GLENN LUKOS ASSOCIATES

Regulatory Services

December 20, 2021

Tom Cruikshank
Space Center Mira Loma, Inc.
3401 Etiwanda Avenue, Leasing Office
Jurupa Valley, California 91752

SUBJECT: Jurisdictional Delineation of the Ottawa Business Center Project Site Located in Victorville, San Bernardino County, California

Dear Mr. Cruikshank:

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 Ottawa Business Center Project Site (Project site) in Victorville, San Bernardino County [Exhibit 1] comprises approximately 53.96 acres and contains one unnamed blue-line streams as depicted on the U.S. Geological Survey (USGS) topographic map Hesperia, California [Exhibit 2]. The Project site consists of 51.92 acres onsite and 2.04 acres of adjacent offsite areas.

On September 9, 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 is a 200-scale map [Exhibit 3] that depicts 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. A soils map is included as Exhibit 5.

Potential Corps jurisdiction within the Project site totals approximately 0.96 acre, none of which consists of federal wetlands.

[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 Project site totals approximately 0.96 acre, none of which consists of State wetlands. Of the total 0.96 acre, all comprises Corps jurisdiction.

CDFW jurisdiction within the Project site totals approximately 1.67 acres, of which approximately 0.02 acre consists of riparian vegetated habitat.

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 within the Project site:

Bryman Loamy Fine Sand

Bryman series consists of deep, well drained soils that formed in alluvium from dominantly granitic sources. Bryman soils are on terraces and older alluvial fans and have slopes of 0 to 15

[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.

percent. The mean annual precipitation is about 4 inches and the mean annual temperature is about 63 degrees F.

Cajon Sand

The Cajon series consists of very deep, somewhat excessively drained soils that formed in sandy alluvium from dominantly granitic rocks. Cajon soils are on alluvial fans, fan aprons, fan skirts, inset fans and river terraces. Slopes are 0 to 15 percent. The average annual precipitation is about 6 inches and the mean annual temperature is about 65 degrees F.

Haplargids-Calciorthids Complex

The Haplargids soils do not have evidence of current ground water within a depth of 1 m, do not have appreciable cementation by silica, have little organic matter or available moisture, and have little evidence of soil movement. The typic Haplargids are extensive soils in the western states. Their slopes are mainly gentle. Most of them are used for grazing. Calciorthids are extensive in the arid regions of the United States. Their slopes range from gentle to strong, and the soils either are irrigated or are used for grazing.

II. JURISDICTION

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

Pursuant to Section 404 of the Clean Water Act, 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. 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.

1. 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 the Wetland Manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the Wetland 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 Wetland Manual and Arid West 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 hydrophytic in nature as published in the most current national wetland plant list;

- 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 Wetland 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.

2. 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 Clean Water Act.

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 Clean Water Act (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.

3. 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 Clean Water Act 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 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 Corps and EPA 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 Corps and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- 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.

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[6] 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.

[6] 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.

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;*[7] *and*
3. *Artificial wetlands*[8] *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,

[7] "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.
[8] Artificial wetlands are wetlands that result from human activity.

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.[9]

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 1600-1603 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

[9] 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.

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. Jurisdictional Summary

All drainage features present within the Project site support an ephemeral flow regime with a drainage type of Confined Desert Wash. These features are present within areas that contain a moderate gradient, which causes associated flows to be contained within topographic low points and flow at relatively higher velocities, preventing braiding from occurring within the confined channel banks. OHWM indicators/evidence of flow associated with confined desert washes within the Project site consist of a break in bank slope, destruction of terrestrial vegetation, sediment sorting, presence of bed and bank, and sediment deposition. These confined desert washes occur within Drainages A, B, and C, and the associated tributaries. The active channels of the drainages features are mainly unvegetated with a sandy subtrate, supporting upland vegetation along the margin and upper terraces consisting primarily of Mojave cottonthorn (*Tetradymia stenolepis*), creosote (*Larrea tridentata*), California buckwheat (*Eriogonum fasciculatum*), big saltbush (*Atriplex lentiformis*), rubber rabbitbrush (*Ericameria nauseosa*), pencil cholla (*Cylindropuntia ramosissima*), Great Basin sagebrush (*Artemisia tridentata*), Joshua tree (*Yucca brevifolia*), Cooper's boxthorn (*Lycium cooperi*), annual bursage (*Ambrosia acanthicarpa*), cheesebrush (*Ambrosia salsola*), spotted spurge (*Euphorbia maculata*), salt heliotrope (*Heliotropum curassavicum*), Sahara mustard (*Brassica tournefortii*), yellow sweetclover (*Melilotus officinalis*), Fremont cottonwood (*Populus fremontii*), blue palo verde (*Parkinsonia florida*), and tree of heaven (*Ailanthus altissima*). Photos of the drainage features are depicted on Exhibit 4 – Site Photographs.

1. Drainage Features

Three main drainages occur within the Project site, designated herein as Drainages A, B, and C [Exhibit 3A – Corps/Regional Board Jurisdictional Delineation Map and Exhibit 3B – CDFW Jurisdictional Delineation Map]. Drainages A, B, and C all flow in a northeast direction prior to existing the site at the northern and eastern Project site boundaries. Flows ultimately discharge into the Mojave River, a RPW, located less than two miles from the Project site.

Drainage A

Drainage A originates off site to the west of Hesperia Road and generally conveys flows in a northeast direction with an OWHM ranging from 10 to 28 feet and a stream course width of 19

to 40 feet. Drainage A exits the Project site at the northern boundary where it continues offsite. Tributary A1 originates onsite, conveys flows in a northwest direction, and supports an OHWM and stream course of one foot in width. Tributary A2 originates offsite and conveys flows in a northeast direction. It converges with Drainage A just west of the Project site boundary and supports an OHWM ranging from two to three feet and stream course width of three to four feet.

Drainage B

Drainage B originates off site to the south of the Project site boundary and is conveyed by box culvert beneath Ottawa Street. Drainage B flows in a northeast direction and supports an OWHM ranging from 12 to 22 feet and stream course width of 14 to 54 feet. Drainage B exits the Project site at the northeastern boundary where it continues offsite.

Drainage C

Drainage C originates onsite in the southeastern portion of the Project site and flows in a northeast direction. It supports with an OWHM ranging from one to three feet and stream course width of two to five feet. Drainage C exits the Project site along the eastern boundary where it continues offsite.

B. Summary of Jurisdiction

1. Corps Jurisdiction

Potential Corps jurisdiction within the Project site totals approximately 0.96 acre (4,081 linear feet), none of which consists of federal wetlands. For a breakdown of acreage and linear feet of potential Corps non-wetland waters by drainage feature, see Table 1 below.

Table 1: Summary of Potential Corps Jurisdiction

Drainage Name	Potential Corps Non-Wetland Waters (acres)	Potential Corps Jurisdictional Wetlands (acres)	Total Potential Corps Jurisdiction (acres)	Length (linear feet)
Drainage A	0.39	--	0.39	1,319
Tributary A1	0.01	--	0.01	541
Tributary A2	0.01	--	0.01	174
Drainage B	0.54	--	0.54	1,799
Drainage C	0.01	--	0.01	248
Total	**0.96**	**0.00**	**0.96**	**4,081**

2. Regional Water Quality Control Board Jurisdiction

Regional Board jurisdiction within the Project site totals approximately 0.96 acre (4,081 linear feet), none of which consists of State wetlands. For a breakdown of acreage and linear feet of Regional Board jurisdiction by drainage feature, see Table 2 below.

Table 2: Summary of Regional Board Jurisdiction

Drainage Name	Regional Board Non-Wetland Waters (acres)	Regional Board Jurisdictional Wetlands (acres)	Total Regional Board Jurisdiction (acres)	Length (linear feet)
Drainage A	0.39	--	0.39	1,319
Tributary A1	0.01	--	0.01	541
Tributary A2	0.01	--	0.01	174
Drainage B	0.54	--	0.54	1,799
Drainage C	0.01	--	0.01	248
Total	**0.96**	**0.00**	**0.96**	**4,081**

3. CDFW Jurisdiction

CDFW jurisdiction within the Project site totals approximately 1.67 acres (4,085 linear feet), of which approximately 0.02 acre consists of vegetated riparian habitat. The riparian vegetation occurs within the offsite segment of Drainage A and consists of a small stand of Fremont cottonwood (*Populus fremontii*) trees. For a breakdown of acreage and linear feet of CDFW jurisdiction by drainage feature, see Table 3 below.

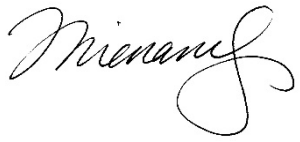
Table 3: Summary of CDFW Jurisdiction

Drainage Name	CDFW Non-riparian Stream (acres)	CDFW Riparian Habitat (acres)	Total CDFW Jurisdiction (acres)	Length (linear feet)
Drainage A	0.66	0.02	0.68	1,323
Tributary A1	0.01	--	0.01	541
Tributary A2	0.01	--	0.01	174
Drainage B	0.95	--	0.95	1,799
Drainage C	0.02	--	0.02	248
Total	**1.65**	**0.02**	**1.67**	**4,085**

If you have any questions about this letter report, please contact Thienan Pfeiffer at (949) 340-9088.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.



Thienan Pfeiffer
President

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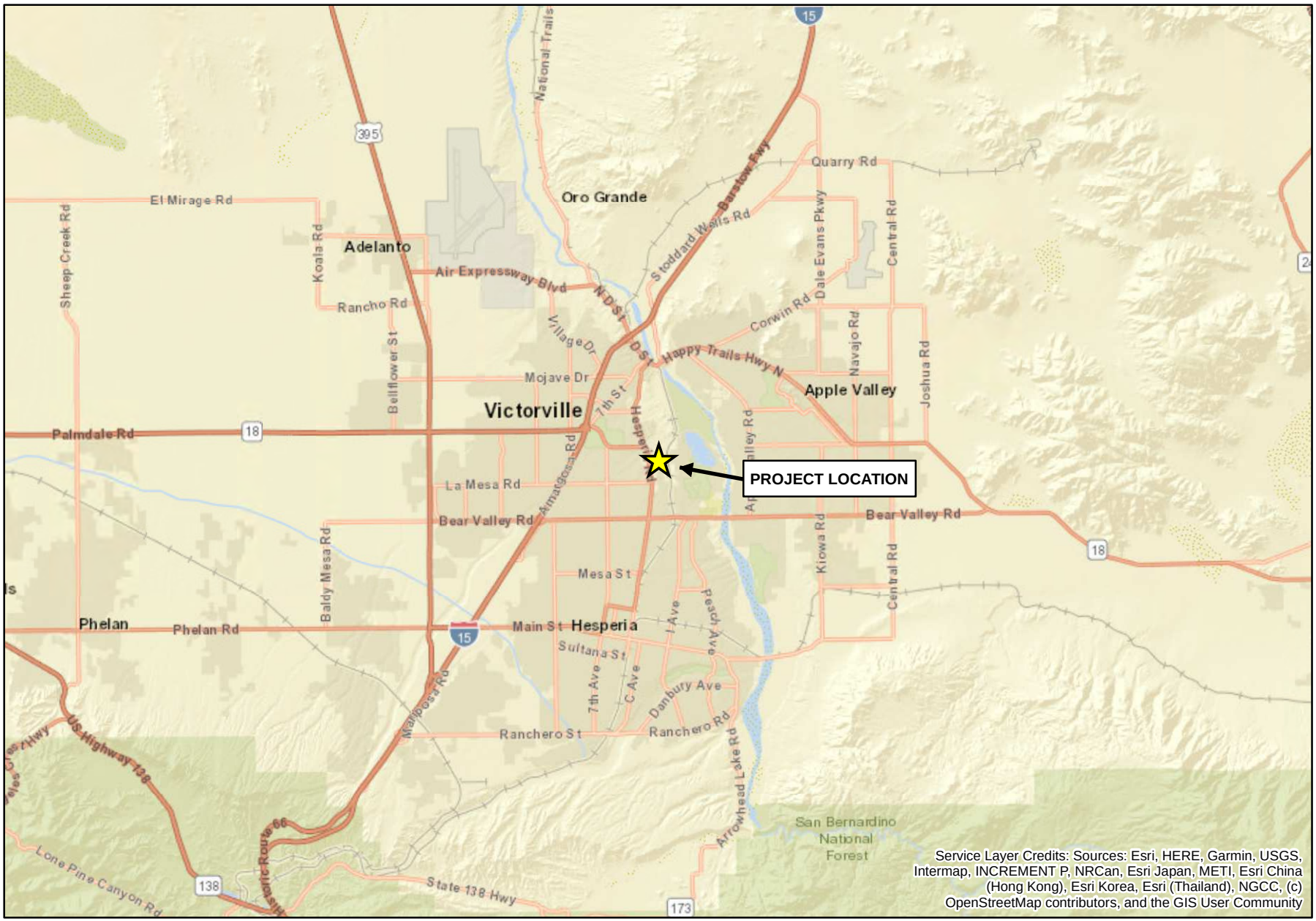

Source: ESRI World Street Map

N

0 2 4 8 Miles

OTTAWA
BUSINESS CENTER PROJECT

Regional Map

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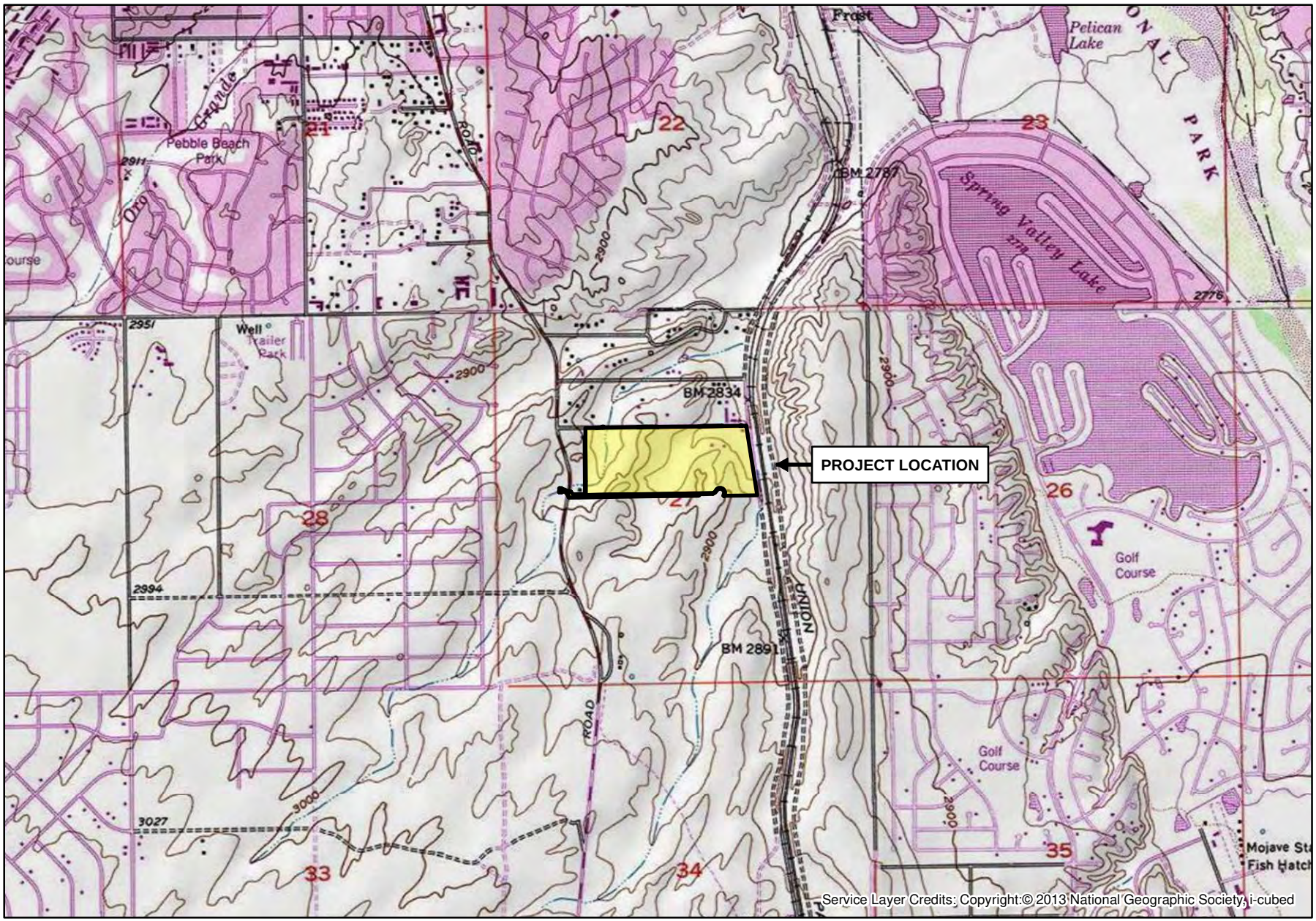
Exhibit 1



Adapted from USGS Hesperia, CA quadrangle

N

0 1,000 2,000 4,000 Feet

OTTAWA
BUSINESS CENTER PROJECT

Vicinity Map

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Exhibit 2

Onsite Project Site

Offsite Project Site

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

No OHWM

Width of Drainage in Feet

N

0 100 200 400

Feet

1 inch = 200 feet

OTTAWA BUSINESS CENTER PROJECT

Corps/RWQCB Jurisdictional Delineation Map

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Exhibit 3A

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Onsite Project Site

Offsite Project Site

Riparian

Non-Riparian Stream

No OHWM

Width of Drainage in Feet

N

0 100 200 400

Feet

1 inch = 200 feet

OTTAWA BUSINESS CENTER PROJECT

CDFW Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 3B

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Photograph 1: Photo looking southwest (offsite) from western boundary of the Project site. Photo depicts piped culvert that conveys Drainage A beneath Hesperia Road.

Photograph 2: Photo looking north/downstream within Drainage A near the middle of the Project site. Photo depicts sandy bottom and confined nature of the feature.

Photograph 3: Photo looking northwest, depicting the confluence of Tributary A1 with Drainage A. Photo depicts incised northern bank of Tributary A1 and adjacent upland vegetation.

Photograph 4: Photo looking southwest within Drainage B near southern perimeter of the Project site. Photo depicts box culvert that conveys Drainage B beneath Ottawa Street.

Photograph 5: Photo looking south and upstream within Drainage B near the middle of the Project site. Photo depicts shelving, sandy bottom and confined nature of Drainage B.

Photograph 6: Photo looking west within Drainage B along the northern perimeter of the Project site. Photo depicts shelving, sandy bottom and adjacent upland vegetation.

Photograph 7: Photo looking southwest and upstream at origination of Drainage C from just east of the terminus of Ottawa Street. Photo depicts adjacent rubber rabbitbrush scrub.

Photograph 8: Photo looking southwest and upstream at Drainage C from the eastern perimeter of the Project site. Photo depicts incised nature of Drainage C.

Onsite Project Site

Offsite Project Site

107 Bryman Loamy Fine Sand, 5 to 9 Percent Slopes

113 Cajon Sand, 2 to 9 Percent Slopes

130 Haplargids-Calciorthids Complex, 15 to 50 Percent Slopes

N

0 100 200 400

Feet

1 inch = 200 feet

OTTAWA BUSINESS CENTER PROJECT

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 5

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