GLENN LUKOS ASSOCIATES

Regulatory Services

January 23, 2023

Derek Hicks
Discovery Village LLC
2392 Morse Avenue
Irvine, California 92614

SUBJECT: Jurisdictional Delineation for the Discovery Village Property, a 56-Acre Property Located in the City of Murrieta, Riverside County, California.

Dear Mr. Hicks:

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

The Discovery Village Property (Project) in the City of Murrieta, Riverside County [Exhibit 1 – Regional Map], comprises approximately 56 acres and does not contain a blue-line drainage (as depicted on the Murrieta, California U.S. Geological Survey (USGS) topographic map, California [dated 1953 and photo revised in 1979]) [Exhibit 2 – Vicinity Map]. On August 16, 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, (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 of the Fish and Game Code. Enclosed are two 200-scale maps [Exhibits 3A and 3B] depicting the boundaries of Regional Board and CDFW jurisdiction on the property. Photographs documenting the topography, vegetative communities, and general widths of the waters are provided as Exhibit 4 and a soils map is provided as Exhibit 5.

Corps jurisdiction within the Study Area totals 0.14 acre, none of which consist of jurisdictional wetlands. A total of 1,606 linear feet of stream is present.

[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.

Regional Board jurisdiction within the Study Area totals 0.14 acre, none of which consist of wetland waters of the State. A total of 1,606 linear feet of stream is present.

CDFW jurisdiction within the Study Area totals 0.17 acre, of which 0.03 acre consists of riparian stream. A total of 1,606 linear feet of stream is present.

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 limits of jurisdiction were recorded using sub-meter GPS technology and/or recorded on a color aerial photograph using visible landmarks. Other data were recorded into field notebooks, and each location of the point where data was collected was recorded using GPS technology with sub-meter accuracy.

[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.

The National Cooperative Soil Survey (NCSS) has mapped the following soil types as occurring in the general vicinity of the project site:

Cajalco Fine Sandy Loam, 2 to 8 Percent Slopes, eroded (CaC2), Cajalco Fine Sandy Loam, 8 to 15 percent slopes, eroded (CaD2), and Cajalco Rocky Fine Sandy Loam, 5 to 15 Percent Slopes, Eroded (CbD2)

The Cajalco series consists of well-drained soils developed in decomposing igneous rocks. The upper 10 inches of the soil color is a yellowish-brown (10YR 5/4) fine sandy loam to dark yellowish brown (10YR 3/4) when moist. The depth of these soils to partly weathered rock range from 20 to 36 inches. These soils occur on uplands with rock outcrops occurring in some areas. They are typically used for dryland pasture, grain, range, irrigated citrus crops, and non-farm purposes.

Cieneba sandy loam, 5 to 8 percent slopes (ChC), Cieneba sandy loam, 8 to 15 percent slopes, eroded (ChD2), and Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded (CkF2)

The Cieneba series consists of somewhat excessively drained soils on uplands. The upper 10 inches of the soil color is a brown (10YR 5/3) sandy loam to dark brown (10YR 3/3) when moist. They are typically used for dryland pasture, grain, range, irrigated citrus crops, and non-farm purposes.

Fallbrook sandy loam, shallow, 5 to 8 percent slopes, eroded (FbC2)

The Fallbrook series consists of well- drained soils that lie on uplands and have slopes of 2 to 50 percent. The upper 14 inches of the soil color is a brown (10YR 5/3) sandy loam to dark brown (10YR 3/3) when moist. The below 14 inches of the soil color is reddish-brown (5YR 4/4) sandy clay. The soils are used for dryland pasture and grain, for irrigated citrus crops, alfalfa, and grain, and homesites.

Greenfield sandy loam, 2 to 8 percent slopes, eroded (GyC2)

The Greenfield series consists of well- drained soils that lie on alluvial fans and terraces with slopes of 0 to 25 percent. The upper 43 inches of the soil color is a brown (10YR 5/3) sandy loam to dark brown (10YR 3/3) when moist. The below 43 inches of the soil color is pale-brown (10YR 6/3) loam. The soils are used for dryland grain and pasture, for irrigated truck crops, alfalfa, potatoes, citrus, and peaches, and for homesites.

Honcut loam, 2 to 8 percent slopes, eroded (HuC2)

The Honcut series consists of well- drained soils that lie on alluvial fans with slopes of 2 to 25 percent. The upper 10 inches of the soil color is a dark-brown (10YR 3/3) sandy loam to very dark-brown (10YR 2/3) when moist. The below 10 inches of the soil color is dark-brown (10YR 4/3) sandy loam. The soils are used for irrigated citrus and dryland grain and pasture, for range and non-farm purposes.

Las Posas loam, 2 to 8 percent slopes (LaC)

The Las Posas series consists of well-drained soils uplands, gabbro and other intrusive basic igneous rocks with slopes of 2 to 50 percent. The upper 12 inches of the soil color is a reddish-brown (5YR 4/4) loam to dark reddish brown (5YR 3/4) when moist. The below 12 inches of the soil color is dark-red (2.5YR 3/6) clay. The soils are used for dryland grain and pasture, for irrigated citrus and truck crops.

Vista coarse sandy loam, 2 to 8 percent slopes (VsC)

The Vista series consists of well- drained soils that lie on uplands and weathered granite and granodiorite with slopes of 2 to 35 percent. The upper 9 inches of the soil color is brown (10YR 5/3) course sandy loam to very dark grayish brown (10YR 3/2) when moist. The below 9 inches of the soil color is grayish-brown (10YR 5/2) course sandy loam. The soils are used for dryland grain and pasture and irrigated for citrus, truck crops, and grains, and for homesites.

II. JURISDICTION

A. <u>Army Corps of Engineers</u>

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.*

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.

[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.]

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[78]);

- 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
- 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

[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.

[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.

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.*

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:*

(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.

[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.

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,
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.

[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.

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.

III. RESULTS

A. Corps Jurisdiction

Corps jurisdictional waters within the Project area total 0.14 acre, none of which consist of jurisdictional wetlands, and 1,606 linear feet of streambed is present. Two drainage features, Drainage A and Tributary A-1, have been evaluated within the Project area. Drainage A and Tributary A-1 are Waters of the United States (WoUS) exhibiting an OHWM with several characteristics of stream flow including destruction of terrestrial vegetation, terracing, change in soil characteristics, debris wracking, and/or water marks. The boundaries of Corps jurisdictional waters are depicted in Exhibit 3A.

Table 1 below summarizes Corps jurisdictional waters associated with the Project site. A description of the Corps jurisdictional drainage features associated with the Project site is outlined below. The boundaries of Corps jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 3A].

Table 1: Summary of Corps Jurisdiction

Drainage Name	Corps Non-Wetland Waters (acre)	Corps Jurisdictional Wetlands (acre)	Total Corps Jurisdiction (acre)	Length (linear feet)
Drainage A	0.11	0.00	0.11	1,376
Tributary A-1	0.03	0.00	0.03	230
Total	**0.14**	**0.00**	**0.14**	**1,606**

1. Drainage A

Corps jurisdiction associated with Drainage A totals approximately 0.11 acre, none of which consist of jurisdictional wetlands, and a total of 1,376 linear feet of streambed is present. Drainage A is an ephemeral drainage that does not exhibit flowing water except during storm events. This drainage is not depicted as a blue-line stream on the USGS Quadrangle Murrieta, California [dated 1953 and photorevised in 1979]. Drainage A enters the site along the west-central boundary of the Project area and extends easterly for approximately 1,376 linear feet across the northern portion of the site until it leaves the site through a box culvert under Whitewood Road. Drainage A contains an OHWM ranging in width from two to seven feet.

Vegetation associated with Drainage A includes California buckwheat (*Eriogonum fasciculatum*, UPL), foxtail chess (*Bromus madritensis*, UPL), sweet clover (*Melilotus* sp., UPL), tar weed (*Deinandra fasciculata*, FACU), telegraph weed (*Heterotheca grandiflora*, UPL), tree tobacco (*Nicotiana glauca*, FAC), vinegar weed (*Trichostema lanceolatum*, FACU), western sunflower (*Helianthus annuus*, FACU), wild radish (*Raphinus sativas*, UPL), arroyo willow (*Salix lasiolepis*, FACW), blue elderberry (*Sambucus nigra* ssp. *caerulea*, FAC), wire lettuce (*Stephanomeria* sp., UPL), and mule fat (*Baccharis salicifolia*, FAC).

2. Tributary A-1

Corps jurisdiction associated with Tributary A-1 totals approximately 0.03 acre, none of which consist of jurisdictional wetlands, and a total of 230 linear feet of streambed is present. Tributary A-1 is an ephemeral drainage that does not contain flowing water except during storm events [Exhibit 4, Photograph 3]. Tributary A-1 begins on site within the northwestern portion of the Project area and extends northwest to southeast for approximately 230 linear feet until flowing into Drainage A. Tributary A-1 contains an OHWM ranging in width from 4 to 9 feet. Tributary A-1 was completely dry during site visit.

Vegetation associated with Tributary A-1 consists of sweet clover (*Melilotus* sp., UPL), tar weed (*Deinandra fasciculata*, FACU), telegraph weed (*Heterotheca grandiflora*, UPL), tree tobacco

(*Nicotiana glauca*, FAC), vinegar weed (*Trichostema lanceolatum*, FACU), western sunflower (*Helianthus annuus*, FACU), wild radish (*Raphinus sativas*, UPL), and wire lettuce (*Stephanomeria* sp., UPL).

B. Regional Water Quality Control Board Jurisdiction

Regional Board jurisdiction associated with Project site totals 0.14 acre, none of which is State or federal wetland. A total of 1,606 linear feet of ephemeral stream is present.

Regional Board jurisdiction includes two ephemeral drainage features (Drainage A and Tributary A-1) that convey surface water only in direct response to precipitation (e.g., rain). Drainage A and Tributary A-1 have been determined to be Corps jurisdictional waters subject to regulation pursuant to Section 401 and 404 of the CWA. These drainages do not need to be addressed separately pursuant to Section 13260 of the CWC, the Porter-Cologne Act.

There are no isolated, non-federal waters associated with the Project site. The boundaries of Regional Board jurisdiction are depicted on the enclosed jurisdictional delineation map provided as Exhibit 3B.

Table 2 below summarizes Regional Board jurisdictional waters associated with the Project site. A description of the Regional Board jurisdictional drainage features associated with the Project site is outlined below. The boundaries of Regional Board jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 3B].

Table 2: Summary of Regional Board Jurisdiction

Drainage Name	Regional Board Non-Wetland Waters (acre)	Regional Board Jurisdictional Wetlands (acre)	Total Regional Board Jurisdiction (acre)	Length (linear feet)
Drainage A	0.11	0.00	0.11	1,376
Tributary A-1	0.03	0.00	0.03	230
Total	**0.14**	**0.00**	**0.14**	**1,606**

1. Drainage A

Regional Board jurisdiction associated with Drainage A totals approximately 0.11 acre, none of which consist of jurisdictional wetlands, and a total of 1,376 linear feet of streambed is present. Drainage A enters the site along the west-central boundary of the Project area and extends easterly for approximately 1,376 linear feet across the northern portion of the site until it leaves

the site via concrete culvert under Whitewood Road. Drainage A contains an OHWM ranging in width from 1 to 10 feet [Exhibit 4, Photograph 1 and 2]. Drainage A was completely dry during the site visit.

Vegetation associated with Drainage A includes California buckwheat (*Eriogonum fasciculatum*, UPL), foxtail chess (*Bromus madritensis*, UPL), sweet clover (*Melilotus* sp., UPL), tar weed (*Deinandra fasciculata*, FACU), telegraph weed (*Heterotheca grandiflora*, UPL), tree tobacco (*Nicotiana glauca*, FAC), vinegar weed (*Trichostema lanceolatum*, FACU), western sunflower (*Helianthus annuus*, FACU), wild radish (*Raphinus sativas*, UPL), arroyo willow (*Salix lasiolepis*, FACW), blue elderberry (*Sambucus nigra* ssp. *caerulea*, FAC), wire lettuce (*Stephanomeria* sp., UPL), and mule fat (*Baccharis salicifolia*, FAC).

2. Tributary A-1

Regional Board jurisdiction associated with Tributary A-1 totals approximately 0.03 acre, none of which consist of jurisdictional wetlands, and a total of 230 linear feet of streambed is present. Tributary A-1 is an ephemeral drainage that does not contain flowing water except during storm events [Exhibit 4, Photograph 3]. Tributary A-1 begins on site within the northwestern portion of the Project area and extends northwest to southeast for approximately 230 linear feet until flowing into Drainage A. Tributary A-1 contains an OHWM ranging in width from 4 to 9 feet. Tributary A-1 was completely dry during site visit.

Vegetation associated with Tributary A-1 consists of sweet clover (*Melilotus* sp., UPL), tar weed (*Deinandra fasciculata*, FACU), telegraph weed (*Heterotheca grandiflora*, UPL), tree tobacco (*Nicotiana glauca*, FAC), vinegar weed (*Trichostema lanceolatum*, FACU), western sunflower (*Helianthus annuus*, FACU), wild radish (*Raphinus sativas*, UPL), and wire lettuce (*Stephanomeria* sp., UPL).

C. CDFW Jurisdiction

CDFW jurisdiction associated with the Project site totals approximately 0.17 acre, of which 0.03 acre consists of riparian stream and 0.14 acre consists of non-riparian stream. CDFW jurisdiction includes all areas within Regional Board jurisdiction including Drainage A and Tributary A-1 as described above. CDFW jurisdiction is extended to the top of the bank of the stream and/or the dripline of riparian vegetation (where applicable).

CDFW jurisdiction at the Project site includes Drainage A and Tributary A-1. There are also areas within and/or adjacent to Drainage A and Tributary A-1 where the width of the channel cannot reasonably be identified by physical or biological indicators and/or are not considered

rivers, streams, or lakes. These areas are swales, erosional areas, and/or disturbed areas that lack a defined stream course and do not convey adequate flow sign or a discernable bed, bank, and channel. As these areas lack a discernable stream course, they are not subject to regulation by the CDFW under Section 1602 of the Fish and Game Code.

Table 3 below summarizes CDFW jurisdictional waters associated with the Project site. The boundaries of CDFW jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 3C].

Table 3: Summary of CDFW Jurisdiction

Drainage Name	CDFW Non-Riparian Stream (acre)	CDFW Riparian Stream (acres)	Total CDFW Jurisdiction (acre)	Length (linear feet)
Drainage A	0.11	0.03	0.14	1,376
Tributary A-1	0.03	0.00	0.03	230
Total	**0.14**	**0.03**	**0.17**	**1,606**

1. Drainage A

CDFW jurisdiction associated with Drainage A totals approximately 0.14 acre, of which 0.03 acre consist of riparian streambed and 0.11 acre consists of non-riparian streambed. A total of 1,376 linear feet of streambed is present. Drainage A enters the site along the west-central boundary of the Project area and extends easterly for approximately 1,376 linear feet across the northern portion of the site until it leaves the site via concrete culvert under Whitewood Road. This feature flows only in direct response to precipitation and was completely dry during the field investigation.

Vegetation associated with Drainage A includes California buckwheat (*Eriogonum fasciculatum*), foxtail chess (*Bromus madritensis*), sweet clover (*Melilotus* sp.), tar weed (*Deinandra fasciculata*), telegraph weed (*Heterotheca grandiflora*), tree tobacco (*Nicotiana glauca*), vinegar weed (*Trichostema lanceolatum*), western sunflower (*Helianthus annuus*), wild radish (*Raphinus sativas*), arroyo willow (*Salix lasiolepis*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), wire lettuce (*Stephanomeria* sp.), and mule fat (*Baccharis salicifolia*).

2. Tributary A-1

CDFW jurisdiction associated with Tributary A-1 totals approximately 0.03 acre, all of which consists of non-riparian streambed. A total of 230 linear feet of streambed is present. Tributary A-1 begins on site within the northeast portion of the Project area and extends northwest to

southeast for approximately 230 linear feet until flowing into Drainage A. This feature flows only in direct response to precipitation and was completely dry during the field investigation.

Vegetation associated with uplands adjacent to Tributary A-1 includes California buckwheat (*Eriogonum fasciculatum*), foxtail chess (*Bromus madritensis*), sweet clover (*Melilotus* sp.), tar weed (*Deinandra fasciculata*), telegraph weed (*Heterotheca grandiflora*), tree tobacco (*Nicotiana glauca*), vinegar weed (*Trichostema lanceolatum*), western sunflower (*Helianthus annuus*), wild radish (*Raphinus sativas*), and wire lettuce (*Stephanomeria* sp.).

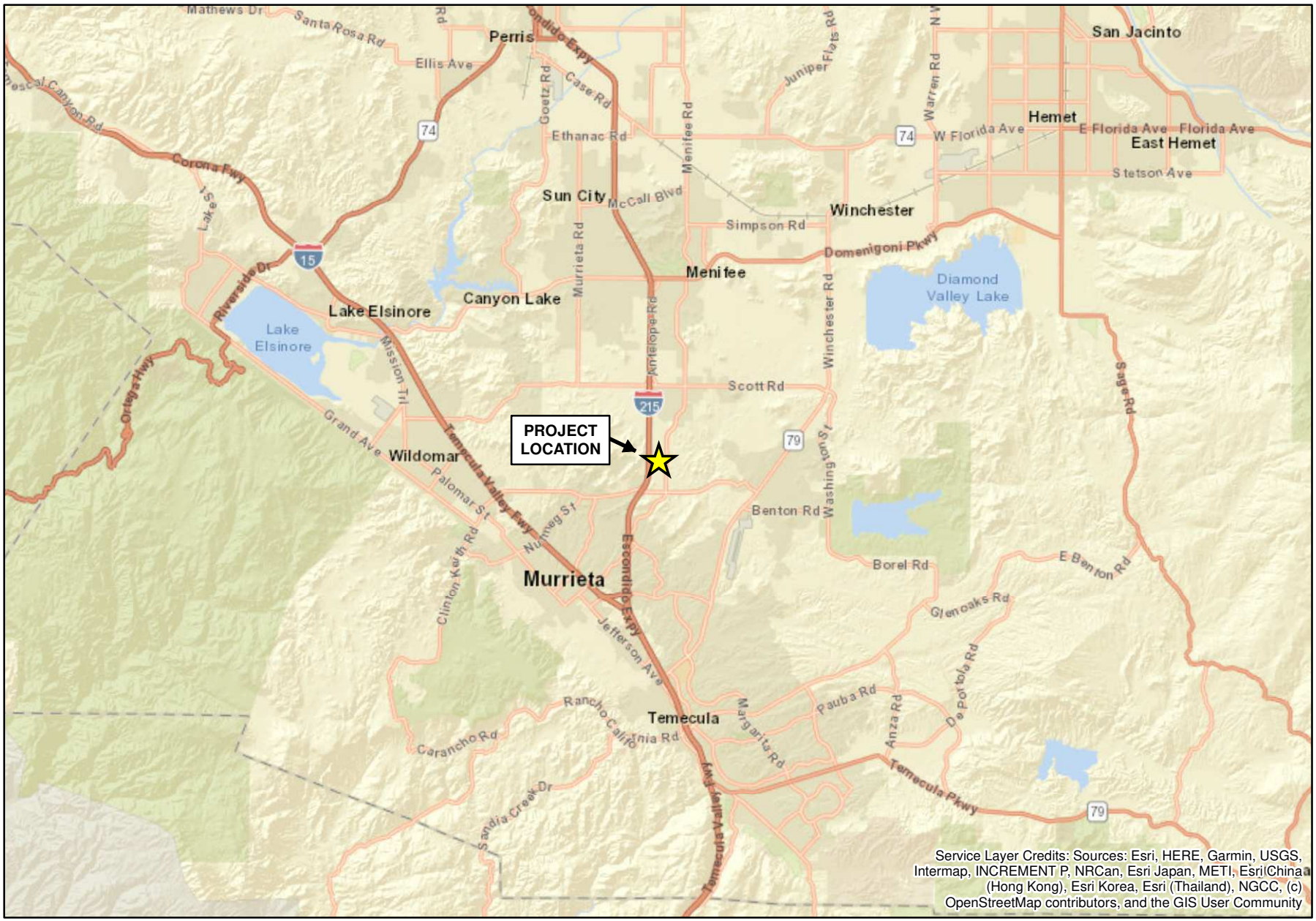
If you have any questions about this letter report, please contact Martin Rasnick at (949) 340-3851 at the office or (714) 323-6221 on his cellular telephone.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

Velvet Park
Regulatory Specialist

p: 0275-95b.JD_012323



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

Source: ESRI World Street Map

N

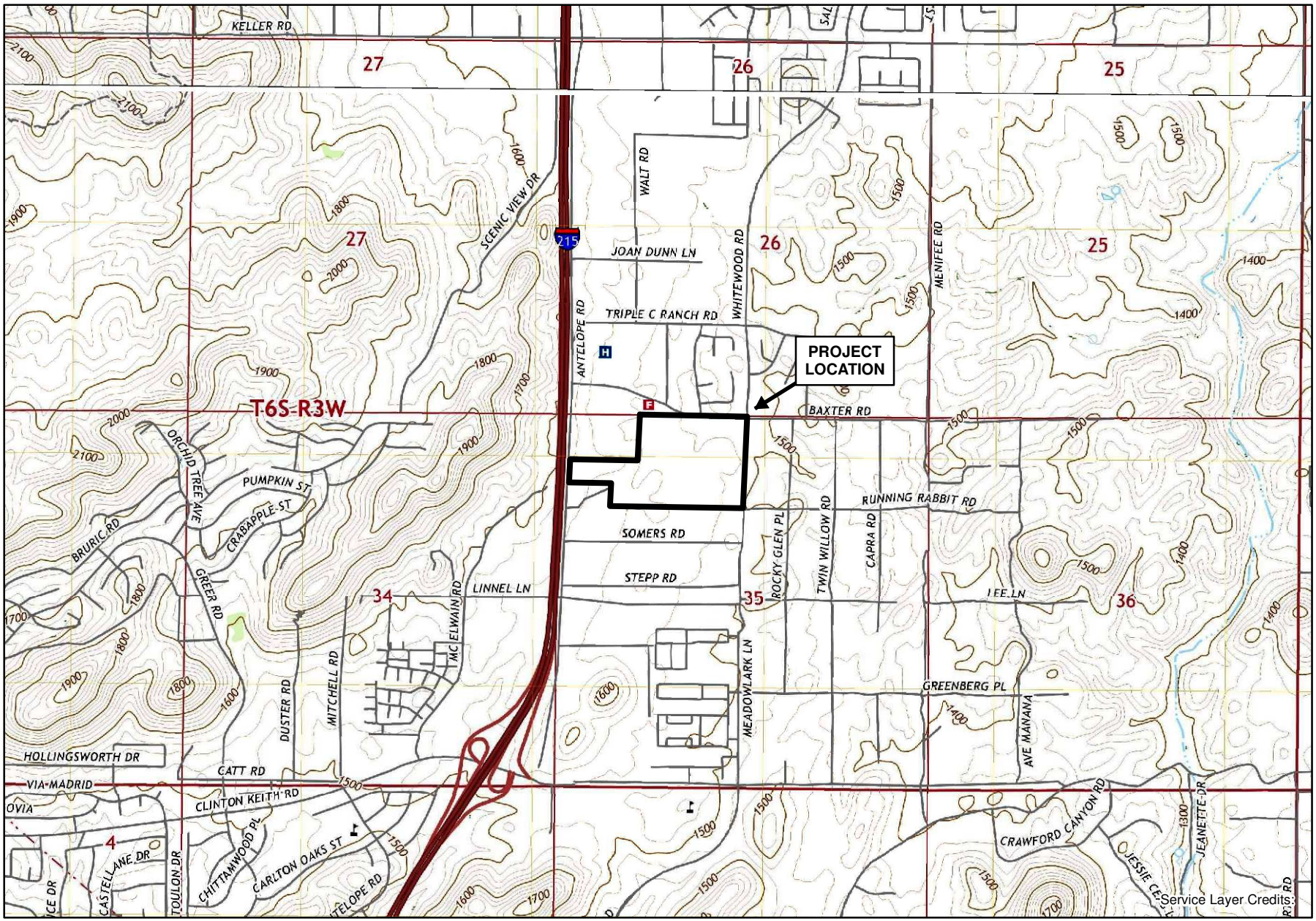
0 2 4 8 Miles

DISCOVERY VILLAGE

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



Adapted from USGS Murrieta, CA quadrangle

N

0 1,000 2,000 4,000 Feet

DISCOVERY VILLAGE

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2

Onsite Project Site

Offsite Project Site

Criteria Cell

Corps/RWQCB Non-Wetland Waters of the State & U.S.

Width of Drainage in Feet

N

0 100 200 400

Feet

1 inch = 200 feet

DISCOVERY VILLAGE PROPERTY

Corps/RWQCB Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 3A

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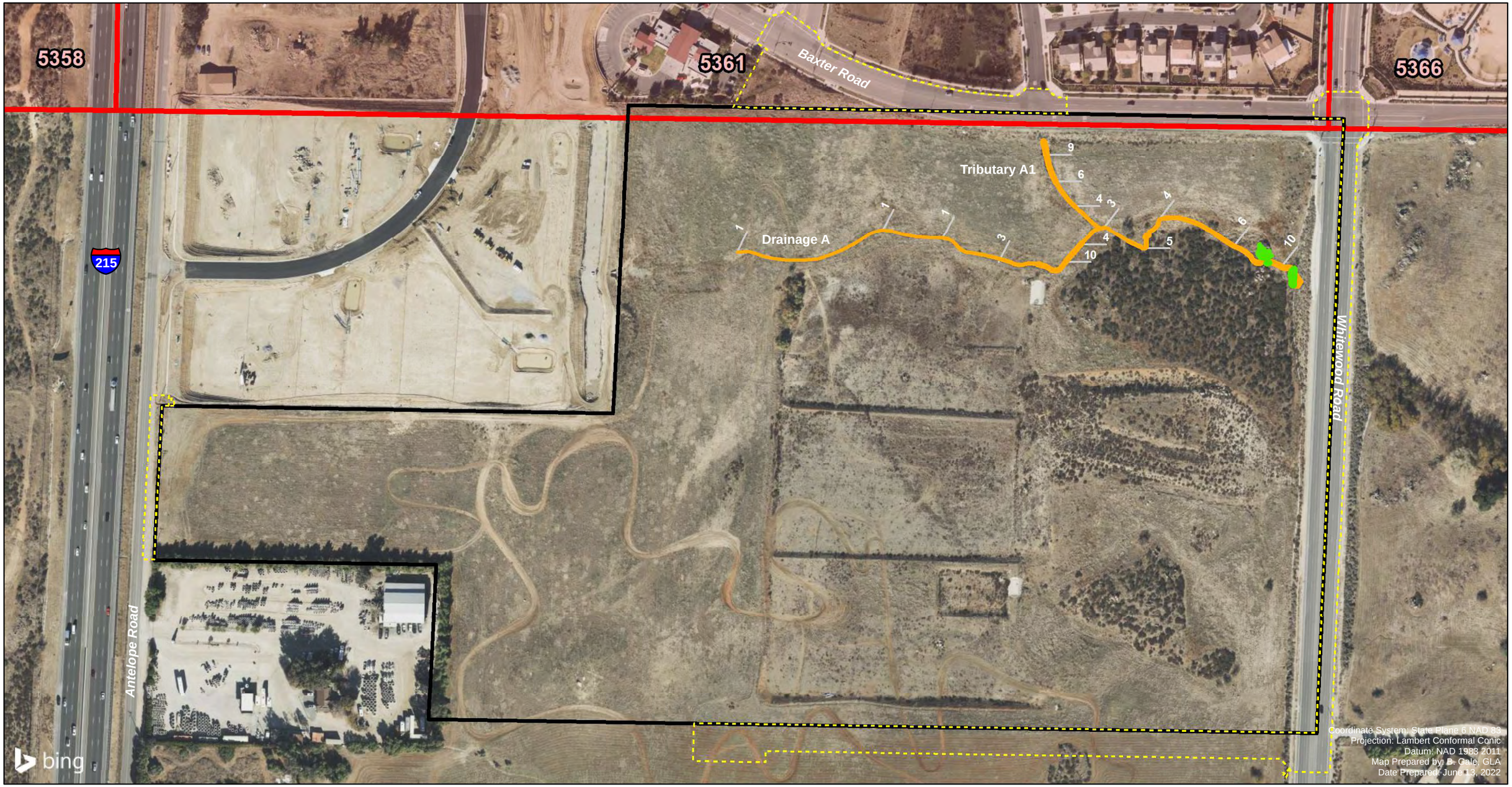

Onsite Project Site

Offsite Project Site

Criteria Cell

CDFW Riparian

CDFW Non-Riparian Stream

Width of Drainage in Feet

N

0 100 200 400

Feet

1 inch = 200 feet

DISCOVERY VILLAGE PROPERTY

CDFW Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 3B

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Photograph 1: Photo depicting western portion of Drainage A and associated vegetation. Photo taken facing east across the Project site on August,16 2021.

Photograph 2: Photo depicting middle portion of Drainage A just east of convergence with Tributary A1. Photo taken facing east towards Whitewood Road on August 16, 2021.

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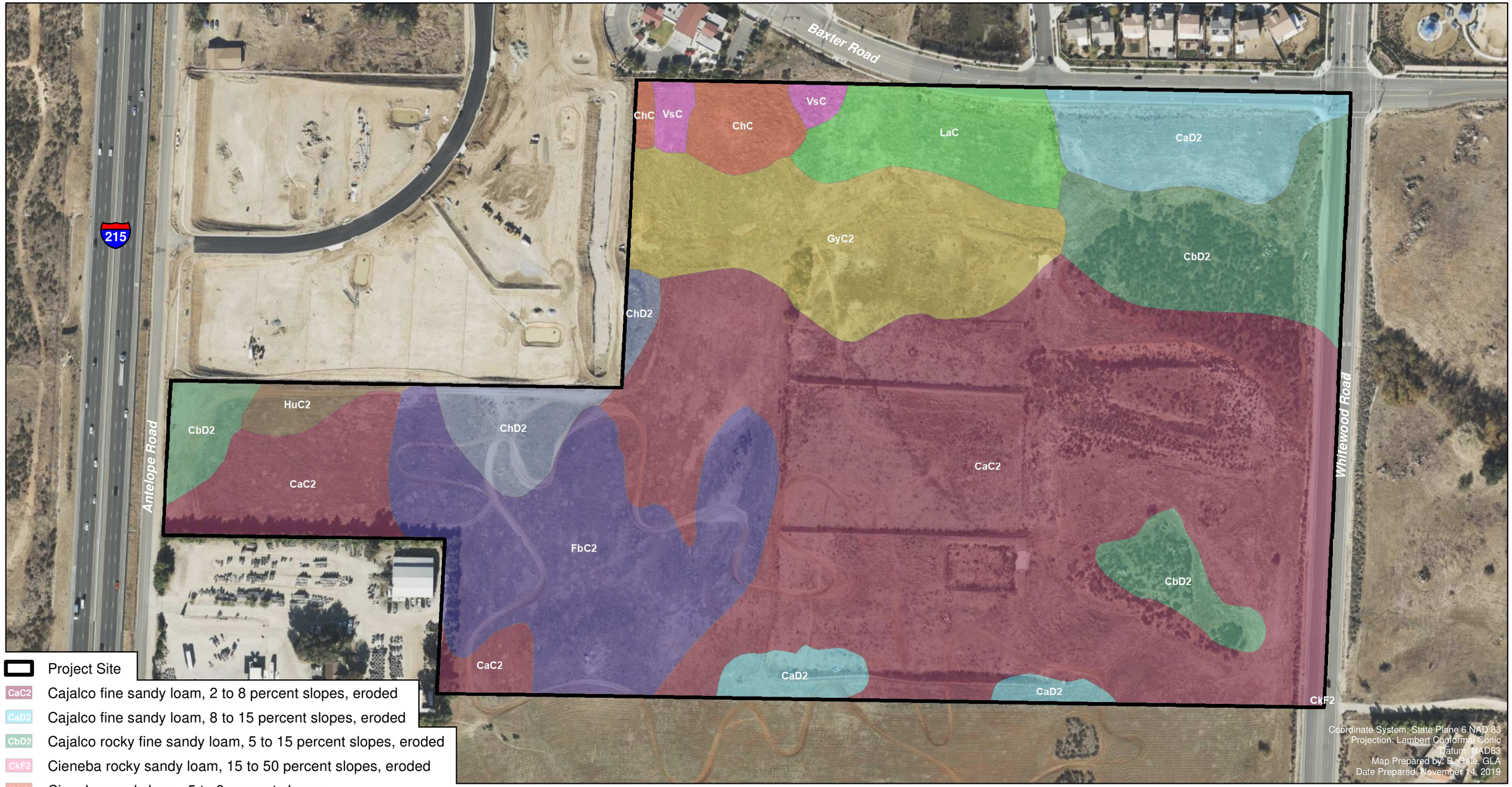
Exhibit 4 – Page 1

DISCOVERY VILLAGE PROJECT

Site Photographs

Photograph 3: Photo depicting Tributary A1 and associated vegetation. Photo taken facing southeast across the Project site on August,16 2021.

Photograph 4: Photo depicting vegetation surrounding Drainage A. Photo taken looking west on August 16, 2021.



- Project Site
- CaC2 Cajalco fine sandy loam, 2 to 8 percent slopes, eroded
- CaD2 Cajalco fine sandy loam, 8 to 15 percent slopes, eroded
- CbD2 Cajalco rocky fine sandy loam, 5 to 15 percent slopes, eroded
- CkF2 Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded
- ChC Cieneba sandy loam, 5 to 8 percent slopes
- ChD2 Cieneba sandy loam, 8 to 15 percent slopes, eroded
- FbC2 Fallbrook sandy loam, shallow, 5 to 8 percent slopes, eroded
- GyC2 Greenfield sandy loam, 2 to 8 percent slopes, eroded
- HuC2 Honcut loam, 2 to 8 percent slopes, eroded
- LaC Las Posas loam, 2 to 8 percent slopes
- VsC Vista coarse sandy loam, 2 to 8 percent slopes

N

0 100 200 400

Feet

1 inch = 200 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: R. Gate, GLA
Date Prepared: November 14, 2019

DISCOVERY VILLAGE

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 5

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