drainage E exhibits an OHWM ranging from one to six feet wide and lacks riparian vegetation. This feature contains ruderal species such as Russian thistle, summer mustard, and disturbed buckwheat scrub.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage F

Corps jurisdiction associated with Drainage F totals 0.27 acre, none of which consists of wetland waters of the U.S. A total of 2,625 linear feet of stream is present.

Drainage F is comprised of a series of two ephemeral features that enter the northwestern portion of the Project site and extend in a general westerly direction from for a collective 2,625 linear feet before crossing a dirt road and exiting the Project site at its eastern boundary. This feature conveys run-off from the Ramona Expressway and ultimately drains into the San Jacinto River off-site. The drainage exhibits an OHWM ranging from two to six feet wide as evidenced by the presence of a defined bed and bank, debris wracks, and changes in soil characteristics.

The majority of this feature is unvegetated with a well-drained, sandy loam substrate and was completely dry during our field investigation. This feature contains ruderal species such as Russian thistle, black mustard, and disturbed buckwheat scrub.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

B. Regional Water Quality Control Board Jurisdiction

Regional Board jurisdiction at the Project site totals 23.311 acres, of which 22.45 acres consist of State wetlands and 0.861 acre consists of non-wetland waters. A total of 9,142 linear feet of stream is present. This includes 1,394 linear feet of wetland stream and 7,748 linear feet of ephemeral, non-wetland stream. Of the total 23.311 acres, approximately 23.27 acres comprise Corps jurisdiction/waters of the U.S. and the remaining 0.041 acre represents Regional Board jurisdiction/waters of the State only.

Regional Board jurisdiction includes 12 features, referenced herein as the San Jacinto River, Disturbed Alkali Playa, Ditch A, Drainages A-H, and Ditch 1. The San Jacinto River, Disturbed Alkali Playa, and Drainages A-F are considered waters of the U.S. and are subject to Corps jurisdiction under Section 404 of the CWA. Since these features are considered waters of the U.S., they are also subject to Regional Board jurisdiction under Section 401 of the CWA.

Ditch A and Ditch 1 are roadside ditches that were excavated wholly in and drains only upland areas and Drainages G and H are erosional features that lack an OHWM and are characterized by infrequent duration flow . As a result, these features do not meet the criteria for regulation under Sections 404 or 401 of the CWA. However, since these features convey surface flow with the potential to support beneficial uses, they are considered to be waters of the State that would be

regulated by the Regional Board pursuant to Section 13260 of the California Water Code (CWC)/the Porter-Cologne Act.

There are also several topographic features in the uplands that do not convey flows or support any beneficial uses identified in the Regional Board Basin Plan. These features do not exhibit an OHWM and do not support a defined bed, bank, and/or channel with the potential to support aquatic resources. These features are not considered waters of the State and would not be regulated pursuant to Section 13260 of the CWC.

Graphics depicting the limits of Regional Board jurisdiction are provided as Exhibits 3B and 3D, and site photographs are provided as Exhibit 4. Table 1 below summarizes Regional Board jurisdiction at the Project site, followed by a description of each feature.

Table 2: Regional Board Jurisdiction

Drainage Name	Regional Board Non-Wetland Waters (Acres)	Regional Board State Wetland Waters (Acres)	Total Regional Board Jurisdiction (Acres)	Total Length (Linear Feet)
Waters of the U.S.				
San Jacinto River	0	1.15	1.15	1,394
Disturbed Alkali Playa	0	21.30	21.30	N/A
Drainage A	0.06	0	0.06	640
Drainage B	0.29	0	0.29	1,482
Drainage C	0.16	0	0.16	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.27	0	0.27	2,625
Sub-Total	**0.82**	**22.45**	**23.27**	**8,314**
Waters of the State Only				
Ditch A	0.02	0	0.02	214
Drainage G	0.01	0	0.01	300
Drainage H	0.001	0	0.001	29
Ditch 1	0.01	0	0.01	285
Sub-Total	**0.041**	**0**	**0.041**	**828**
TOTAL*	**0.861**	**22.45**	**23.311**	**9,142**

*Total may not equal sum of individual parts due to rounding error

Waters of the U.S.

San Jacinto River

Regional Board jurisdiction associated with the San Jacinto River totals 1.15 acres, all of which is State wetland. A total of 1,394 linear feet of streambed is present. This feature is considered a

water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

The San Jacinto River is an ephemeral-to-intermittent stream entering the Project in the southern portion of the site along its eastern boundary. The San Jacinto River flows from northeast to southwest across the Project for approximately 1,394 feet before exiting the Project site beneath Nuevo Road. The drainage exhibits an OHWM approximately 75 feet wide as evidenced by the presence of water marks, sediment deposits, and debris.

Vegetation within and along the banks of the San Jacinto River is primarily dominated with riparian species including black willow, tamarisk, and mulefat, with herbaceous species including common spikerush and toothed dock. Non-native species such as foxtail barley, summer mustard, Jimsonweed, and doveweed are also dominant along the banks of the river.

Based on the presence of a restrictive layer preventing penetration of the upper 12 inches, a soil profile was not obtainable. However, the area is mapped as containing Riverwash and saline-alkali silty clay soils and meets the indicators for wetland hydrology. In addition, areas within and adjacent to the channel support a prevalence of riparian/wetland vegetation; therefore, hydric soils are assumed present.

Disturbed Alkali Playa

Regional Board jurisdiction associated with Disturbed Alkali Playa totals approximately 21.30 acres, all of which is State wetland. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

This feature is within the historical floodplain of the San Jacinto River and exhibits sign of temporary inundation during the wet season as evidenced by the presence of surface soil cracks during the dry season and impenetrable clay soils. This feature contains high concentrations of alkali salts and is currently mapped by the NCSS as containing (Wn) - *Willows silty clay, deep, strongly saline alkali* soils.

While decades of agriculture practices and disturbances throughout the site have modified onsite conditions, site topography continues to convey storm flows in a general west to east direction, depending on rainfall amounts, through the site towards the San Jacinto River. Since this playa is both adjacent to, and hydrologically connected to, the San Jacinto River, it is subject to both Corps and Regional Board jurisdiction pursuant to Sections 404 and 401 of the CWA.

The playa contains a mosaic of patchy FAC or wetter alkali-adapted species, including silverscale saltbush, alkali weed, bush seepweed, heliotrope, alkali mallow, smooth tarplant, and

San Jacinto Valley crownscale. Additional non-native species occur in this area as well including foxtail barley, summer mustard, Jimsonweed, and doveweed. Due to the presence of wetland hydrology and alkaline soils, this area meets the criteria for hydric vegetation. Based on the presence of a restrictive layer preventing penetration of the upper 12 inches, a soil profile was not obtainable. However, the area is mapped as containing silty clay and silty clay strongly saline-alkali soils and meets the indicators for wetland hydrology; therefore, hydric soils are assumed present.

Drainage A

Regional Board jurisdiction associated with Drainage A totals 0.06 acre, none of which consists of State wetlands. A total of 640 linear feet of streambed is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdiction under Sections 404 and 401 of the CWA.

Drainage A is a direct ephemeral tributary to the San Jacinto River. This feature enters the off-site portion of the Project in the south at Pico Road and flows along the south side of Nuevo Road from east to west for approximately 640 feet before discharging into the eastern bank of the San Jacinto River. The drainage exhibits an OHWM ranging from three to five feet wide as evidenced by the presence of water marks, a defined bed and bank, and debris wracks. This feature is an earthen channel with ephemeral characteristics for the majority of its length but does receive irrigation run-off and nuisance flow from the neighboring greenhouse to the south and agriculture fields in the general Project vicinity. Furthermore, EMWD has several pump stations along the south of Nuevo, which may leak or discharge surface or ground water flows into Drainage A. Based on the presence of nuisance flow in the downstream extent of this feature and its direct connection to the river, this feature is subject to both Corps and Regional Board jurisdictions pursuant to Sections 404 and 401 of the CWA.

Vegetation associated with this feature is comprised primarily of non-native upland species, including summer mustard, foxtail barley, and annual brome grasses. Additional species near the confluence with the San Jacinto River include two-three arroyo willow trees and a single tamarisk.

No soils pits were excavated in Drainage A due to a predominance of upland vegetation and ephemeral nature of the drainage.

Drainage B

Regional Board jurisdiction associated with Drainage B totals 0.29 acre, none of which is State wetland. A total of 1,482 linear feet of drainage is present. This feature is considered a water of

the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

Drainage B is an ephemeral stream originating in the western portion of the Project site. Drainage B flows from west to east for approximately 1,482 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage B pass into a tributary to the San Jacinto River. The majority of Drainage B has been disturbed and disked away as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits slight flow sign ranging from three to 10 feet wide.

Adjacent upland vegetation is comprised primarily of sparsely distributed Riversidean sage scrub including California buckwheat, but also includes Rancher's fireweed, skunk brush, summer mustard, giant wild-rye, and non-native grasses and herbs.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage C

Regional Board jurisdiction associated with Drainage C totals 0.16 acre, none of which is State wetland. A total of 1,626 linear feet of drainage is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

Drainage C is an ephemeral drainage originating in the western portion of the Project site. Drainage C flows from west to east for approximately 1,626 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage C pass into a tributary to the San Jacinto River. A majority of Drainage C has been disturbed and disked away and as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits slight flow sign ranging from two to 10 feet wide and lacks vegetation.

Adjacent upland vegetation is comprised primarily of ruderal vegetation that is routinely disked for weed abatement, as was the case during the field study. For areas where vegetation was still discernable, dominant plant species observed include stinknet, puncture vine , London rocket, red-stemmed filaree, cheese weed, fiddleneck, ripgut grass, red brome, tocalote, Russian thistle, and doveweed. Sparsely distributed Riversidean sage scrub species occurring adjacent to the head waters include California buckwheat, California sagebrush, and brittlebush.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage D

Regional Board jurisdiction associated with Drainage D totals 0.01 acre, none of which is State wetland, and a total of 70 linear feet of drainage is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

Drainage D is a disturbed earthen feature located in the northern portion of the site that conveys brief ephemeral flow during high storm events. This feature originates at an outfall pipe that conveys run-off from the Ramona Expressway and extends in a southeasterly direction for approximately 70 linear feet, at which point, flow sign is no longer discernible. This feature exhibits slight flow sign averaging four (4) feet wide was completely dry during our field investigation. Upland vegetation adjacent to this feature includes Russian thistle and disturbed buckwheat scrub.

Areas south of this feature have been disturbed as part of ongoing dry farming activities. During the September 2020 site visit, GLA biologists observed a watermelon agriculture field being actively managed on the Project site. Agriculture practices have been noted on the Project site historically and are subject to varying crop types and acreages.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage E

Regional Board jurisdiction associated with Drainage E totals 0.03 acre, none of which is State wetland. A total of 477 linear feet of drainage is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

Drainage E is an ephemeral feature entering the Project via a dirt access road adjacent to Ramona Expressway. Drainage E flows southeasterly for approximately 477 feet, at which point, flow sign is no longer discernible. A majority of this feature been disturbed as part of ongoing dry farming activities on site was completely dry during our field investigation. Drainage E exhibits flow sign ranging from one to six feet wide and lacks riparian vegetation. This feature contains ruderal species such as Russian thistle, summer mustard, and disturbed buckwheat scrub.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage F

Regional Board jurisdiction associated with Drainage F totals 0.27 acre, none of which is State wetland. A total of 2,625 linear feet of stream is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

Drainage F is comprised of a series of two ephemeral features that enter the northwestern portion of the Project site and extend in a general westerly direction from for a collective 2,625 linear feet before crossing a dirt road and exiting the Project site at its eastern boundary. This feature conveys run-off from the Ramona Expressway and ultimately drains into the San Jacinto River off-site. The drainage exhibits an OHWM ranging from two to six feet wide as evidenced by the presence of a defined bed and bank, debris wracks, and changes in soil characteristics.

A majority of this feature is unvegetated with a well-drained, sandy loam substrate and was completely dry during our field investigation. This feature contains ruderal species such as Russian thistle, black mustard, and disturbed buckwheat scrub.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Waters of the State Only

Ditch A

Regional Board jurisdiction associated with Ditch A totals 0.02 acre and 214 linear feet, none of which is State wetland. This feature is considered a water of the State that is subject to Section 13260 of the California Water Code (CWC)/the Porter-Cologne Act.

Ditch A enters the off-site portion of the Project site at Nuevo Rd. along the east side of Pico Road and runs south for approximately 214 linear feet before exiting the off-site Project area. This feature is an ephemeral earthen roadside ditch approximately five (5) feet wide and ultimately discharges onto the EMWD property, located off-site. Ditch A receives irrigation and road run-off from the surrounding areas and was completely dry during our field investigation. Vegetation adjacent to this feature is comprised primarily of non-native grasses and herbs similar to those described above.

Drainage G

Regional Board jurisdiction associated with Drainage G totals 0.01 acre and 300 linear feet, none of which is State wetland. This feature is considered a water of the State that is subject to Section 13260 of the CWC/the Porter-Cologne Act.

Drainage G is an earthen ephemeral drainage that starts at an outfall pipe located in the off-site northwestern portion of the Project area. This features begins north of the EMWD water tank located on top of a hill and runs along the southern side of a gravel access road for approx. 300 ft downslope before disappearing into the gravel road that separates EMWD from an existing school site. This feature averages two feet wide as evidenced by the presence of bed and bank and does not connect to any downstream feature. Drainage G was completely dry during our field investigation.

Upland vegetation is comprised primarily of disturbed Riversidean sage scrub including California buckwheat and coyote brush (*Baccharis pilularis*), but also includes Rancher's fireweed, skunk brush, summer mustard, and non-native grasses and herbs.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage H

Regional Board jurisdiction associated with Drainage H totals 0.001 acre and 29 linear feet, none of which is State wetland. This feature is considered a water of the State that is subject to Section 13260 of the CWC/the Porter-Cologne Act.

Drainage H is partially earthen ephemeral standard two-foot wide v-ditch located in the northwestern off-site portion of the Project area. This feature exists on the north side of an EMWD gravel access road and extends down slope for approximately 29 linear feet before leaving the off-site portion of the Project area. This feature ultimately dissipates into flat uplands and does not connect to any downstream feature and was completely dry during our field investigation.

Vegetation associated with this feature includes disturbed Riversidean sage scrub including California buckwheat, coyote brush, and non-native grasses and herbs.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Ditch 1

Regional Board jurisdiction associated with Ditch 1 totals 0.01 acre and 285 linear feet, none of which is State wetland. This feature is considered a water of the State that is subject to Section 13260 of the California Water Code (CWC)/the Porter-Cologne Act.

Ditch 1 enters the southerly off-site portion of the Project site through a two-foot wide corrugated metal pipe at the intersection of Dunlap Drive and Nuevo Road. The ditch extends across the site for 285 linear feet adjacent to the eastern road edge of Dunlap Drive before flowing
offsite and entering the underground storm drain system.

The roadside ditch is approximately two feet wide and 48 feet within the Project area. The roadside ditch is ephemeral and generally unvegetated, although the upper bank of the ditch contains disturbed/ruderal vegetation such as brome grass (*Bromus* sp.), mustard (*Brassica nigra*), and stinknet.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

C. CDFW Jurisdiction

CDFW jurisdiction at the Project site totals approximately 26.151 acres and includes all areas within Corps and/or Regional Board jurisdiction. Of this total, 22.95 acres consist of riparian stream, and 3.201 acres consist of non-riparian stream. A total of 9,142 linear feet of stream is present. This includes 2,034 linear feet of riparian stream and 7,108 linear feet of ephemeral, non-riparian stream.

The Project site contains 12 drainage features, referenced herein as the San Jacinto River, Disturbed Alkali Playa, Ditch A, Drainages A-H, and Ditch 1. Drainages A through H, Ditch A, and Ditch 1 are ephemeral drainage features that accept urban flow and storm water runoff from the surrounding areas. The San Jacinto River is an ephemeral-to-intermittent stream and is hydrologically connected to the Disturbed Alkali Playa, located just west of the river. These features exhibit flow sign with the presence of a bed and bank and/or contain riparian habitat that is associated with the San Jacinto River. As such, these features are subject to CDFW jurisdiction under Section 1602 of the Fish and Game Code.

There are also several topographic features in the uplands that do not exhibit a defined bed, bank, and/or channel with the potential to support aquatic resources. These features are not rivers,

streams, or lakes and as such, are not subject to CDFW jurisdiction under Section 1602 of the Fish and Game Code.

Graphics depicting the limits of CDFW jurisdiction are provided as Exhibits 3C and 3E, and site photographs are provided as Exhibit 4. Table 1 below summarizes CDFW jurisdiction at the Project site, followed by a description of each feature.

Table 3: CDFW Jurisdiction

Drainage Name	Total CDFW Non-Riparian Stream (Acres)	Total CDFW Riparian Stream (Acres)	Total CDFW Jurisdiction (Acres)	Total Length (Linear Feet)
San Jacinto River	2.14	1.51	3.65	1,394
Disturbed Alkali Playa	0	21.30	21.30	N/A
Drainage A	0.07	0.14	0.21	640
Ditch A	0.02	0	0.02	214
Drainage B	0.37	0	0.37	1,482
Drainage C	0.22	0	0.22	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.31	0	0.31	2,625
Drainage G	0.02	0	0.02	300
Drainage H	0.001	0	0.001	29
Ditch 1	0.01	0	0.01	285
Total	**3.201**	**22.95**	**26.151**	**9,142**

San Jacinto River

CDFW jurisdiction associated with the San Jacinto River totals 3.65 acres, of which, 1.51 acres consist of riparian stream, and 2.14 acres consist of non-riparian stream. A total of 1,394 linear feet of stream is present. .

The San Jacinto River is an ephemeral-to-intermittent stream entering the Project in the southern portion of the site along its eastern boundary. The San Jacinto River flows from northeast to southwest across the Project for approximately 1,394 feet before exiting the Project site beneath Nuevo Road.

Vegetation within and along the banks of the San Jacinto River is primarily dominated with riparian species including black willow, tamarisk, and mulefat, with herbaceous species including common spikerush and toothed dock. Non-native species such as summer mustard, foxtail barley, and annual brome grasses are also dominant along the banks of the river.

Disturbed Alkali Playa

CDFW jurisdiction associated with Disturbed Alkali Playa totals approximately 21.30 acres, all of which is riparian.

This feature is within the historical floodplain of the San Jacinto River and exhibits sign of temporary inundation during the wet season as evidenced by the presence of surface soil cracks during the dry season and impenetrable clay soils. This feature contains high concentrations of alkali salts and is currently mapped by the NCSS as containing (Wn) - *Willows silty clay, deep, strongly saline alkali* soils.

While decades of agriculture practices and disturbances throughout the site have modified onsite conditions, site topography continues to convey storm flows in a general west to east direction, depending on rainfall amounts, through the site towards the San Jacinto River. Since this playa is both adjacent to, and hydrologically connected to, the San Jacinto River, it is subject to CDFW jurisdiction pursuant to Section 1602 of the Fish and Game Code.

The playa contains a mosaic of patchy alkali-adapted species, including silverscale saltbush, alkali weed, bush seepweed, heliotrope, alkali mallow, smooth tarplant, and San Jacinto Valley crownscale. Additional non-native species occur in this area as well including foxtail barley, summer mustard, Jimsonweed, prickly lettuce, and doveweed.

Drainage A

CDFW jurisdiction associated with Drainage A totals 0.21 acre, of which, 0.14 acres is riparian and 0.07 is non-riparian. A total of 640 linear feet of stream is present.

Drainage A is direct ephemeral tributary to the San Jacinto River. This feature enters the off-site portion of the Project in the south at Pico Road and flows along the south side of Nuevo Road from east to west for approximately 640 feet before discharging into the eastern bank of the San Jacinto River. Flow sign averages five feet wide as evidenced by the presence of water marks, changes in soil characteristics, and a defined bed and bank. This feature is an earthen channel with ephemeral characteristics for the majority of its length but does receive irrigation run-off and nuisance flow from the neighboring greenhouse to the south and agriculture fields in the general Project vicinity. Furthermore, EMWD has several pump stations along the south of Nuevo, which may leak or discharge surface or ground water flows into Drainage A.

Vegetation associated with this feature is comprised primarily of non-native upland species, including summer mustard, foxtail barley, and annual brome grasses. Additional species near the

confluence with the San Jacinto River include two-three arroyo willow trees and a single tamarisk.

Ditch A

CDFW jurisdiction associated with Ditch A totals 0.02 acre, none of which is riparian. A total of 214 linear feet of drainage is present.

Ditch A enters the off-site portion of the Project site at Nuevo Rd. along the east side of Pico Rd. and runs south for approximately 126 linear feet before exiting the off-site Project area. This feature is an ephemeral earthen roadside ditch approximately five (5) feet wide and ultimately discharges onto the EMWD property, located off-site. Ditch A receives irrigation and road run-off from the surrounding areas and was completely dry during our field investigation. Vegetation adjacent to this feature is comprised primarily of non-native grasses and herbs.

Drainage B

CDFW jurisdiction associated with Drainage B totals 0.37 acre, none of which is riparian. A total of 1,482 linear feet of drainage is present.

Drainage B is an ephemeral stream originating in the western portion of the Project site. Drainage B flows from west to east for approximately 1,482 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage B pass into a tributary to the San Jacinto River. A majority of Drainage B has been disturbed and disked away as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits slight flow sign ranging from three to 20 feet wide.

Adjacent upland vegetation is comprised primarily of sparsely distributed Riversidean sage scrub including California buckwheat, but also includes Rancher's fireweed, skunk brush, summer mustard, giant wild-rye, and non-native grasses and herbs.

Drainage C

CDFW jurisdiction associated with Drainage C totals 0.22 acre, none of which is riparian. A total of 1,626 linear feet of drainage is present.

Drainage C is an ephemeral drainage originating in the western portion of the Project site. Drainage C flows from west to east for approximately 1,626 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage C pass into a tributary to the San Jacinto River. A majority of Drainage C has been disturbed and disked away and as part of ongoing dry

farming activities on site and was completely dry during our field investigation. The drainage exhibits slight flow sign ranging from two to 20 feet wide and lacks vegetation.

Adjacent upland vegetation is comprised primarily of ruderal vegetation that is routinely disked for weed abatement, as was the case during the field study. For areas where vegetation was still discernable, dominant plant species observed include stinknet, puncture vine, London rocket, red-stemmed filaree, cheese weed, fiddleneck, ripgut grass, red brome, tocalote, Russian thistle, and doveweed. Sparsely distributed Riversidean sage scrub species occurring adjacent to the head waters include California buckwheat, California sagebrush, and brittlebush.

Drainage D

CDFW jurisdiction associated with Drainage D totals 0.01 acre, none of which is riparian, and a total of 70 linear feet of drainage is present.

Drainage D is a disturbed earthen feature located in the northern portion of the site that conveys brief ephemeral flow during high storm events. This feature originates at an outfall pipe that conveys run-off from the Ramona Expressway and extends in a southeasterly direction for approximately 70 linear feet, at which point, flow sign is no longer discernible. This feature exhibits slight flow sign averaging four feet wide was completely dry during our field investigation. Upland vegetation adjacent to this feature includes Russian thistle and disturbed buckwheat scrub.

Areas south of this feature have been disturbed as part of ongoing dry farming activities. During the September 2020 site visit, GLA biologists observed a watermelon agriculture field being actively managed on the Project site. Agriculture practices have been noted on the Project site historically and are subject to varying crop types and acreages.

Drainage E

CDFW jurisdiction associated with Drainage E totals 0.03 acre, none of which is riparian. A total of 477 linear feet of drainage is present.

Drainage E is an ephemeral feature entering the Project via a dirt access road adjacent to Ramona Expressway. Drainage E flows southeasterly for approximately 477 feet, at which point, flow sign is no longer discernible. A majority of this feature been disturbed as part of ongoing dry farming activities on site was completely dry during our field investigation. Drainage E exhibits flow sign ranging from one to six feet wide and lacks riparian vegetation. This feature contains ruderal species such as Russian thistle, black mustard, and disturbed buckwheat scrub.

Drainage F

CDFW jurisdiction associated with Drainage F totals 0.31 acre, none of which is riparian. A total of 2,625 linear feet of stream is present.

Drainage F is comprised of a series of two ephemeral features that enter the northwestern portion of the Project site and extend in a general westerly direction from for a collective 2,625 linear feet before crossing a dirt road and exiting the Project site at its eastern boundary. This feature conveys run-off from the Ramona Expressway and ultimately drains into the San Jacinto River off-site. The drainage exhibits flow sign ranging from two to 10 feet wide as evidenced by the presence of a defined bed and bank, debris wracks, and changes in soil characteristics. A majority of this feature is unvegetated with a well-drained, sandy loam substrate and was completely dry during our field investigation. This feature contains ruderal species such as Russian thistle, black mustard, and disturbed buckwheat scrub.

Drainage G

CDFW jurisdiction associated with Drainage G totals 0.01 acre, none of which is riparian. A total of 300 linear feet of drainage is present.

Drainage G is an earthen ephemeral drainage that starts at an outfall pipe located in the off-site northwestern portion of the Project area. This features begins north of the EMWD water tank located on top of a hill and runs along the southern side of a gravel access road for approx. 300 ft downslope before disappearing into the gravel road that separates EMWD from an existing school site. This feature exhibits flow sign ranging from two to four feet wide as evidenced by top of bank and does not connect to any downstream feature. Drainage G was completely dry during our field investigation.

Upland vegetation is comprised primarily of disturbed Riversidean sage scrub including California buckwheat and coyote brush, but also includes Rancher's fireweed, skunk brush, summer mustard, and non-native grasses and herbs.

Drainage H

CDFW jurisdiction associated with Drainage H totals 0.001 acre, none of which is riparian. Approximately 29 linear feet of drainage is present.

Drainage H is partially earthen ephemeral standard two-foot wide v-ditch located in the northwestern off-site portion of the Project area. This feature exists on the north side of an EMWD gravel access road and extends down slope for approximately 29 linear feet before

leaving the off-site portion of the Project area. This feature ultimately dissipates into flat uplands and does not connect to any downstream feature and was completely dry during our field investigation.

Vegetation associated with this feature includes disturbed Riversidean sage scrub including California buckwheat, coyote brush, and non-native grasses and herbs.

Ditch 1

CDFW jurisdiction associated with Ditch 1 totals 0.01 acre and 285 linear feet, none of which is riparian.

Ditch 1 enters the southerly off-site portion of the Project site through a two-foot wide corrugated metal pipe at the intersection of Dunlap Drive and Nuevo Road. The ditch extends across the site for 285 linear feet adjacent to the eastern road edge of Dunlap Drive before flowing
offsite and entering the underground storm drain system.

The roadside ditch is approximately two feet wide and 48 feet within the Project area. The roadside ditch is ephemeral and generally unvegetated, although the upper bank of the ditch contains disturbed/ruderal vegetation such as brome grass, mustard, and stinknet

IV. DISCUSSION

Impact Analysis

An analysis of impacts will be performed based upon this delineation and the current project design (or design alternative) upon the client's request. This analysis will be provided as a separate memo and accompanying map.

If you have any questions about this letter report, please contact me at (949) 340-3851 via telephone or at mrasnick@wetlandpermitting.com via email.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

Martin A. Rasnick
Principal/Sr. Regulatory Specialist

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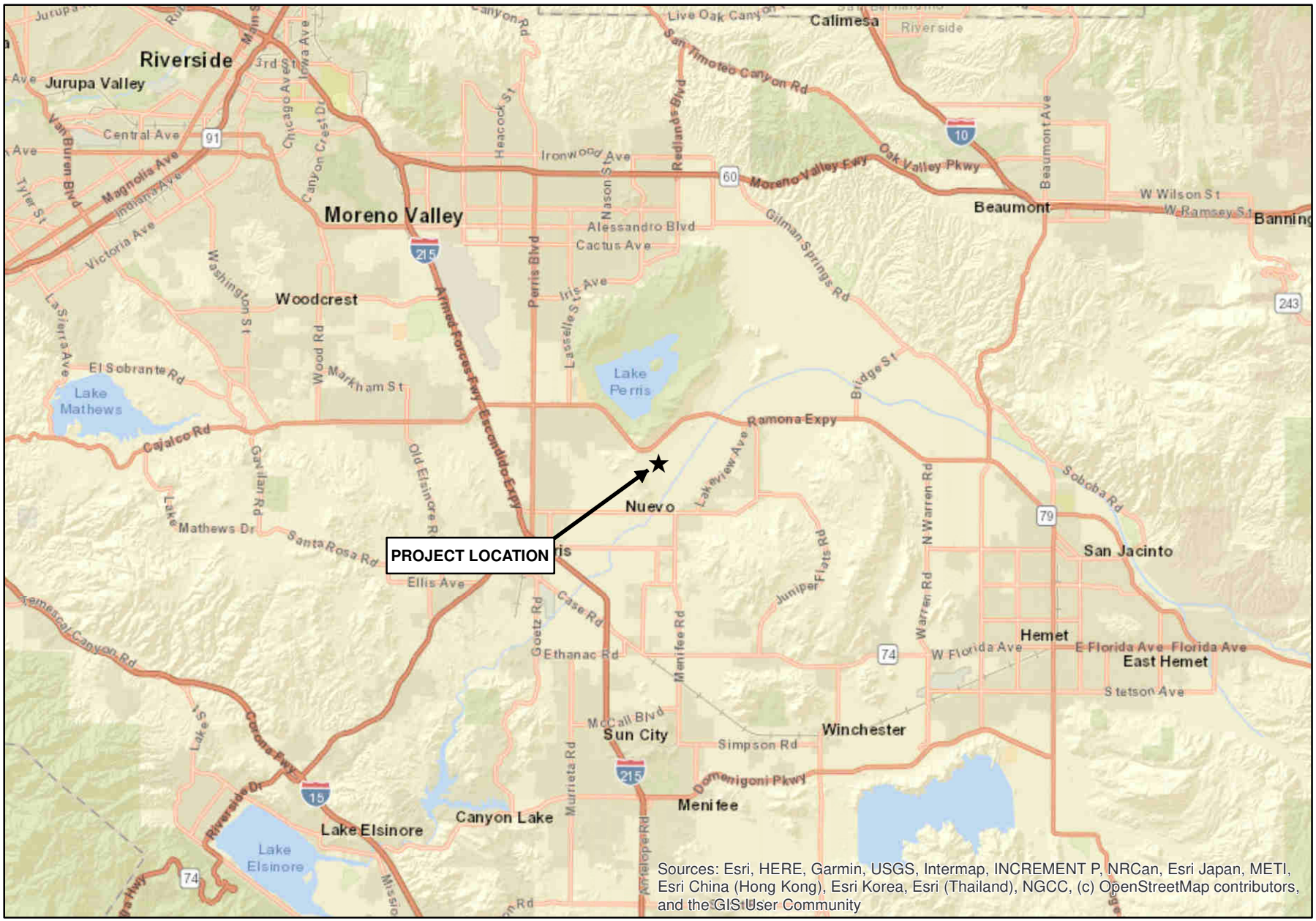

Source: ESRI World Street Map

N

0 2 4 8 Miles

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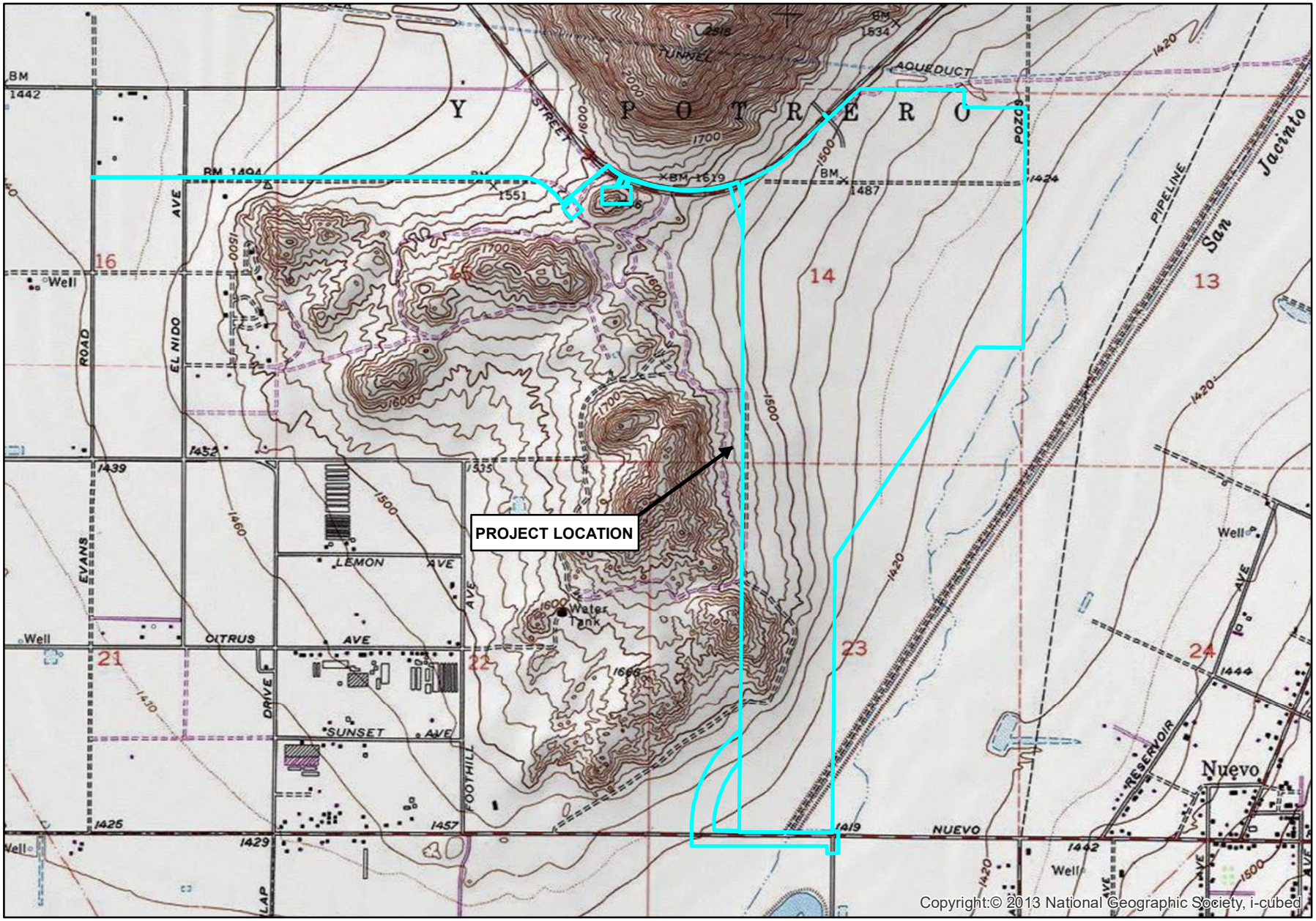
Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



Adapted from USGS Perris, CA quadrangle

N

0 1,000 2,000 4,000 Feet

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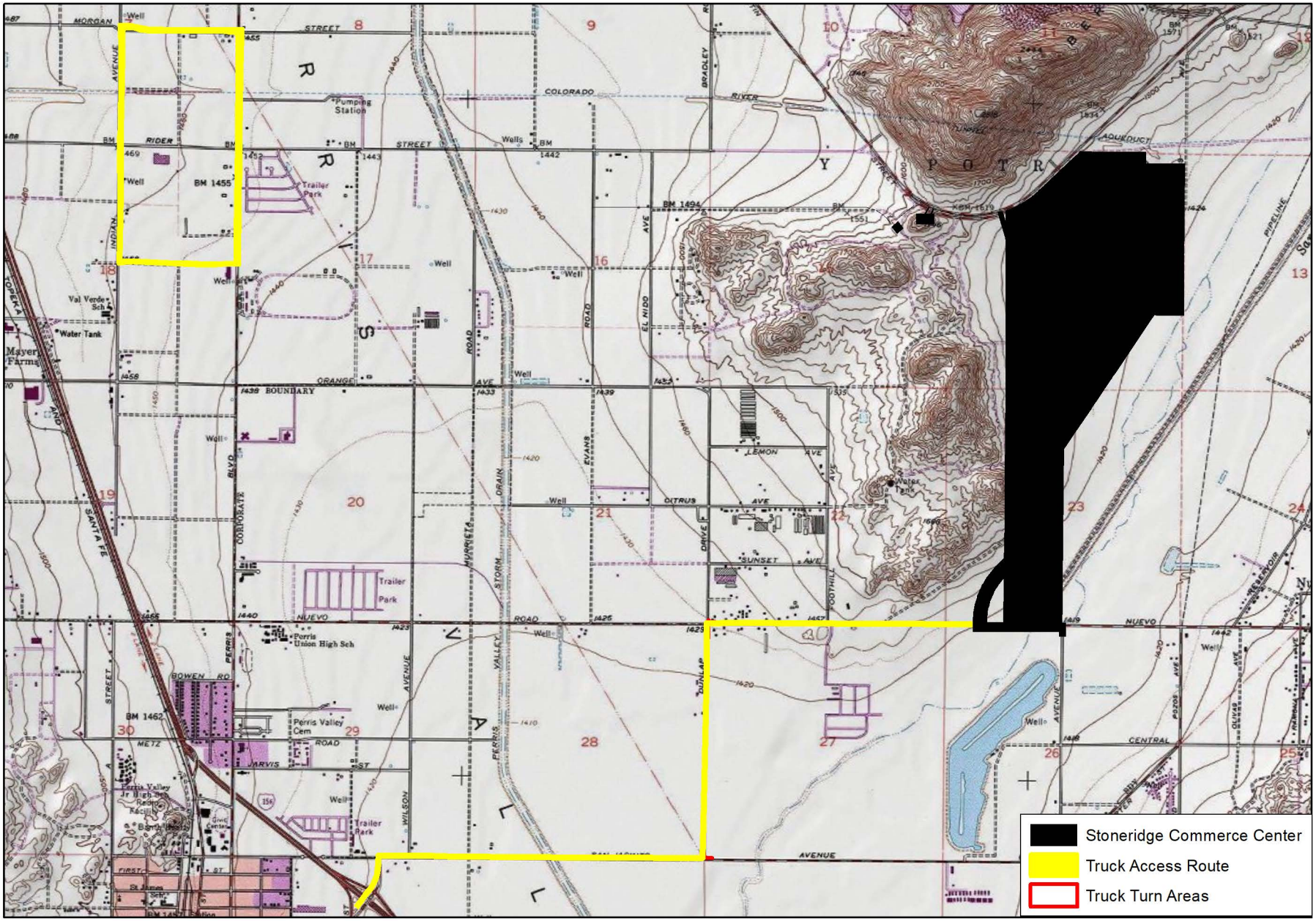
Vicinity Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 2A



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Vicinity Map, Northerly and Southerly Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 2B

Onsite Project Site Boundary

Offsite Project Site Boundary

Non-Wetland Waters of the U. S.

Wetland Waters of the U. S.

3 Width of OHWM in Feet

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 7, 2022

STONERIDGE COMMERCE CENTER

Corps Jurisdictional Delineation Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 3A

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Onsite Project Site Boundary

Offsite Project Site Boundary

Non-Wetland Waters of the U.S./State

Non-Wetland Waters of the State

Wetland Waters of the U.S./State

3 Width of OHWM in Feet

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 7, 2022

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RWQCB Jurisdictional Delineation Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 3B

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Onsite Project Site Boundary

Offsite Project Site Boundary

CDFW Non-Riparian Streambed

CDFW Riparian

Width of Non-Riparian Streambed in Feet

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 7, 2022

STONERIDGE COMMERCE CENTER

CDFW Jurisdictional Delineation Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 3C

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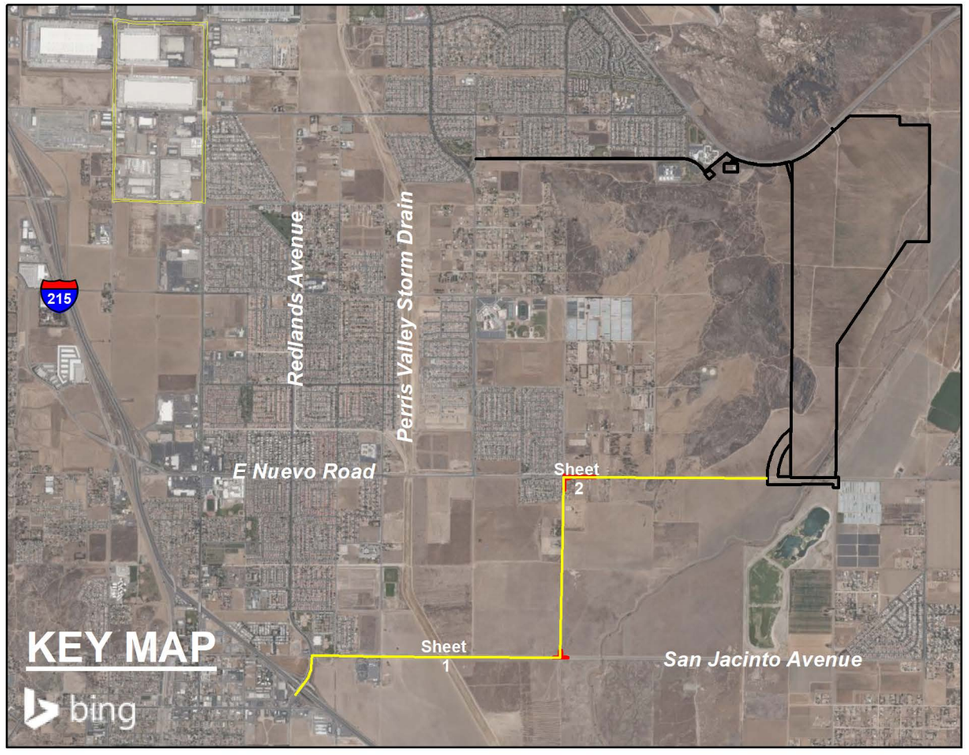

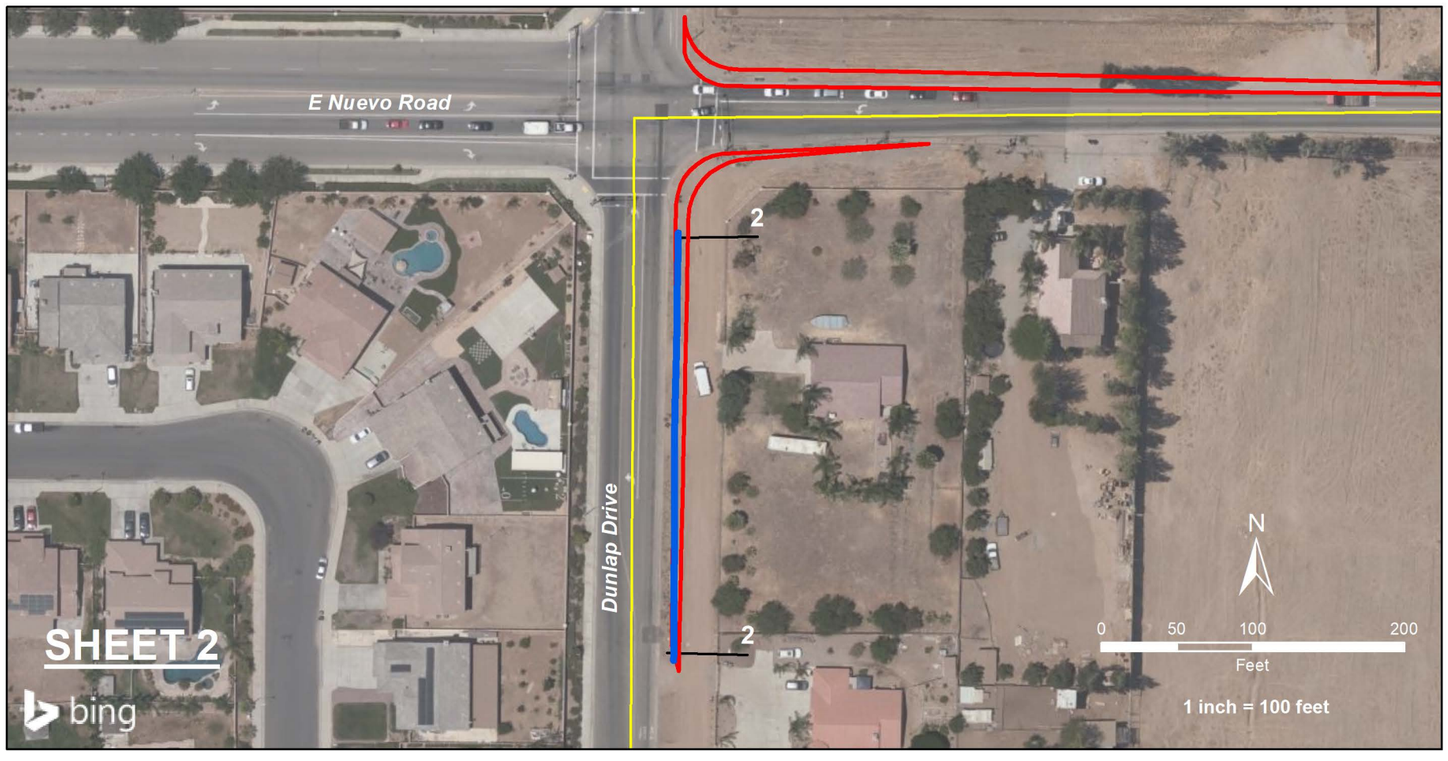

- Stoneridge Project Site
- Truck Access Route
- Truck Turn Areas
- RWQCB Non-Wetland Waters of the State
- Width of Feature in Feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 7, 2022

STONERIDGE COMMERCE CENTER

RWQCB Jurisdictional Delineation Map, Northerly and Southerly Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 3D

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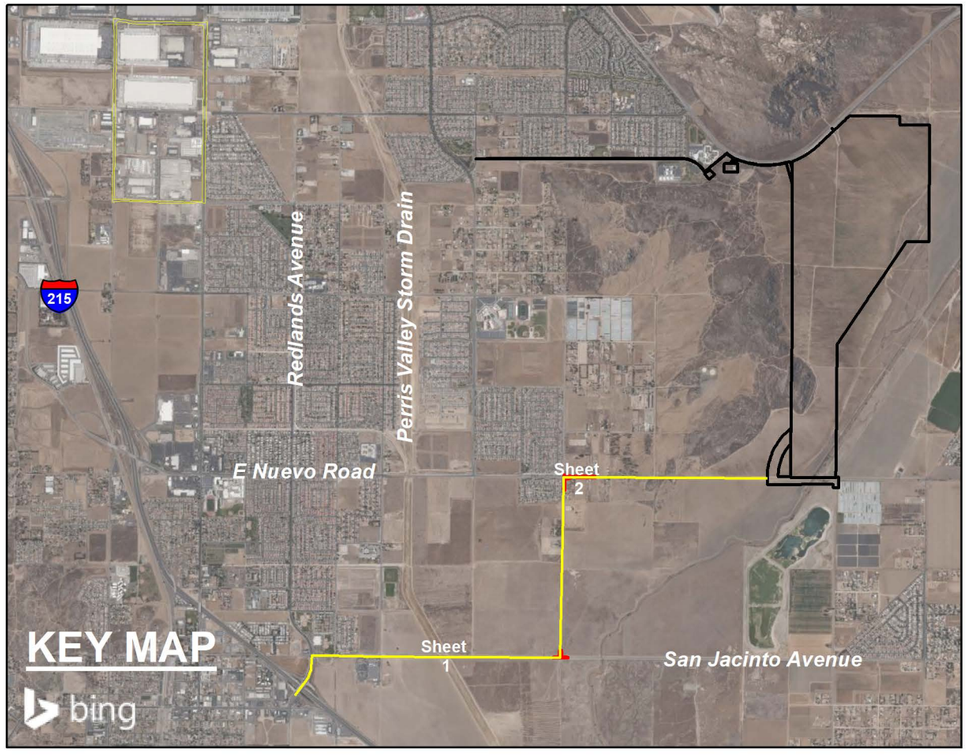

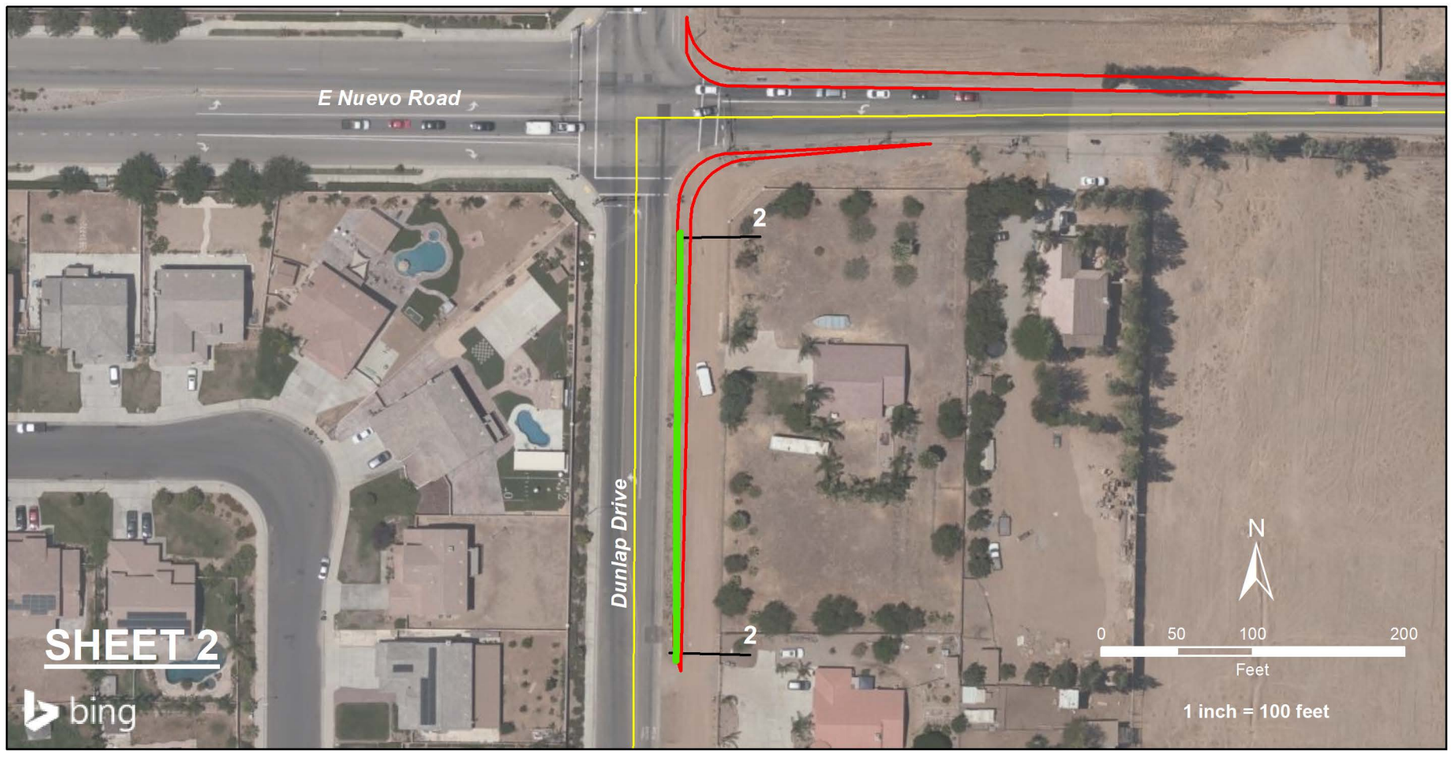

Stoneridge Project Site

Truck Access Route

Truck Turn Areas

CDFW Non-Riparian Stream

Width of Feature in Feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 7, 2022

STONERIDGE COMMERCE CENTER

CDFW Jurisdictional Delineation Map, Northerly and Southerly Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 3E

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Photograph 1: 09/30/20. View of San Jacinto River looking north.

Photograph 2: 09/30/20. View of San Jacinto River looking south towards Nuevo Road overpass. Note the presence of emergent riparian/wetland habitat in the channel and along the banks.

Photograph 3: 09/30/20. View of adjacent riparian/wetland habitat associated with San Jacinto River.

Photograph 4: 09/30/20. View depicting attempted soil pit taken within San Jacinto River. Note the presence of a hardened silt-clay and river wash layer preventing the penetration of the upper 12".

Photograph 5: 04/02/20. Drainage A looking west towards confluence with San Jacinto River and associated riparian habitat.

Photograph 6: 06/12//20. Ditch A running along Pico Road. Photo taken from intersection of Nuevo Road and Pico Road looking south..

Photograph 7: Drainage B looking downstream. Note the presence of slight flow sign after recent disking.

Photograph 8: Easterly view of upland areas east of Drainage B terminus looking towards San Jacinto River. Note a lack of flow sign.

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Site Photographs

Photograph 9: 09/30/20. View of Drainage C looking downstream. Note the disturbed/unvegetated conditions due to recent disking, Slight flow path depicted in the background.

Photograph 10 : 09/30/20. View of Drainage D origination looking north towards Ramona Expressway at outfall pipe looking Ramona Expressway.

Photograph 11: 09/30/20. View taken from Drainage D looking south/southeast where flow sign is no longer discernible.

Photograph 12: 09/30/20. View of Drainage E looking south. Note the presence of upland weedy species obscuring the channel bottom

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Site Photographs

Photograph 13: 09/30/20. View depicting start of Drainage F looking upstream at outfall pipe, located offsite. Photo taken from edge of project boundary

Photograph 14 : 09/30/20. View of Drainage F upstream reach looking south. Photo taken from onsite dirt road within project boundary.

Photograph 15: 09/30/20. View depicting eastern branch of Drainage F looking downstream. Note the presence of a defined bed, bank, and channel with flow sign,

Photograph 16: 07/08/20. View of Drainage G running along edge of Ramona Expressway looking west/downstream. Note the presence of upland weedy species obscuring the channel bottom.

Photograph 17: 07/08//20. View of Drainage G tributary located within project offsite areas looking south towards EMWD water tower. Note the presence of overgrown upland scrub encroaching into the channel has obscured flow sign.

Photograph 18 : 07/08/20. View of downstream v-ditch portion of Drainage H looking offsite towards school facility.

Photograph 19: 09/30/20. Representative view of non-jurisdictional areas within the northern/ portion of the project site looking east. Note the presence of active watermelon fields.

Photograph 20: 09/30/20. Representative view of non-jurisdictional areas within the northern/ portion of the project site looking west across. Note a lack of flow sign in the area.

Photograph 21: 09/30/20. Representative view of non-jurisdictional areas within the northern/ portion of the project site looking west across. Note a lack of flow sign in the area.

Photograph 23: 04/20/21. View from northerly extent of Ditch 1 (roadside ditch) adjacent to Dunlap Avenue looking south

Photograph 22 : 04/20/21. View from southerly extent of Ditch 1 (roadside ditch) adjacent to Dunlap Avenue looking north towards Nuevo Road.

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Exhibit 4 – Page 6

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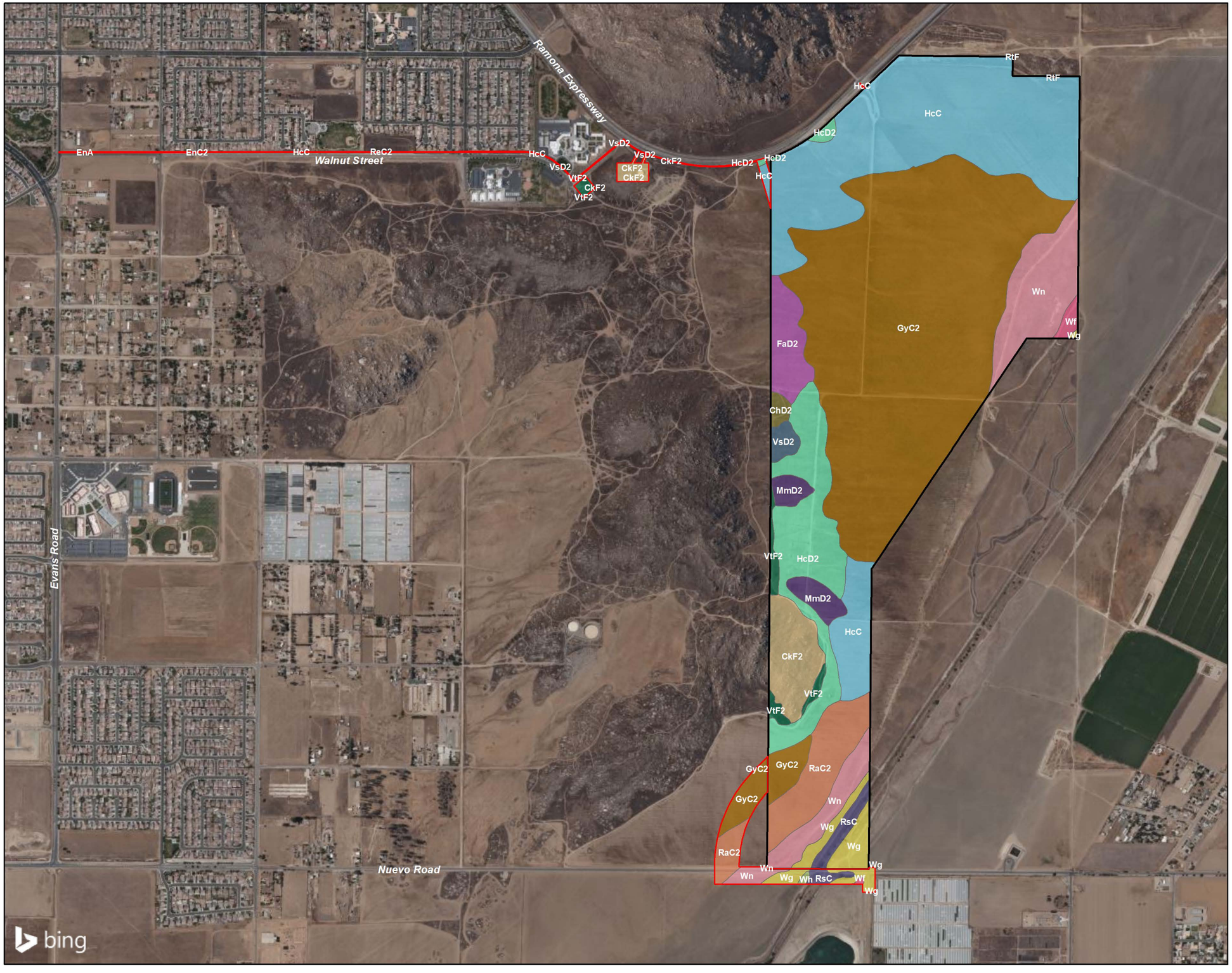
Site Photographs



- Onsite Project Site Boundary
- Offsite Project Site Boundary
- ChD2 - Cieneba sandy loam, 8 to 15 percent slopes, eroded
- CkF2 - Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded
- Dw - Domino silt loam, strongly saline-alkali
- EnA - Exeter sandy loam, 0 to 2 percent slopes
- EnC2 - Exeter sandy loam, 2 to 8 percent slopes, eroded
- EpA - Exeter sandy loam, deep, 0 to 2 percent slopes
- FaD2 - Fallbrook sandy loam, 8 to 15 percent slopes, eroded
- FfC2 - Fallbrook fine sandy loam, 2 to 8 percent slopes, eroded
- GyC2 - Greenfield sandy loam, 2 to 8 percent slopes, eroded
- HcC - Hanford coarse sandy loam, 2 to 8 percent slopes
- HcD2 - Hanford coarse sandy loam, 8 to 15 percent slopes, eroded
- MmD2 - Monserate sandy loam, 8 to 15 percent slopes, eroded
- PaC2 - Pachappa fine sandy loam, 2 to 8 percent slopes, eroded
- RaC2 - Ramona sandy loam, 5 to 8 percent slopes, eroded
- ReC2 - Ramona very fine sandy loam, 0 to 8 percent slopes, eroded
- RsC - Riverwash
- RsC - Riverwash
- VsD2 - Vista coarse sandy loam, 8 to 15 percent slopes, eroded
- VtF2 - Vista rocky coarse sandy loam, 2 to 35 percent slopes, eroded
- Wf - Willows silty clay
- Wg - Willows silty clay, saline-alkali
- Wh - Willows silty clay, strongly saline-alkali
- Wn - Willows silty clay, deep, strongly saline-alkali

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 7, 2022

STONERIDGE COMMERCE CENTER

Soils Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 5A

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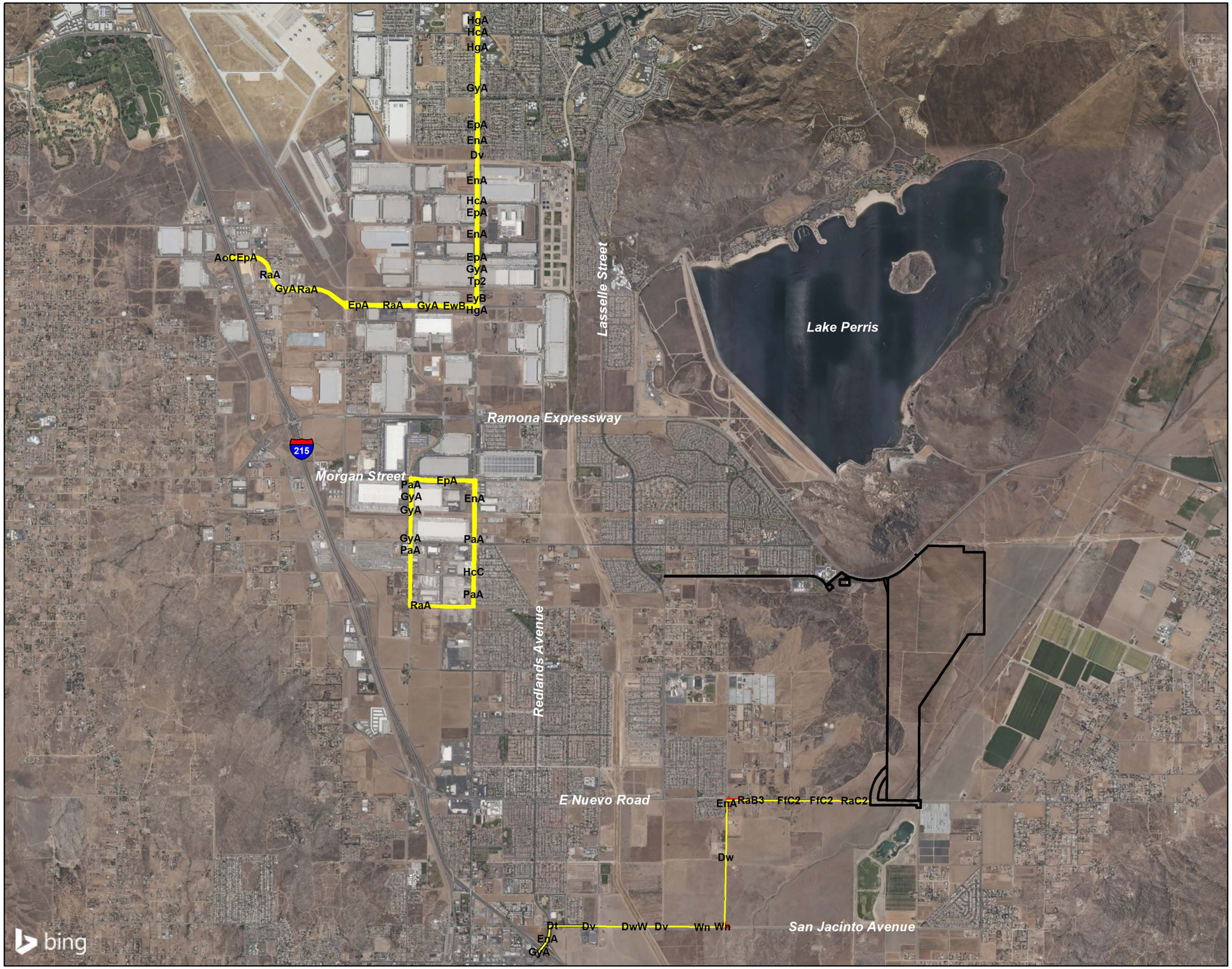

- Stoneridge Project Site
- Truck Access Route
- Truck Turn Areas
- AoC - Arlington fine sandy loam, deep, 2 to 8 percent slopes
- CkD2 - Cieneba rocky sandy loam, 8 to 15 percent slopes, eroded
- Dt - Domino fine sandy loam, saline-alkali
- Dv - Domino silt loam, saline-alkali
- Dw - Domino silt loam, strongly saline-alkali
- EnA - Exeter sandy loam, 0 to 2 percent slopes
- EpA - Exeter sandy loam, deep, 0 to 2 percent slopes
- EpC2 - Exeter sandy loam, deep, 2 to 8 percent slopes, eroded
- EwB - Exeter very fine sandy loam, 0 to 5 percent slopes
- EyB - Exeter very fine sandy loam, deep, 0 to 5 percent slopes
- FfC2 - Fallbrook fine sandy loam, 2 to 8 percent slopes, eroded
- GyA - Greenfield sandy loam, 0 to 2 percent slopes
- GyC2 - Greenfield sandy loam, 2 to 8 percent slopes, eroded
- HcA - Hanford coarse sandy loam, 0 to 2 percent slopes
- HcC - Hanford coarse sandy loam, 2 to 8 percent slopes
- HgA - Hanford fine sandy loam, 0 to 2 percent slopes
- PaA - Pachappa fine sandy loam, 0 to 2 percent slopes
- PaC2 - Pachappa fine sandy loam, 2 to 8 percent slopes, eroded
- RaA - Ramona sandy loam, 0 to 2 percent slopes
- RaB3 - Ramona sandy loam, 0 to 5 percent slopes, severely eroded
- RaC2 - Ramona sandy loam, 5 to 8 percent slopes, eroded
- ReC2 - Ramona very fine sandy loam, 0 to 8 percent slopes, eroded
- Tp2 - Traver loamy fine sand, eroded
- VtF2 - Vista rocky coarse sandy loam, 2 to 35 percent slopes, eroded
- W - Water
- Wn - Willows silty clay, deep, strongly saline-alkali

N

0 2,000 4,000 8,000

Feet

1 inch = 4,000 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 7, 2022

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Soils Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 5B

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