DETERMINATION OF BIOLOGICALLY EQUIVALENT OR SUPERIOR PRESERVATION (DBESP) ANALYSIS

FOR IMPACTS TO MSHCP RIPARIAN/RIVERINE AREAS

MAJESTIC FREEWAY BUSINESS CENTER PROJECT BUILDING 13 (PPT 220008)

LOCATED IN THE COMMUNITY OF MEAD VALLEY, RIVERSIDE COUNTY, CALIFORNIA

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1.0 EXECUTIVE SUMMARY

This document provides an analysis in support of a Determination of Biologically Equivalent or Superior Preservation (DBESP) for the Majestic Freeway Business Center, Building 13 (PPT 220008) Project ("the Project"), located in the Community of Mead Valley, Riverside County, California, in regard to the Multiple Species Habitat Conservation Plan (MSHCP) requirements for *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (MSHCP Volume I, Section 6.1.2).*

The Project would permanently remove 0.16 acre of MSHCP riverine areas (817 linear feet) associated with Drainage A and Drainage B, none of which supports riparian habitat. Drainage A and Drainage B are ephemeral drainage features with marginal bed and/or bank. Drainage A averages 10 feet in width, traversing the property from the western property boundary to the northeastern boundary where flows are directed into a storm drain located at the Harvill Avenue and Perry Street intersection. Drainage B ranges in widths from 2 to 5 feet, originating at the western boundary and flowing in a northerly direction. These features exhibit low function and value due to a general lack of native habitat, marginal stream flow indictors, regularly disked surroundings, and being bordered by developed land-use types, such as rural and commercial/industrial development.

This document has been prepared following the MSHCP DBESP Report Template created by the Regional Conservation Authority (RCA), to demonstrate that with the appropriate mitigation, the Project will represent a "biologically equivalent or superior" alternative to avoidance. This document summarizes the findings of general biological surveys and habitat assessments, and vegetation mapping, as it relates to riparian and vernal pool resources, and species with MSHCP survey requirements. Specific details regarding the delineation of MSHCP Riparian/Riverine Areas are contained in the Project's Jurisdictional Delineation Report (GLA, 2022) – Appendix A.

2.0 INTRODUCTION

2.1 Project Area

The Project is located in the Community of Mead Valley, Riverside County, California [Exhibit 1 – Regional Map] in Section 1 of Township 4 West, Range 4 West, of the U.S. Geological Survey (USGS) 7.5′ quadrangle map Steele Peak, California [Exhibit 2 – Vicinity Map]. The Project is located south of Perry Street, west of Harvill Avenue, north of Martin Street, and east of Seaton Avenue and is comprised of Assessor's Parcel Numbers: 314-130-015, 314-130-023, 314-130-024, 314-130-026, and 314-1300-27.

For this report, the term "Project site" is defined as the limits of the Property owned by the Applicant and equals 19.03 acres. The total impact area equals 19.14 acres and is comprised of on-site impacts (18.32 acres) and off-site impacts (0.82 acres). Within the Project site, 0.71 acre will not be impacted. The term "Study Area" is defined as the 19.03 acres on site and the 0.82 acres off site and totals 19.85 acres [Exhibit 3 – Site Plan].

2.2 Project Description

The Project Applicant is proposing a Plot Plan application for the future development of one conforming warehouse facility (herein Building 13) on the subject property. Building 13 would consist of a 307,616 square foot building with a total of 53 docking doors along the western façade of the building. The analysis in this document assumes that all direct impacts would be permanent.

2.3 MSHCP Application to the Project

The Study Area is located within the Mead Valley Area Plan of the MSHCP, but is not located within the MSHCP Criteria Area, and as such the Project does not require a Joint Project Review. The Project is located within the MSHCP Survey Area for the burrowing owl (*Athene cunicularia*) but is not located within the Mammal or Amphibian Survey Areas, Narrow Endemic Plant Species Survey Area (NEPSSA), or Criteria Area Plant Species Survey Area (CAPSSA) [Exhibit 4 – MSHCP Overlay Map].

Within the designated Survey Areas, the MSHCP requires habitat assessments and focused surveys within areas of suitable habitat. For locations with positive survey results, the MSHCP requires that 90 percent of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species have been met throughout the MSHCP. Findings of equivalency shall be made demonstrating that the 90-percent standard has been met, if applicable. If equivalency findings cannot be demonstrated, then "biologically equivalent or superior preservation" must be provided.

2.4 Infeasibility of Avoidance

Volume I, Section 6.1.2 of the MSHCP requires that projects develop avoidance alternatives, if feasible, that would allow for full avoidance of riparian/riverine areas. The onsite drainages features are located in the north-central and western portion of the Study Area, and as a result of the meandering configuration of the drainages, the majority of the northern Study Area is encumbered by the drainage features. As such, it would be infeasible to re-design the warehouse facility to avoid the drainage system. Because the complete avoidance of MSHCP riparian/riverine areas by the proposed Project is not feasible, this document has been prepared to demonstrate that the Project will comply with the MSHCP guidelines and provide a "biologically equivalent or superior" alternative to avoidance.

3.0 EXISTING CONDITIONS

Based on historic aerial photography, the Study Area and environs have been mechanically disturbed regularly since the 1990s. The Study Area consists of vacant land that supports disturbed non-native grassland and other disturbed and developed areas. The entire perimeter of the Project site is mowed and/or disked on a regular basis for weed abatement and fire protection

[Exhibit 5 – Site Photos]. The offsite impacts associated with the Project are immediately adjacent to and surrounding the Project and total approximately 0.82 acre. Soils consist of Arlington fine sandy loam, deep, 2 to 8 percent slopes, Greenfield sandy loam, 2 to 8 percent slopes, eroded, and Hanford coarse sandy loam, 2 to 8 percent slopes [Exhibit 6 – Soils Map].

The Study Area is generally flat with a gentle slope from west to east. Elevations range from approximately 1,515 to 1,534 feet above mean sea level (AMSL). The Study Area supports two ephemeral drainages on the northern side of the property. The Study Area is dominated by ruderal species and supports the following vegetation/land cover types: developed, disturbed, disturbed ruderal, and disturbed non-native grassland. Tables 2-1 and 2-2 provide a summary of the vegetation types and their corresponding acreage. A description of each Vegetation/Land Use type is summarized below. A Vegetation Map is attached as Exhibit 7.

Table 2-1. Summary of Vegetation/Land Use Types for the Project Site

VEGETATION/LAND USE TYPE	ONSITE IMPACT (acres)	ONSITE NOT IMPACT (acres)	PROJECT SITE TOTAL (acres)
Developed	0.13	0.70	0.83
Disturbed	5.67	0.01	5.68
Disturbed Non-Native Grassland	11.69	0.002	11.69
Disturbed Ruderal	0.83	0.0003	0.83
Total	**18.32**	**0.71**	**19.03**

Table 2-2. Summary of Offsite Vegetation/Land Use Types

VEGETATION/LAND USE TYPE	OFFSITE IMPACT (acres)
Developed	0.25
Disturbed	0.57
Disturbed Non-Native Grassland	0
Disturbed Ruderal	0
Total	**0.82**

Developed
The Study Area contains 1.08 acre (0.83 acre onsite, 0.25 acre offsite) of developed lands. These areas are comprised of existing sidewalks and roads.

Disturbed
The Study Area contains 6.25 acres (5.68 acres onsite, 0.57 acres offsite) of disturbed lands. These areas have been graded and disked and have minimal vegetative cover. At the time surveys were conducted, the northwestern portion of the Study Area was being graded as part of ongoing development by the adjacent landowner.

Disturbed Non-Native Grassland
The Study Area contains 11.69 acres of disturbed non-native grasslands, all of which are onsite. These lands cover the majority of the Study Area. These areas are routinely disked for weed

abatement, as was the case during the biological study. Dominant plant species observed included foxtail barley (*Hordeum murinum*), slender wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), red-stemmed filaree (*Erodium cicutarium*), fascicled tarweed, and stinknet (*Oncosiphon piluliferum*).

Disturbed Ruderal

The Study Area contains 0.83 acres of disturbed/ruderal lands, all of which are onsite. These areas are associated with an ephemeral drainage (Drainage A) discussed in more detail in Section 4.2. Dominant plant species observed include common vetch (*Vicia sativa*), silverleaf nightshade (*Solanum elaeagnifolium*), fascicled tarweed (*Deinandra fasciculata*), and common sunflower (*Helianthus annuus*).

4.0 RIPARIAN/RIVERINE RESOURCES

Volume I, Section 6.1.2 of the MSHCP describes the process through which protection of riparian/riverine areas and vernal pools would occur within the MSHCP Plan Area. The purpose is to ensure that the biological functions and values of these areas throughout the MSHCP Plan Area are maintained such that habitat values for species inside the MSHCP Conservation Area are maintained. The MSHCP requires that as projects are proposed within the overall Plan Area, the effect of those projects on riparian/riverine areas and vernal pools must be addressed.

The MSHCP defines riparian/riverine areas as *lands which contain Habitat dominated by trees, shrubs, persistent emergent mosses and lichens, which occur close to or which depend upon soils moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.*

The MSHCP defines vernal pools as *seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indictors of hydrology and/or vegetation during the drier portion of the growing season.*

With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

4.1 Methods

GLA biologists reviewed the Study Area to document MSHCP riparian/riverine areas and vernal/seasonal pool habitat. Prior to beginning the field assessments, a color aerial photograph, a topographic base map of the property, and the previously cited USGS topographic map were examined to determine the locations of potential riparian/riverine areas. Suspected resources were field checked for the presence of definable channels and/or riparian vegetation. While in the field, the limits of riparian/riverine resources were recorded onto a color aerial photograph using visible landmarks and/or sub-meter accuracy global positioning system devices.

4.2 Results

The Study Area contains 0.16 acre of MSHCP riverine areas associated with Drainage A and Drainage B, none of which support riparian habitat as depicted in Table 4-1 and Table 4-2 [Exhibit 8 – MSHCP Riverine Areas Map]. Drainage A and Drainage B are ephemeral drainage features with marginal bed and/or bank. Drainage A averages 10 feet in width, traversing the property from the western property boundary to the northeastern boundary where flows are directed into a storm drain located at the Harvill Avenue and Perry Street intersection. Drainage B ranges in widths from 2 to 5 feet, originating at the western boundary and flowing in a northerly direction.

Vegetation observed onsite consists predominantly of disturbed/ruderal species, including common vetch (*Vicia sativa*), silverleaf nightshade (*Solanum elaeagnifolium*), fascicled tarweed (*Deinandra fasciculata*), common sunflower (*Helianthus annuus*), foxtail barley (*Hordeum murinum*), slender wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), red-stemmed filaree (*Erodium cicutarium*), stinknet (*Oncosiphon piluliferum*), Russian thistle (*Salsola tragus*), London rocket (*Sisymbrium irio*), Bermuda grass (*Cynodon dactylon*), sow thistle (*Sonchus asper*), radish (*Raphanus sativus*), and fiddleneck (*Amsinckia intermedia*).

As noted above, the Study Area does not contain riparian habitat, and therefore does not contain suitable habitat for the least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, or other riparian birds. In addition, the site does not contain any vernal or seasonal pools, or other artificial features with the potential to support fairy shrimp. No ponding was observed at the site during biological surveys, including those that occurred following periods of substantial rainfall. The site lacks the suitable topography (including localized depressions) to support prolonged inundation necessary to support fairy shrimp. The site slopes slightly from west to east, with the northern portion of the site containing drainage features that convey flows from west to east. As a result of the sloping topography and drainage, there is no opportunity for water to pond at the site. Furthermore, the site does not contain any artificial depressional features, including tire tracks and stock ponds that could support prolonged inundation. In addition, the site is mapped as containing sandy loam soils, which are generally not associated with vernal pools. Observations of the soils at the site showed a lack of clay soil components. Lastly, no plants were observed at the site that are associated with vernal pools and similar habitats that experience prolonged inundation.

Table 4-1 – Summary of MSHCP Riverine Areas Within Project Site

Drainage Name	MSHCP Riverine (acres)	Drainage Length (Linear feet)
Drainage A	0.14	602
Drainage B	0.02	205
Total	**0.16**	**807**

Table 4-2 – Summary Off-Site MSHCP Riverine Areas

Drainage Name	MSHCP Riverine (acres)	Drainage Length (Linear feet)
Drainage A	0.003	10
Drainage B	0	0
Total	**0.003**	**10**

1. Drainage A

Drainage A totals 0.14 acre (0.14 acre within Project site, 0.003 acre off-site), none of which consists of MSHCP riparian habitat. Drainage A is an ephemeral drainage feature that traverses the property from the northwestern property boundary to the northeastern boundary where flows are directed into a storm drain located at the Harvill Avenue and Perry Street intersection for a total of 612 linear feet. Drainage A averages 10 feet in width as evidenced by changes in soil characteristics, presence of bent vegetation, and seasonal flow patterns[1]. Flowing and/or standing water was absent during the field delineation.

Vegetation associated with Drainage A consists of ruderal species including milk thistle (*Silybum marianum*), silverleaf nightshade, ripgut brome, common sunflower, Russian thistle, fascicled tarweed, shortpod mustard, jimsonweed, Bermuda grass, fiddleneck, yellow star thistle, smallseed sandmat, and tarragon.

2. Drainage B

Drainage B totals 0.02 acre, none of which consists of MSHCP riparian habitat. Drainage B is an ephemeral feature located on the western boarder of the Project site that flows in a northernly direction for a total of approximately 205 linear feet. The drainage exhibits flow patterns extending up to five feet in width as evidenced by changes in soil characteristics and defined channel banks in the upstream reach. Flowing and/or standing water was absent during the field delineation.

Vegetation associated with Drainage B consists predominately of non-native grass and ruderal species, including slender wild oat, ripgut brome, shortpod mustard, common sunflower, valley vinegar weed, stinknet, prickly lettuce, yellow star thistle, and tall cyperus.

4.3 Impacts

Pursuant to *Volume I, Section 6.1.2* of the MSHCP, projects must consider alternatives providing for 100 percent avoidance of riparian/riverine areas. If avoidance is infeasible, then the unavoidable impacts must be mitigated and a DBESP is required.

[1] The field delineation occurred in August 2022 during a drier than normal year; therefore, flow patterns were observed on Google Earth aerial imagery and were confirmed in the field through observation of physical and biological field indicators.

As noted above, MSHCP riverine areas within the Study Area are limited to the onsite ephemeral Drainages A and B and a 10 linear foot section of Drainage A in the offsite portion of the Study Area. The Project will result in unavoidable permanent impacts to all MSHCP riverine areas at the site, totaling 0.16 acre. No riparian vegetation is present within these ephemeral drainages; therefore, this report has been written solely for impacts to MSHCP riverine areas.

Unavoidable impacts to MSHCP riverine resources associated with Drainages A and B will occur from grading and development of the proposed Study Area. Additionally, it should be noted that the MSHCP riverine drainages have been disturbed from prior agricultural activities and are now dominated by non-native vegetation such as Russian thistle, summer mustard, and ripgut brome. The non-native grassland field that abuts Drainages A and B has also been routinely maintained for decades.

The above-referenced MSHCP riverine resources within the Study Area exhibit low function and values as compared to the provision of compensatory mitigation at a local mitigation bank or in-lieu fee program as described below. The Project consists of the construction of a 307,616 square foot warehouse; therefore, it would be infeasible to re-design the warehouse facility to avoid the drainage system.

4.4 Mitigation and Equivalency

As noted above, direct effects to 0.16 acre of MSHCP riverine area will be unavoidable under the implementation of the proposed project. The lost functions will be replaced at a minimum 2:1 mitigation-to-impact ratio through the purchase of re-establishment and/or re-habilitation mitigation credits at the Riverpark Mitigation Bank. If mitigation is not available at the Riverpark Mitigation Bank, mitigation credits shall be purchased through the Inland Empire Resource Conservation District (IERCD) or other acceptable mitigation bank. The purchase of compensatory mitigation will be at least equivalent compared to the preservation of riparian/riverine areas within the Project site, including the replacement of the limited functions discussed above.

4.4.1 Existing Condition/Vegetation/Habitat

The project is not located in the MSHCP Criteria Area, but it is located within the burrowing owl survey area. The project is not located within any other MSHCP survey area and is not described for Reserve Assembly. As there is no riparian habitat on site and there are limited riverine resources, the resources to be impacted do not contribute to functions associated with live-in habitat for wildlife movement.

The Project site generally drains to the northeast away from existing and described Conservation Areas. Drainage A collects offsite runoff from an adjacent commercial building at the southeastern corner of Seaton Avenue and Perry Street and conveys the runoff easterly across the site to the box culvert at the intersection of Harvill Avenue and Perry Street where flows then continue easterly across and under the Interstate 215 Freeway eventually connecting with the Perris Valley Storm Drain. Drainages B collects a small, localized amount of runoff either from onsite generation or offsite sources, conveying the runoff in a northerly direction toward

Drainage A, but without clear connections to Drainage A. Hydrologically, the drainage features provide limited function in conveying water to downstream areas, and provide limited, if any, function relative to flood storage, sediment trapping and transport, and chemical factors such as nutrient retention and transformation, toxicant trapping, or pollutant loading.

The riverine areas provide limited biological function. None of the plants identified in Section 6.1.2 of the MSHCP were detected at the Project site. The flora associated with Drainages A and B are identical to that of the surrounding uplands, supporting entirely non- hydrophytic species, including non-native grasses and forbs, and a few common native forbs.

The Study Area is dominated with ruderal species and supports the following vegetation/land cover types: developed, disturbed, disturbed ruderal, and disturbed non-native grassland. A description of each Vegetation/Land Use type is summarized in Section 3 of this report and on Exhibit 7 – Vegetation Map.

Each of these vegetation categories document the existing level of disturbance on the property which indicates a low level of habitat function.

4.4.2 Existing Riparian/Riverine Resources

As described in the Jurisdictional Delineation Report, the project will impact two drainage features [Drainages A and B] to construct one conforming warehouse facility (Building 13) on the subject property. Building 13 would consist of a 307,616 square foot building with a total of 53 docking doors along the western façade of the building. Each drainage is described above in Section 4.2.

4.4.3 Direct Effects

As noted above, direct effects to 0.16 acre of MSHCP riverine resources will be unavoidable under the implementation of the Project. A total of 817 linear feet of streambed will be permanently impacted.

4.4.4 Indirect Effects

The Study Area and its surroundings have been under agricultural operation for more than 50 years and it is not a wildlife movement corridor; instead, the area is already fragmented by construction of other warehouse buildings, the Interstate 215 Freeway, and rural residential housing. The development of a warehouse building and its associated improvements will not result in further fragmentation than already exists, and it will not result in a lower function and value of natural open space for native species, or other effects associated with such natural open space. As such the Project will to not result in adverse indirect effects, whether short-term during construction, or long-term from the operation of the warehouse facility.

4.5 Mitigation Proposal/Justification

To meet the criteria of a biologically equivalent or superior alternative, the applicant will offset permanent impacts to 0.16 acre of MSHCP Section 6.1.2 Riverine resources following one of the three alternatives below.

- Permanent impacts to 0.16 acre of MSHCP riverine habitat within Drainages A and B would be mitigated at a 2:1 ratio (0.32 acre) through the purchase of 0.16 acre of re-establishment credits and 0.16 acre of rehabilitation credits from the Riverpark Mitigation Bank.

- Permanent impacts to 0.16 acre of MSHCP riverine habitat within Drainages A and B would be mitigated at a minimum 2:1 ratio (0.32 acre) through the Inland Empire Resource Conservation District In-Lieu Fee Program (IERCD ILFP), with the intent to purchase 0.16 acre of re-establishment credits and 0.16 acre of rehabilitation credits, depending on availability. However, if at least 0.16 acre of re-establishment credits are not available, then additional rehabilitation credits above the 0.16 acre will be purchased at an additional 1:1 ratio. For example if re-establishment credits were not available, then mitigation would consist of 0.48 acre of rehabilitation credits (3:1 ratio). If some re-establishment credits were available, but less than the 0.16-acre minimum, then the balance would be transferred to rehabilitation credits at a 2:1 ratio. In summary, mitigation through IERCD would range from 0.32 acre to 0.48 acre depending on credit availability.

- If mitigation is not available at Riverpark or through IERCD, then mitigation would consist of the purchase of mitigation credits from another approved mitigation bank or in-lieu fee program acceptable to the CDFW and USFWS. The mitigation credits would be purchased following the same structure described above for IERCD.

4.5.1 Riverpark Mitigation Bank (Mitigation Option 1)

Drainage A is located in the northern portion of the project area and Drainage B is located in the western portion of the project area. Both drainages are subject to annual maintenance and disking of the entire site and its drainage features as part of ongoing dry farming. The vegetation within these drainages consists of disturbed, disturbed non-native grassland, and disturbed ruderal habitats. As a result, there is limited function and value of the on site streambeds due to the present habitat conditions and the fact that each drainage is disked as part of ongoing farming and disking each year.

The Riverpark Mitigation Bank is an approved mitigation bank offering compensatory mitigation credits for impacts to agency and MSHCP jurisdiction in the Santa Ana River Watershed. The Riverpark Mitigation Bank proposes to re-establish (recreate former but no longer existing) alkali plain wetland system habitat and rehabilitate (repair existing but degraded) alkali plain wetland system habitat for a grand total of 583 acres of restoration of various types of alkali plain wetland system plant communities. As stated by the United States Army Corps of Engineers (USACE):

"*The Riverpark Mitigation Bank is a proposed 619-acre mitigation bank located along the San Jacinto River (SJR) in western Riverside County (Figures 1 and 2). The Bank property is specifically located just downstream of the Ramona Expressway and immediately upstream of Nuevo Road. The site is depicted on the U.S. Geological Survey (USGS) Perris and Romoland Quadrangle Rancho San Jacinto Nuevo y Potrero Land Grant (Figure 3) in unincorporated Riverside County, California (33° 49' 8.4"N, -117° 9' 18"W).*" (USACE 2015)

"*The primary objective of the proposed mitigation bank would be to replace functions and services of aquatic resources and associated habitats that have been degraded or destroyed as a result of activities conducted in compliance or in violation of Section 404 of the CWA. The proposed mitigation bank would provide mitigation for both permanent and temporary impacts to waters of the U.S. In addition, the proposed mitigation bank may be used to offset environmental losses resulting from unavoidable impacts related to regulated activities by the California Department of Fish and Wildlife and the San Diego and Santa Ana Regional Water Quality Control Boards. Specific objectives include: • Restoration of fluvial processes on site within the San Jacinto River floodplain. • Restoration of alkali playa and vernal pool habitat. • Expansion of existing sensitive plant populations across the site. • Removal of ongoing agricultural activities on the site. • Removal of existing berms and the low flow channel. • Permanent protection of the site through transfer of fee title to the Western Riverside Regional Conservation Authority (RCA). • Permanent management of the site through funding of a non-wasting endowment*." (USACE 2015)

"*Due to its location along the San Jacinto River and its high potential for successful restoration upon elimination of the artificial low flow channel and berms created by historic agricultural activities, the proposed mitigation bank location has been identified by several state and Federal agencies as a high-priority restoration site.*" (USACE 2015)

The Project is within the service area for this mitigation bank. Credits have already been accepted and evaluated by the Wildlife Agencies to be acceptable to meet the goals of the MSHCP and to mitigate riparian/riverine resources described in Section 6.1.2 of the MSHCP. Mitigation credits will soon be available to re-establish and rehabilitate lands within the mitigation bank area.

Compensatory mitigation credits will soon be available for riverine and riparian habitat impacts, which are in-kind as compared to Project riverine and riparian impacts. The applicant will be providing funding to the mitigation bank to either re-establish or rehabilitate riverine/riparian habitat. Since the Project impact totals 0.16 acre which will be re-established within the mitigation bank with in-kind native streambed and riparian habitat mitigation as compared to impact, and an additional 0.16 acre of native riverine/riparian habitat will be rehabilitated, there will be an increase in function and value for streambeds within the MSHCP plan area (0.32 acre re-established and/or rehabilitated as compared to 0.16 acre impacted).

Once completed, the purchase of mitigation credits at the Riverpark Mitigation Bank will provide greater acreage (0.32 acre as compared to 0.16 acre), habitat function (establishment of native riparian or riverine habitat in place of existing non-native disturbed or developed habitat), and wildlife connectivity as compared to the preservation of on-site resources.

Although the Project will permanently impact 0.16 acre of riverine habitat, no direct effects to MSHCP conserved habitats, riparian/riverine species, existing wildlife linkages and/or functions within the MSHCP are expected. Therefore, the proposed mitigation would result in a superior preservation of the amount and quality of conserved MSHCP riparian/riverine habitat. The proposed mitigation will also benefit MSHCP riparian/riverine-associated species by enhancing and/or establishing habitat to a greater function and value to which it is found on the Study Area. Project impacts to MSHCP riverine resources and CDFW non-riparian stream are identical (0.16 acre), and the Project proposes to purchase mitigation credits from the Riverpark Mitigation Bank as a first option for both MSHCP and CDFW impacts if credits are available.

4.5.2 IERCD In-Lieu Fee Program (Second Choice)

The IERCD In-Lieu Fee Program (ILFP) is dedicated to promoting, educating, managing, and preserving natural resources through collaborative partnerships for the economic and ecological benefit of the communities where they operate. The IERCD ILFP is located within the overall Santa Ana River Watershed and includes, at a minimum, rehabilitation of native riparian habitats within the watershed. This rehabilitation will return riparian function to drainages features that have currently been disturbed and require human intervention to return areas that are currently supporting non-native habitats to native habitats. IERCD ILFP typically holds fee title, conservation easements and offers of dedication on natural open space lands in San Bernardino and Riverside Counties.

The IERCD ILFP also prepares habitat mitigation and monitoring plans (HMMP) to restore or establish riparian habitats within individual habitat areas that come under their stewardship.

These mitigation habitats would be funded, implemented, monitored, and reported on for a minimum of five years. The mitigation habitat would then enter into long-term management which would be funded through an endowment in perpetuity. A long-term management plan would also be prepared to ensure that the site is successful. Each of these plans, and the funding proposed, would be reviewed and approved by the wildlife agencies.

Once completed, the mitigation will provide greater acreage (minimum 0.32 acre as compared to 0.16 acre), habitat function (rehabilitation of native riparian or riverine habitat in place of existing non-native disturbed or developed habitat), and wildlife connectivity as compared to the preservation of on-site resources. As a result, mitigation at the IERCD ILFP will be biologically superior as compared to preservation of Drainages A or B and would satisfy the requirements of Section 6.1.2 of the MSHCP.

Although the Project will permanently impact 0.16 acre of riverine habitat, no direct effects to MSHCP conserved habitats, riparian/riverine species, existing wildlife linkages and/or functions within the MSHCP are expected. Therefore, the proposed mitigation would result in a superior

preservation of the amount and quality of conserved MSHCP riparian/riverine habitat. The proposed mitigation will also benefit MSHCP riparian/riverine-associated species by enhancing and/or establishing habitat to a greater function and value to which it is found on the Study Area. Project impacts to MSHCP riverine resources and CDFW non-riparian stream are identical (0.16 acre), and the Project proposes to purchase mitigation credits from the IERCD ILFP and CDFW impacts if credits are not available at the Riverpark Mitigation Bank

5.0 NARROW ENDEMIC PLANT SPECIES

The Project is not located within the Narrow Endemic Plant Species Survey Area (NEPSSA). As such, MSHCP requirements pertaining to NEPSSA plants do not apply to the Project, including focused surveys and avoidance/mitigation.

6.0 ADDITIONAL SURVEY NEEDS

6.1 Criteria Area Species Survey Area – Plants

The Study Area is not located within Criteria Area Plant Species Survey Area (CAPSSA). As such, MSHCP requirements pertaining to CAPSSA species do not apply to the Project, including focused surveys and avoidance/mitigation.

6.2 Burrowing Owl

The Study Area is located within the MSHCP survey area for the burrowing owl (*Athene cunicularia,* BUOW) and suitable habitat exists for this species within the Study Area.

6.2.1 Methods

GLA biologists David Smith, Brinna Lee, and Chris Waterston conducted four focused surveys for the burrowing owl for all suitable habitat areas within the Study Area. Surveys were conducted in accordance with survey guidelines described in the 2006 MSHCP Burrowing Owl Survey Instructions. The guidelines stipulate that four focused-survey visits be conducted on separate dates between March 1 and August 31. Within areas of suitable habitat, the MSHCP requires a focused burrow survey to map all potentially suitable burrows. The burrow survey was conducted on March 22, 2022, along with the first focused owl survey. The remaining survey visits were conducted on April 19, May 17, and June 21, 2022. The burrowing owl survey visits need to be conducted within a period from one hour prior to sunrise to two hours after sunrise or two hours before sunset to one hour after sunset.

Both the burrow and owl surveys were conducted during weather that was conducive to observing owls outside their burrows and detecting burrowing owl sign and not during rain, high winds (> 20 mph), dense fog, or temperatures over 90°F. Additionally, the focused burrow survey was performed more than 5 days after a rain event.

Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Transects were spaced no more than 30 meters (100 feet) apart, adjusting for vegetation height and density, in order to provide adequate visual coverage of the survey areas. At the start of each transect, and at least every 100 meters (320 feet) along transects, the survey area was scanned for burrowing owls using binoculars. All suitable burrows were inspected for diagnostic owl sign (e.g., pellets, prey remains, whitewash, feathers, bones, and/or decoration) in order to identify potentially occupied burrows. Table 6-1 summarizes the burrowing owl survey visits.

Table 6-1. Summary of Burrowing Owl Surveys

Survey Date	Biologist(s)	Start/End Time	Start/End Temperature (°F)	Start/End Wind Speed (mph)	Cloud Cover (%)
03/22/22	DS/BL	0715-0945	54-72	0-1	0
04/19/22	BL/CW	0615-0845	57-68	0-2	10
05/17/22	DS/BL	0630-0830	57-59	0-1	0
06/21/22	DS/BL	0600-0800	64-73	0-1	0

DS = David Smith, BL = Brinna Lee, CW = Chris Waterston

6.2.2 Results/Impacts

No burrowing owls were detected within the Study Area or within the 500-foot surrounding visual buffer. Therefore, no equivalency or mitigation measures are required in regard to burrowing owl for this Project. However, the Study Area supports approximately 18.77 acres of potential suitable habitat for BUOW. As such, per MSHCP Objective 6 for burrowing owls, a qualified biologist will conduct a pre-construction presence/absence survey for burrowing owls within 30 days prior to site disturbance. If burrowing owls are detected onsite, the owls will be relocated/excluded from the site outside of the breeding season following accepted protocols, and subject to the approval of the RCA and wildlife agencies. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrowing owl is found, the same coordination described above will be necessary.

6.3 Mammals

The Study Area is not located within a MSHCP Mammal Survey Area. As such, there are no MSHCP requirements pertaining to small mammals applicable to the Project, including focused surveys and avoidance/mitigation.

6.4 Amphibians

The Study Area is not located within a MSHCP Amphibian Survey Area. As such, there are no MSHCP requirements pertaining to amphibians applicable to the Project, including focused surveys and avoidance/mitigation.

7.0 DELHI SANDS FLOWER-LOVING FLY

The Study Area is not located within Delhi soils mapped within the MSHCP baseline data, and therefore habitat assessments/focused surveys are not required for the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*).

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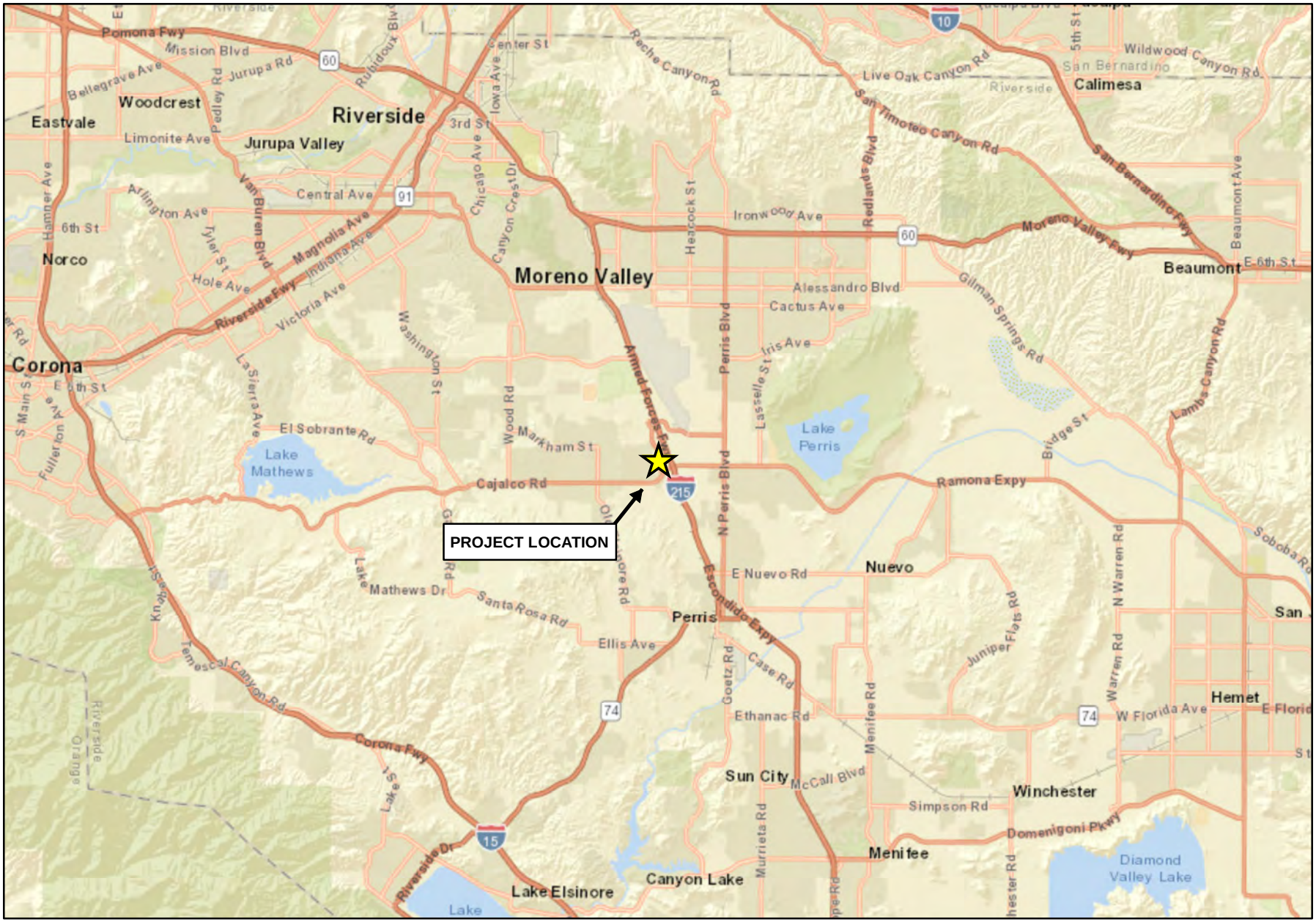


Source: ESRI World Street Map

N

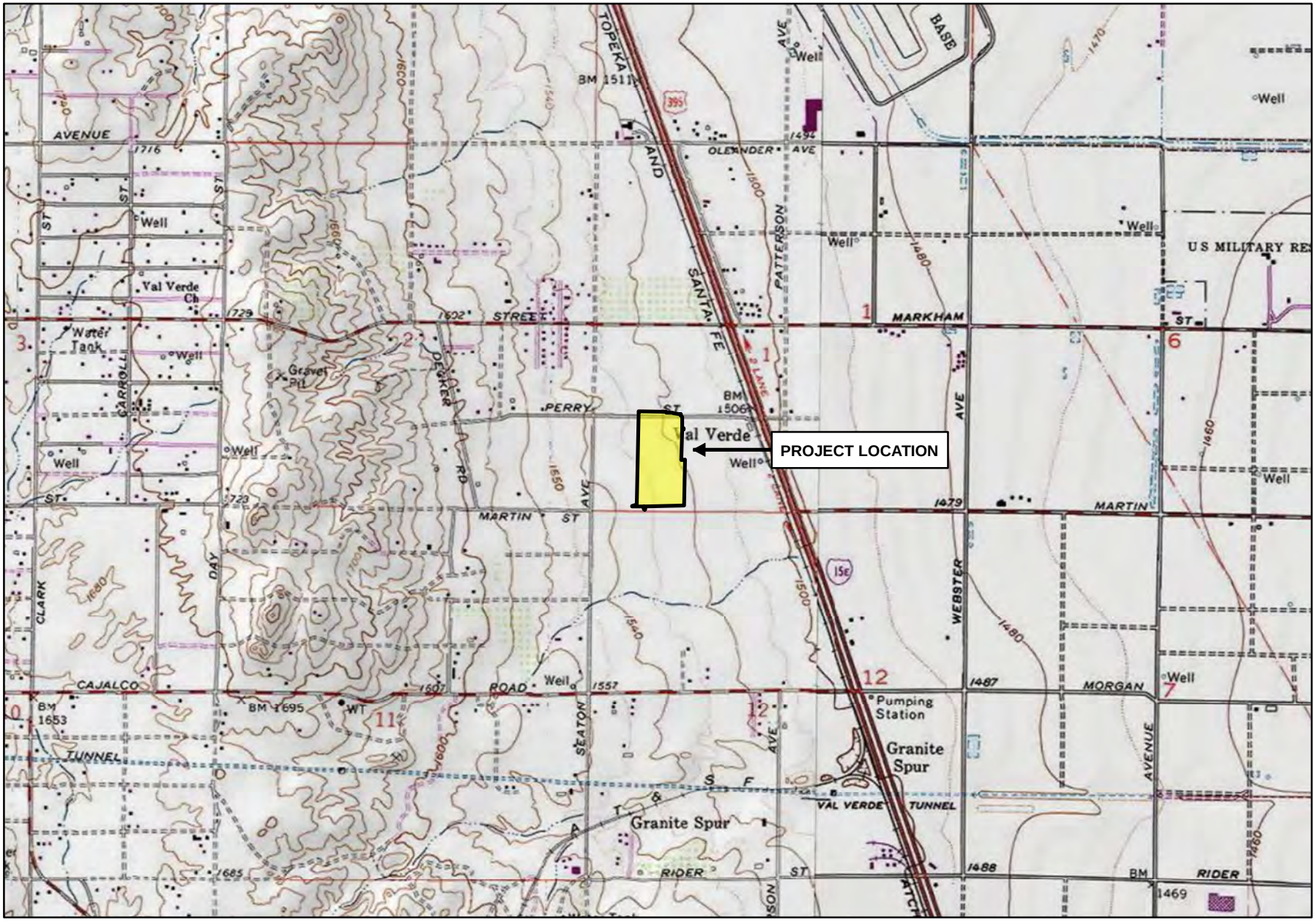
0 2 4 8 Miles

BUILDING 13 AT THE MAJESTIC FREEWAY BUSINESS CENTER PROJECT

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



BUILDING 13 AT THE MAJESTIC FREEWAY BUSINESS CENTER PROJECT

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2

Study Area

Project Site - 19.03 ac.

On-Site Impacts - 18.32 ac.

Off-Site Impacts - 0.82 ac.

On-Site Not Impacted - 0.71 ac.

N

0 50 100 200

Feet

1 inch = 100 feet

BUILDING 13 AT THE MAJESTIC FREEWAY BUSINESS CENTER PROJECT

Site Plan Map

GLENN LUKOS ASSOCIATES

Exhibit 3

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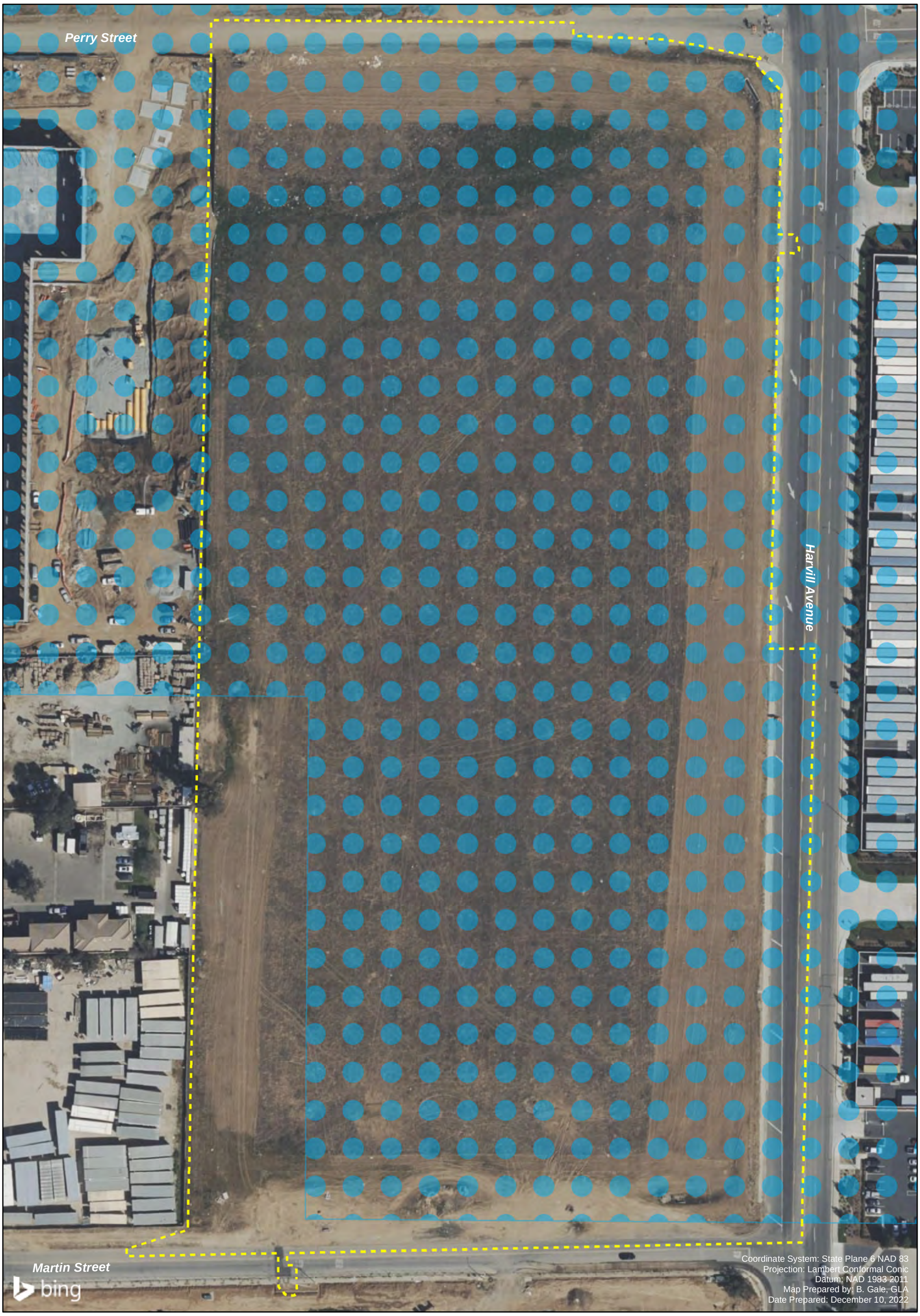

Study Area

Burrowing Owl Survey Area

N

0 50 100 200

Feet

1 inch = 100 feet

BUILDING 13 AT THE MAJESTIC FREEWAY BUSINESS CENTER PROJECT

Site Plan Map

GLENN LUKOS ASSOCIATES

Exhibit 3

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Photograph 1: Taken August 16, 2022, with view of Drainage A at the western project boundary facing approximately east, dominated by ruderal plant species.

Photograph 2: Taken August 16, 2022, with view of Drainage A at the eastern project boundary facing approximately west.

GLENN LUKOS ASSOCIATES

BUILDING 13 MAJESTIC FREEWAY BUSINESSS CENTER PROJECT

Site Photographs

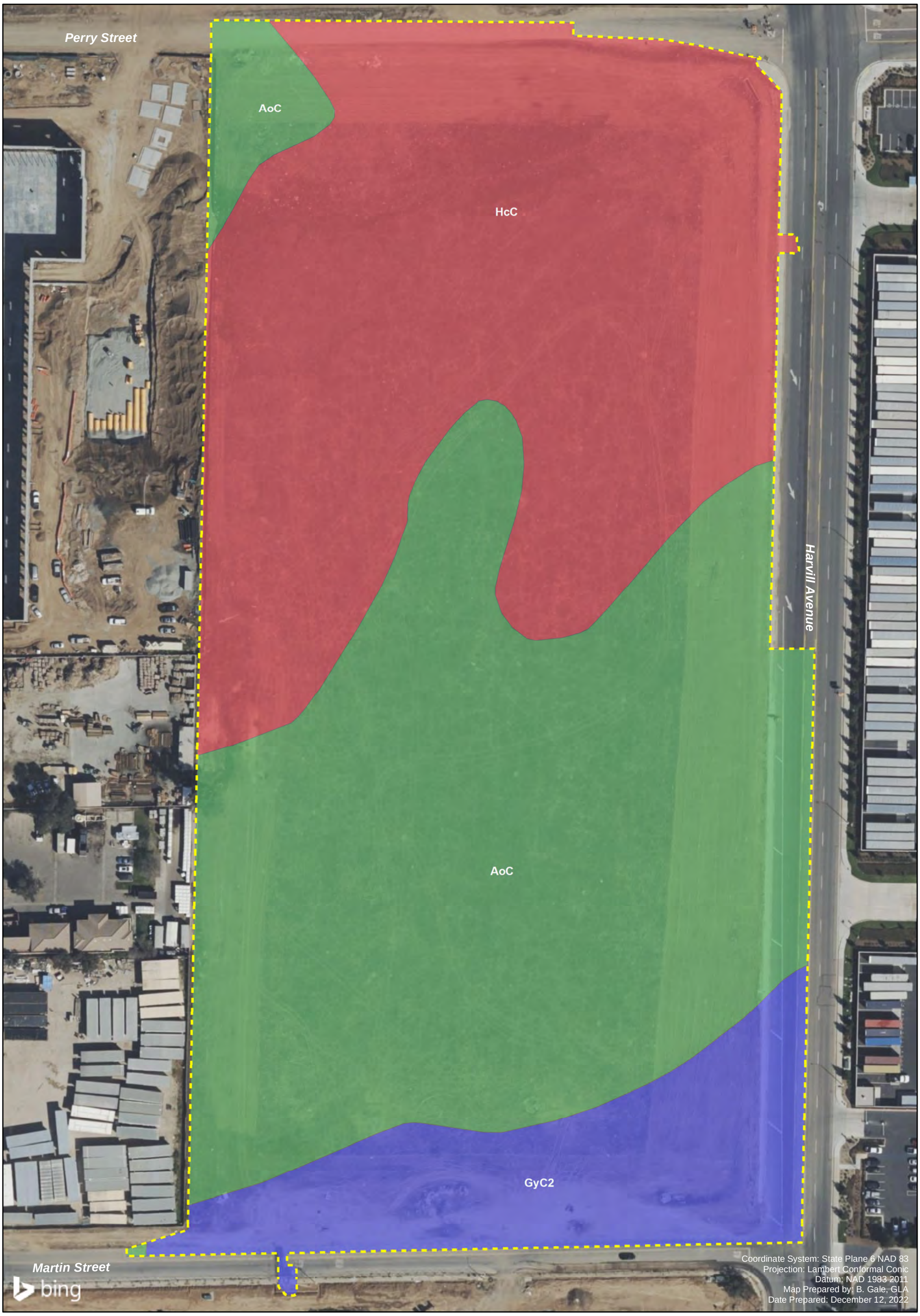
Photograph 3: Taken August 16, 2022, with view of Drainage A at the northeastern project boundary facing approximately east, depicting storm drain located at the Harvill Avenue and Perry Street intersection.

Photograph 4: Taken August 16, 2022, with view of Drainage B at the western project boundary facing approximately northeast, dominated by non-native grasses.

GLENN LUKOS ASSOCIATES

BUILDING 13 MAJESTIC FREEWAY BUSINESSS CENTER PROJECT

Site Photographs



Study Area

AoC — Arlington fine sandy loam, deep, 2 to 8 percent slopes

GyC2 — Greenfield sandy loam, 2 to 8 percent slopes, eroded

HcC — Hanford coarse sandy loam, 2 to 8 percent slopes

N

0 50 100 200

Feet

1 inch = 100 feet

BUILDING 13 AT THE MAJESTIC FREEWAY BUSINESS CENTER PROJECT

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 5

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Study Area

Project Site - 19.03 ac.

On-Site Impacts - 18.32 ac.

Off-Site Impacts - 0.82 ac.

On-Site Not Impacted - 0.71 ac.

Disturbed Non-Native Grassland

Disturbed Ruderal

Disturbed

Developed

N

0 50 100 200

Feet

1 inch = 100 feet

BUILDING 13 AT THE MAJESTIC FREEWAY BUSINESS CENTER PROJECT

Vegetation Map

GLENN LUKOS ASSOCIATES

Exhibit 4

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Study Area

Project Site - 19.03 ac.

On-Site Impacts - 18.32 ac.

Off-Site Impacts - 0.82 ac.

On-Site Not Impacted - 0.71 ac.

MSHCP Riverine

(#) Photo Location

N

0 50 100 200

Feet

1 inch = 100 feet

BUILDING 13 AT THE MAJESTIC FREEWAY BUSINESS CENTER PROJECT

MSHCP Riverine Map

GLENN LUKOS ASSOCIATES

Exhibit 8

X:\0363-THE REST\0849-68B13\GIS\DelineationGIS\849-68_JD_MSHCP.mxd

GLENN LUKOS ASSOCIATES
Regulatory Services

December 14, 2022

Jerrica Harding
T&B Planning
3665 Ruffin Road, Suite 208
San Diego, California 92123

SUBJECT: Jurisdictional Delineation for the Building 13 at the Majestic Freeway Business Center Project, a 19.85-Acre Study Area Located in Unincorporated Mead Valley, Riverside County, California

Dear Ms. Harding:

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 Building 13 at the Majestic Freeway Business Center Project (Project site) located in unincorporated Mead Valley, Riverside County, California [Exhibit 1 – Regional Map].[1]

The Project site comprises approximately 19.03 acres and contains no blue line streams as depicted on the U.S. Geological Survey (USGS) topographic map Steele Peak, California, California [Exhibit 2 – Vicinity Map]. The Project site is located at latitude at 33.846531 and longitude -117.258298, within Section 1 of Township 4 South and Range 4 West. The Project site is generally bounded by Perry Street to the north, Martin Street to the south, Harvill Avenue to the east, and Seaton Avenue to the west and is comprised of Assessor's Parcel Numbers: 314-130-015, 314-130-023, 314-130-024, 314-130-026, and 314-1300-27.

For this report, the term "Project site" is defined as the limits of the property owned by the Applicant and equals 19.03 acres. The total "Study Area" equals 19.85 and is defined as all areas within the Project site and offsite [Exhibit 3 – Study Area Map].

On August 16, 2022, regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the Study Area 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

[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.

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 100-scale maps [Exhibits 4A and 4B] that depict the areas of potential Corps/Regional Board and CDFW jurisdiction. Photographs to document the topography, vegetative communities, and general widths of the identified features are provided as Exhibit 5, and a map depicting the soils is provided as Exhibit 6.

Potential Corps/Regional Board jurisdiction within the Study Area totals 0.16 acre, none of which consists of jurisdictional wetlands. A total of 817 linear feet of ephemeral drainage is present.

Potential CDFW jurisdiction within the Study Area totals approximately 0.16 acre, none of which consists of riparian habitat. A total of 817 linear feet of ephemeral drainage 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 potential limits of jurisdiction were recorded with a sub-meter Trimble GPS device in conjunction with a color aerial photograph using visible landmarks.

[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:

- *Arlington Fine Sandy Loam, Deep, 2 to 8 Percent Slopes (AoC)*
- *Greenfield Sandy Loam, 2 to 8 Percent Slopes, eroded (GyC2)*
- *Hanford Coarse Sandy Loam, 2 to 8 Percent Slopes (HcC)*

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 shellfish 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 criterion 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 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.

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 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 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 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.

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*

[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.

[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

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,
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]

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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.

[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.

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.

III. RESULTS

A. Corps Jurisdiction

Potential Corps jurisdiction associated with the Study Area totals approximately 0.16 acre, none of which consists of jurisdictional wetlands. A total of 817 linear feet of ephemeral drainage is present.

Corps jurisdiction within the Study Area consists of two ephemeral drainages, described herein as Drainage A and Drainage B. Both Drainage A and B are considered ephemeral non-RPW features originating offsite with respective easterly and northerly flows. Neither drainage exhibits wetland characteristics. These features exhibit low function and value due to a general lack of

native habitat, marginal stream flow indictors, regularly disked surroundings, and being bordered by developed land-use types, such as rural and commercial/industrial development.

Tables 1 and 2 below outline the total acreage and linear feet of Corps jurisdiction within the Study Area. The boundaries of Corps jurisdictional features are depicted in Exhibit 4A.

Table 1 – Summary of Potential Corps Jurisdiction Within Project Site

Drainage Name	Corps Non-Wetland Waters of the U.S. (acres)	Corps Wetland Waters of the U.S. (acres)	Drainage Length (Linear feet)
Drainage A	0.14	0	602
Drainage B	0.02	0	205
Total	**0.16**	**0**	**807**

Table 2 – Summary of Potential Off-Site Corps Jurisdiction

Drainage Name	Corps Non-Wetland Waters of the U.S. (acres)	Corps Wetland Waters of the U.S. (acres)	Drainage Length (Linear feet)
Drainage A	0.003	0	10
Drainage B	0	0	0
Total	**0.003**	**0**	**10**

1. Drainage A

Potential Corps jurisdiction associated with Drainage A totals 0.14 acre (0.14 acre within Project site, 0.003 acre offsite), none of which consists of jurisdictional wetlands. Drainage A is an ephemeral feature that traverses the Study Area from the northwestern property boundary to the northeastern boundary where flows are directed into a storm drain located at the Harvill Avenue and Perry Street intersection, for a total of 612 linear feet. Drainage A supports a marginal OHWM averaging 10 feet in width as evidenced by changes in soil characteristics, presence of bent vegetation, and seasonal flow patterns.[10] Flowing and/or standing water was absent during the field delineation.

Vegetation associated with Drainage A consists predominantly of disturbed/ruderal species, including milk vetch (*Vicia sativa*, FACU), silverleaf nightshade (*Solanum crassifolia*, UPL), ripgut

[10] The field delineation occurred in August 2022 during a drier than normal year; therefore, flow patterns were observed on Google Earth aerial imagery and were confirmed in the field through observation of physical and biological field indicators.

brome (*Bromus diandrus*, UPL), common sunflower (*Helianthus annuus*, FACU), Russian thistle (*Salsola tragus,* FACU), fascicled tarweed (*Deinandra fasciculata,* FACU), shortpod mustard (*Hirschfeldia incana*, UPL), jimsonweed (*Datura stramonium,* UPL), Bermuda grass (*Cynodon dactylon*, FACU), fiddleneck (*Amsinckia intermedia,* UPL), yellow starthistle (*Centaurea solstitialis*, UPL), smallseed sandmat (*Euphorbia polycarpa,* UPL) and tarragon (*Artemisia dracunculus*, UPL).

2. Drainage B

Potential Corps jurisdiction associated with Drainage B totals 0.02 acre, none of which consists of jurisdictional wetlands. Drainage B is an ephemeral feature located on the western border of the Study Area that flows in a northerly direction for a total of approximately 205 linear feet. During high storm years, this feature conveys a surficial connection to Drainage A. The OHWM ranges from two to five feet in width as evidenced by changes in soil characteristics, defined channel banks in the upstream reach, and seasonal flow patterns.[11] Flowing and/or standing water was absent during the field delineation.

Vegetation associated with Drainage B consists predominately of non-native grass and ruderal species, including slender wild oat (*Avena barbata*, UPL), ripgut brome, shortpod mustard, common sunflower, valley vinegar weed (*Lessingia glandulifera*, FACU), stinknet (*Oncosiphon piluliferum*, FACU), prickly lettuce (*Lactuca serriola*, FACU), yellow star thistle, and tall cyperus (*Cyperus eragrostis*, FACW).

B. Regional Board Jurisdiction

Drainage A and Drainage B have been determined to be potential Corps jurisdictional waters subject to regulation pursuant to Section 404 of the CWA, and therefore would be regulated under Section 401 of the CWA. As such, they do not need to be addressed separately pursuant to Section 13260 of the CWC, the Porter-Cologne Act.

C. CDFW Jurisdiction

Potential CDFW jurisdiction within the Study Area totals approximately 0.16 acre, none of which consists of riparian habitat. A total of 817 linear feet of ephemeral drainage is present.

CDFW jurisdiction within the Study Area consists of two ephemeral drainages, described herein as Drainage A and Drainage B. Both Drainage A and B are considered ephemeral features with respective easterly and northerly flows. Neither drainage exhibits riparian habitat characteristics.

[11] The field delineation occurred in August 2022 during a drier than normal year; therefore, flow patterns were observed on Google Earth aerial imagery and were confirmed in the field through observation of physical and biological field indicators.

These features exhibit low function and value due to a general lack of native habitat, marginal stream flow indictors, regularly disked surroundings, and being bordered by developed land-use types, such as rural and commercial/industrial development.

Tables 3 and 4 below outline the total acreage and linear feet of CDFW jurisdiction within the Study Area. The boundaries of CDFW jurisdictional features are depicted in Exhibit 4B.

Table 3 – Summary of Potential CDFW Jurisdiction Within Project Site

Drainage Name	CDFW Non-Riparian Stream (acres)	CDFW Riparian Stream (acres)	Drainage Length (Linear feet)
Drainage A	0.14	0	602
Drainage B	0.02	0	205
Total	**0.16**	**0**	**807**

Table 4 – Summary of Potential Off-Site CDFW Jurisdiction

Drainage Name	CDFW Non-Riparian Stream (acres)	CDFW Riparian Stream (acres)	Drainage Length (Linear feet)
Drainage A	0.003	0	10
Drainage B	0	0	0
Total	**0.003**	**0**	**10**

1. Drainage A

Potential CDFW jurisdiction associated with Drainage A totals 0.14 acre (0.14 acre within Project site, 0.003 acre off-site), none of which consists of riparian habitat. Drainage A is an ephemeral drainage feature that traverses the Study Area from the northwestern property boundary to the northeastern boundary where flows are directed into a storm drain located at the Harvill Avenue and Perry Street intersection. Drainage A averages 10 feet in width as evidenced by changes in soil characteristics, presence of bent vegetation, and seasonal flow patterns.[12] Flowing and/or standing water was absent during the field delineation.

Vegetation associated with Drainage A consists of ruderal species including milk, silverleaf nightshade, ripgut brome, common sunflower, Russian thistle, fascicled tarweed, shortpod

[12] The field delineation occurred in August 2022 during a drier than normal year; therefore, flow patterns were observed on Google Earth aerial imagery and were confirmed in the field through observation of physical and biological field indicators.

mustard, jimsonweed, Bermuda grass, fiddleneck, yellow star thistle, smallseed sandmat, and tarragon.

2. Drainage B

Potential CDFW jurisdiction associated with Drainage B totals 0.02 acre, none of which consists of riparian habitat. Drainage B is an ephemeral feature located on the western border of the Study Area that flows in a northerly direction for a total of approximately 205 linear feet. The drainage exhibits flow patterns extending up to five feet in width as evidenced by changes in soil characteristics and defined channel banks in the upstream reach.[13] Flowing and/or standing water was absent during the field delineation.

Vegetation associated with Drainage B consists predominately of non-native grass and ruderal species, including slender wild oat, ripgut brome, shortpod mustard, common sunflower, valley vinegar weed, stinknet, prickly lettuce, yellow star thistle, and tall cyperus.

If you have any questions about this letter report, please contact Martin Rasnick at (949) 837-0404.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

Brinna Lee
Regulatory Specialist

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[13] The field delineation occurred in August 2022 during a drier than normal year; therefore, flow patterns were observed on Google Earth aerial imagery and were confirmed in the field through observation of physical and biological field indicators.