Appendix C:
Biological Resources Supporting Information

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C.1 - Biological Resources Assessment

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Biological Resources Assessment
Shirk and Riggin Industrial Park Project
City of Visalia, Tulare County, California

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Date: September 13, 2022
Revised: June 6, 2023

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SECTION 1: INTRODUCTION

1.1 - Purpose and Methods of Analysis

At the request of Seefried Industrial Properties, Inc., (project applicant) FirstCarbon Solutions (FCS) conducted a Biological Resource Assessment (BRA) for the proposed Shirk and Riggin Industrial Park Project (proposed project). The purpose of the BRA was to (1) document existing and potentially occurring biological resources on the project site and adjacent areas; (2) analyze potential project-related impacts on regulated biological resources as required under the California Environmental Quality Act (CEQA); (3) summarize relevant local, State, and federal regulations; and (4) recommend appropriate measures to mitigate potential impacts on biological resources to less than significant levels.

1.2 - Project Site Location

The project site is located on approximately 284 acres, which is currently within unincorporated Tulare County (Exhibit 1). However, the project applicant proposes annexation of the project site into the City of Visalia (City).

The project site is bound by West Riggin Avenue to the south, North Shirk Street to the east, North Kelsey Street to the west, and a canal ditch to the north. The site consists of three parcels that are designated with Assessor's Parcel Numbers (APNs) 077-840-001 through -003. The entire site is within the Urban Growth Boundary (UGB) and Sphere of Influence (SOI) of the City of Visalia and has historically been used for agricultural purposes. The City's General Plan assigns the western portion of the site as Industrial and the eastern portion as Light Industrial use designations.

1.3 - Project Description

The project applicant proposes to convert existing agricultural lands to develop the approximately 284-acre project site into an industrial park comprised of: eight industrial buildings used for warehouse, distribution, and light manufacturing; six flex industrial buildings; two drive-through restaurants; a convenience store and gas station; a recreational vehicle (RV) and self-storage facility; and a car wash. The total building footprint is approximately 3,720,149 square feet. The proposed project would include enough trailer and car parking stalls to serve the project site in accordance with applicable City requirements. The proposed project would also incorporate sufficient infrastructure and improvements to serve the proposed uses. These would include detention basins on the east, west, and central portions of the project site and other necessary stormwater facilities to be sized and installed in accordance with all applicable requirements and standards. The proposed project would remove approximately 275.09 acres of existing orchards on-site. Appropriate landscaping and lighting would be incorporated into the overall site design consistent with applicable City requirements and guidelines.

The proposed project would require approval of annexation of the project site into jurisdictional boundaries of the City; a Master Conditional Use Permit (CUP) to allow the proposed convenience store and drive-through restaurants; and a reduction in minimum parcel size from currently applicable standards. The proposed Master CUP would apply to all three project parcels.

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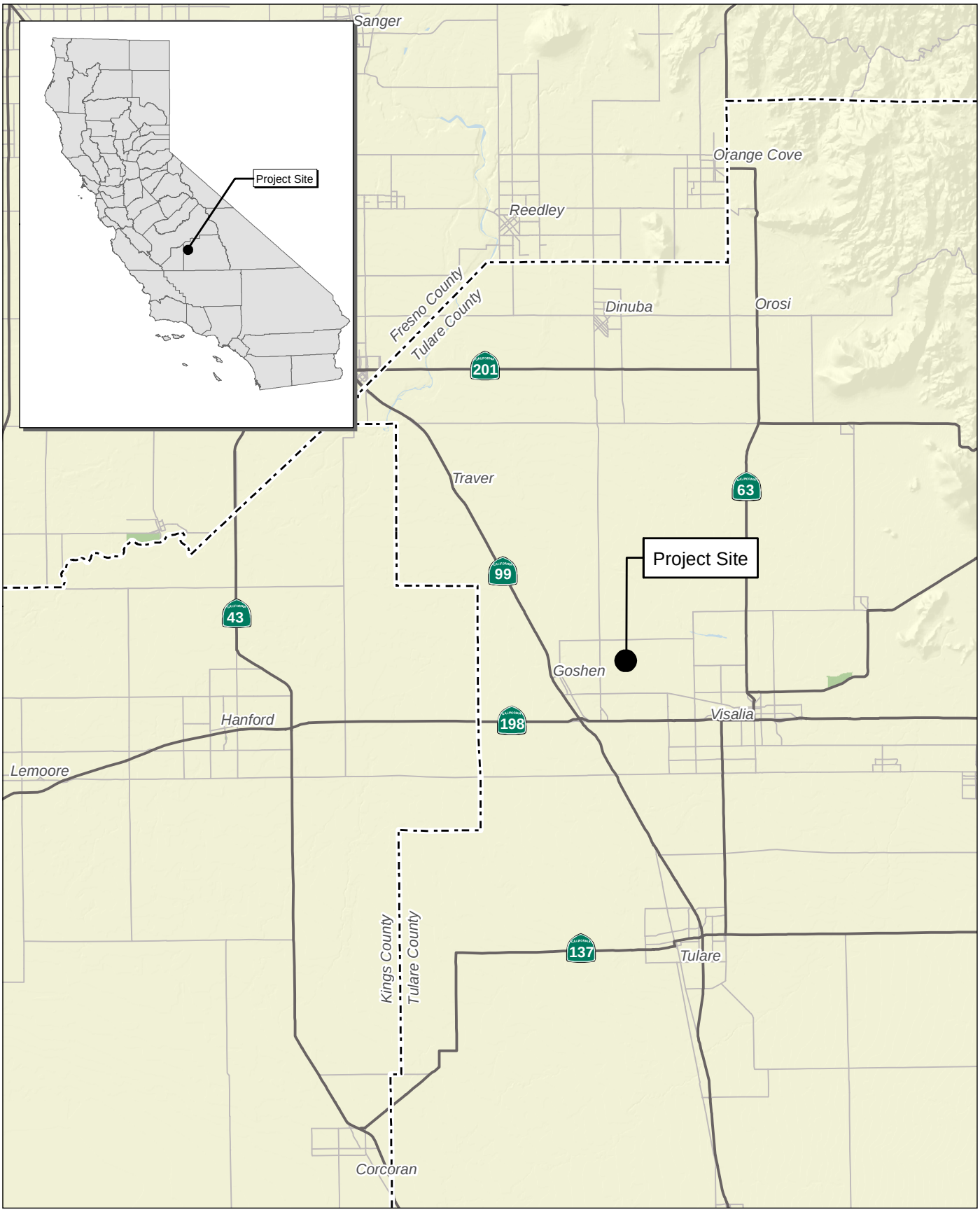

Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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SEEFRIED INDUSTRIAL PROPERTIES, INC.
SHIRK AND RIGGIN INDUSTRIAL PARK PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

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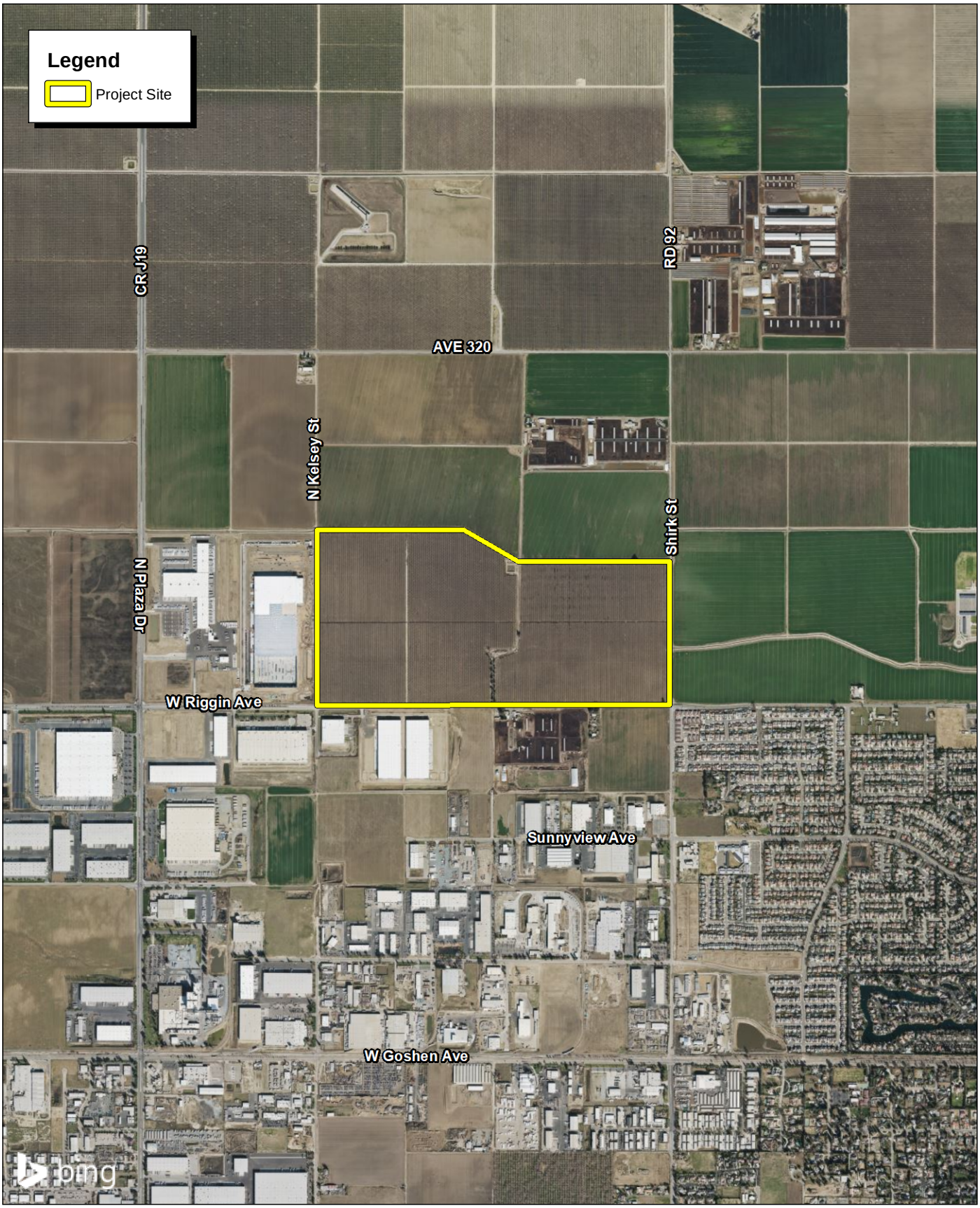

Source: Bing Aerial Imagery.

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2,000 1,000 0 2,000 Feet

Exhibit 2
Local Vicinity Map

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SEEFRIED INDUSTRIAL PROPERTIES, INC.
SHIRK AND RIGGIN INDUSTRIAL PARK PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

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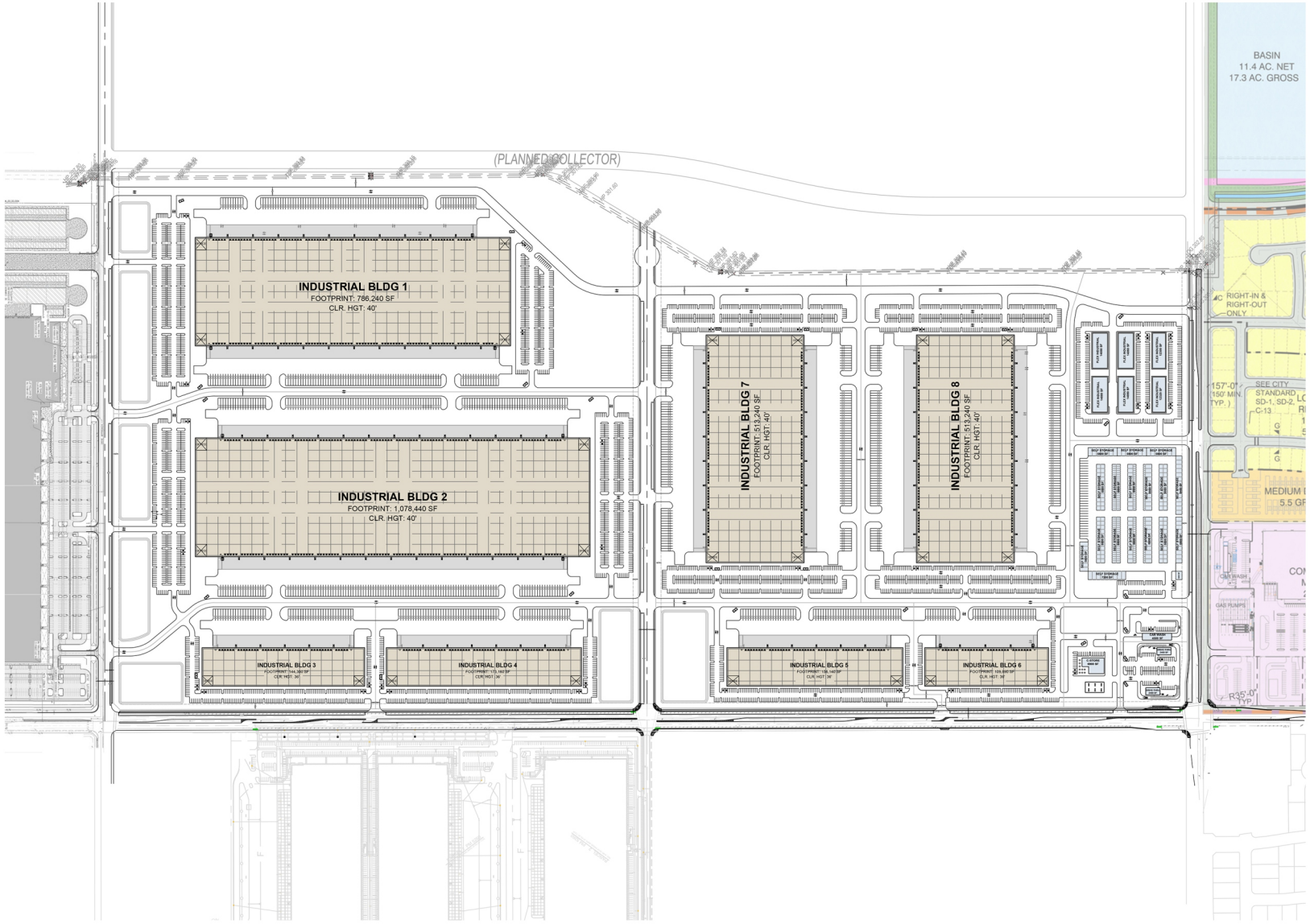

Source: 4Creeks, August 2022.

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Exhibit 3
Site Plan

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SECTION 2: REGULATORY SETTING

2.1 - Federal

2.1.1 - Endangered Species Act

The United States Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the federal Endangered Species Act. Section 9 of the Endangered Species Act protects listed species from "take," which is broadly defined as actions taken to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." The Endangered Species Act protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; during the environmental review process, these species are usually treated by resource agencies as if they were listed.

2.1.2 - Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. All migratory birds and their nests are protected from take and other impacts under the MBTA (16 United States Code [USC] § 703, *et seq*.).

2.1.3 - Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq*.) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

2.1.4 - Clean Water Act

Section 404

The United States Army Corps of Engineers (USACE) administers Section 404 of the federal Clean Water Act (CWA), which regulates the discharge of dredge and fill material into waters of the United States. The USACE has established a series of nationwide permits that authorize certain activities in waters of the United States if a proposed activity can demonstrate compliance with standard conditions. Normally, USACE requires an individual permit for an activity that will affect an area equal to or in excess of 0.5 acre of waters of the United States. Projects that result in impacts to less than 0.5 acre can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions. The USACE also has discretionary authority to require an Environmental Impact Statement for proposed projects that result in impacts to an area between 0.1 and 0.5 acre. Use of any nationwide permit is contingent on the activities having no impacts to endangered species.

Section 401

As stated in Section 401 of the CWA, "any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the applicable Regional Water Quality Control Board (RWQCB).

2.2 - State

2.2.1 - CEQA Guidelines

The following CEQA Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on State or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, natural community conservation plan, or other approved local, regional, or State Habitat Conservation Plan.

2.2.2 - California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the federal Endangered Species Act but pertains to State listed endangered and threatened species. CESA requires lead agencies to consult with the CDFW when preparing CEQA documents. The purpose is to ensure that lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether the project would

jeopardy the continued existence of a species, and allows the CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

2.2.3 - California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Sections 2050 through 2098 of the Fish and Game Code outline the protection provided to California's rare, endangered, and threatened species. Section 2080 of the Fish and Game Code prohibits the taking of plants and animals listed under the CESA. Section 2081 established an incidental take permit program for State listed species. The CDFW maintains a list of "Candidate species," which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq*.) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify the CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from "take" prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right-of-way." Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the development at issue.

The CDFW also maintains lists of "Species of Special Concern" that serve as species "watch lists." The CDFW has identified many Species of Special Concern. Species with this status have limited distribution or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and thereby warrant specific protection measures.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society (CNPS) List ranked 1A, 1B, and 2 would typically be considered under CEQA.

Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or

licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Section 3503.5 of the Fish and Game Code, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed development within its jurisdiction must determine whether any State listed endangered or threatened species may be present in the relevant study area and determine whether the proposed development would have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any development project that may impact a candidate species.

Impacts to species on the CESA endangered or threatened list resulting from a proposed development would be considered significant. State listed species are fully protected under the mandates of CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Section 1602 of the Fish and Game Code requires any entity to notify the CDFW before beginning any activity that "may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake" or "deposit debris, waste, or other materials that could pass into any river, stream, or lake." "River, stream, or lake" includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water.

Section 2000 and 4150 of the California Fish and Wildlife Code state that it is unlawful to take or possess a number of species, including bats, without a license or permit as required by Section 3007.

2.2.4 - California Porter-Cologne Water Quality Control Act

The RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the State" (Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the State" (Water Code § 13050(e)).

California State Water Resources Control Board/RWQCB Stormwater Management Permitting

While federal CWA NPDES regulations allow two permitting options for construction-related stormwater discharges (individual permits and General Permits), the State Water Board has elected to adopt only one Statewide Construction General Permit at this time that will apply to all stormwater discharges associated with construction activity, except from those on Tribal Lands, in

the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (Caltrans).

The Construction General Permit requires all dischargers where construction activity disturbs greater than 1 acre of land, or those sites less than 1 acre that are part of a common plan of development or sale that disturbs more than one acre of land surface to:

1. Develop and implement a SWPPP which specifies BMPs that will prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off-site into receiving waters.
2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation. Achieve quantitatively defined (i.e., numeric) pollutant-specific discharge standards, and conduct much more rigorous monitoring based on the project's projected risk level.
3. Perform inspections of all BMPs.

2.2.5 - California Native Plant Society

The CNPS maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS ranks:

- **Rank 1A:** Plants presumed Extinct in California
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere
- **Rank 2A:** Plants presumed extirpated in California but common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more common elsewhere
- **Rank 3:** Plants about which we need more information—A Review List
- **Rank 4:** Plants of limited distribution—A Watch List

All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, potential impacts to these species or their habitats should be analyzed during the preparation of environmental documents relating to CEQA, as they may meet the definition of Rare or Endangered under CEQA Guidelines Section 15380 criteria.

2.2.6 - Habitat Conservation Plan

The project site does not lie within the boundaries of any adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State HCP.

2.2.7 - Regional and Local

The project site will be annexed to the City of Visalia (City). Therefore, this BRA discusses applicable City regulations as they relate to biological resources.

City of Visalia Municipal Code

The City Municipal Code contains the following provisions regarding the protection and preservation of biological resources:

Chapter 12.24 Oak Tree Preservation

Articles 1–5 describe the City restrictions related to potential destruction, removal, and other activities affecting oak trees during development planning and implementation, including (see Code for more details):

Article 1 Purpose and Definitions

- Valley Oak Tree (Quercus lobata) and "Landmark" trees

Article 2 Destruction Prohibition–Removal Permit Requirements

- Willful destruction of oak trees prohibited
- Oak tree removal permit required
- Removal standards
- Mitigation requirements

Article 3 Pruning Standards and Requirements

- Pruning notice required

Article 4 Development Proposals; Protection of Oak Trees

- Encroachment into canopy drip-line of oak trees during construction

Article 5 Enforcement

- Enforcement proceedings and penalties

Street Tree Ordinance

Sections 12.20.010 et seq. of the City's Municipal Code regulates the planting, long-term care, maintenance, and protection of street trees within the City, including protection during construction, and replacement.

A street tree is defined as any tree that is located between the curb and sidewalk or within a tree well in the sidewalk within the public right-of-way, or any tree within a street tree easement in or adjacent to the public right-of-way.

SECTION 3: METHODS

3.1 - Literature Review

The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the project site, as well as the surrounding area (e.g., the *Goshen, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map and its eight neighboring quadrangles), in accordance with applicable requirements under CEQA.

3.1.1 - Existing Documentation

As part of the literature review, an FCS Biologist examined existing environmental documentation for the project site and vicinity. This documentation included biological studies for the area; literature pertaining to habitat requirements of special-status species potentially occurring on the project site and vicinity; and federal register listings, protocols, and species data provided by the USFWS and CDFW.

3.1.2 - Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and remainder of the study area.[1] Information obtained from the review of the topographic maps included range, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the EPA Watershed Assessment, Tracking, and Environmental Results System (WATERS).[2] Aerial photographs provide a perspective of the most current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

3.1.3 - Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.[3] These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to establish if soil conditions on-site are suitable for any special-status plant species.

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1 United States Geological Survey (USGS). 2020. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed July 2022.

2 United States Environmental Protection Agency (EPA). 2020. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed July 2022.

3 Natural Resources Conservation Service (NRCS). 2020. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed July 2022.

3.1.4 - Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded on-site and the surrounding area. The list was based on a search of the CDFW California Natural Diversity Database (CNDDB), the USFWS Information for Planning and Consultation (IPaC) database and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California database for the *Goshen, California* USGS 7.5-minute topographic quadrangle map and its eight neighboring quadrangles.[4,5]

The CNDDB Biogeographic Information and Observation System (BIOS 5) database was used to determine the distance between known recorded occurrences of special-status species and the project site.[6]

3.1.5 - Trees

Prior to conducting the reconnaissance-level survey, an FCS Biologist reviewed applicable City and County ordinances pertaining to tree preservation and protective measures and their required tree replacement conditions or permits.

3.1.6 - Jurisdictional Waters and Wetlands

Prior to conducting the reconnaissance-level survey, an FCS Biologist reviewed EPA WATERS and aerial photography to identify any potential natural drainage features and water bodies.[7] In general, all surface drainage features identified as blue-line streams on USGS maps are expected to be potentially subject to State and federal regulatory authority as "waters of the United States and/or State." A preliminary assessment was conducted to determine the location of any existing drainages relative to the proposed limits of project-related activities involving grading or other ground disturbance.

3.2 - Field Survey

FCS Senior Biologist, Robert Carroll, conducted a reconnaissance-level field survey of the project site on July 5, 2022, between approximately 10:00 a.m. and 4:00 p.m. The objective of the survey was not to exhaustively search for every potential species occurring within the project site, but rather to ascertain general site conditions and identify potentially suitable habitat areas for special-status plant and wildlife species. Special-status or unusual biological resources identified during the literature review were confirmed during the reconnaissance-level survey for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species. Professional qualifications for Mr. Carroll can be found in Appendix A.

[4] California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Database (CNDDB) RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed July 2022.

[5] California Native Plant Society (CNPS). 2020. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed July 2022.

[6] California Department of Fish and Wildlife (CDFW). 2020. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed July 2022.

[7] United States Environmental Protection Agency (EPA). 2020. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed July 2022.

3.2.1 - Vegetation

Common plant species observed during the reconnaissance-level survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Uncommon and less familiar plants were identified with the use of taxonomical guides, including Jepson eFlora and Calflora.[8,9] Taxonomic nomenclature used in this study follows The Jepson Manual: Vascular Plants of California.[10] Common plant names, when not available from The Jepson Manual, were taken from other regionally specific references. Vegetation types and boundaries were noted on aerial photos, verified through field observation, and digitized using ESRI ArcGIS software® ArcMap 10.0. By incorporating collected field data and interpreting aerial photography, a map of habitat types, land cover types, and other biological resources within the project site was prepared. Vegetation community and land cover types used to help classify habitat types are based on Manual of California Vegetation and cross-referenced with the CDFW Natural Communities List.[11,12]

3.2.2 - Wildlife

All wildlife species that were detected during the on-site reconnaissance-level survey by sight, calls, tracks, scat, or other signs were recorded, and notations were made regarding suitable habitat for those special-status species determined to potentially occur within the project site.[13] FCS staff used appropriate field guides to assist with species identification during surveys, such as Peterson, Reid, and Stebbins.[14,15,16] Online resources such as eBird and California Herps were consulted, as necessary.[17,18]

3.2.3 - Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated “islands” of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The project site was evaluated for evidence of a wildlife movement corridor during the reconnaissance-level survey. The scope of the BRA did not include a formal wildlife movement corridor study utilizing track plates, camera stations, scent stations, or snares. Rather, the focus of

[8] Jepson Flora Project (eds.) 2020. Jepson eFlora. Website: https://ucjeps.berkeley.edu/eflora/. Accessed July 2022.
[9] Calflora. 2020. Calflora: Information on California plants for education, research, and conservation. Website: http://www.calflora.org/. Accessed July 2022.
[10] Baldwin, B. et al. 2012. The Jepson Manual: Vascular Plants of California. Berkeley: University of California Press. County of San Bernardino (Bernardino). 2007 (amended 2015).
[11] Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento. 1300 pp.
[12] California Department of Fish and Wildlife (CDFW). 2020. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities. Accessed July 2022.
[13] California Department of Fish and Wildlife (CDFW). 2020. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed July 2022.
[14] Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4th Edition. Boston: Houghton Mifflin Harcourt.
[15] Reid, F. 2006. A Field Guide to Mammals of North America, 4th Edition. Boston: Houghton Mifflin Harcourt.
[16] Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.
[17] eBird. 2020. Online bird occurrence database. Website: http://ebird.org/content/ebird/. Accessed July 2022.
[18] California Herps. 2020. A Guide to the Amphibians and Reptiles of California. Website: http://www.californiaherps.com/. Accessed July 2022.

this study was to determine whether the proposed project's change of land use at the project site could have significant impacts on the regional movement of wildlife.

The following conclusions are based on the information compiled during the literature review, including aerial photographs, USGS topographic maps and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity.

SECTION 4: RESULTS

This section summarizes the results of the literature search, database review, and survey conducted on July 5, 2022.

4.1 - Environmental Setting

The project site lies within the central portion the San Joaquin Valley, which together with the Sacramento Valley makes up California's larger Central Valley. The San Joaquin Valley is bounded by the Sierra Nevada Mountains to the east and Coast Ranges to the west. The project site is surrounded by mixed agriculture to the north and east, and industrial complexes to the west and south, plus a dairy farm to the south. Urbanized areas in the City of Visalia are located primarily to the southeast.

4.1.1 - Topography

The topography of the project site and surrounding area is relatively flat, which is typical of the San Joaquin Valley. The topography of the eastern San Joaquin Valley rises gradually to the east toward the Sierra Nevada Mountains, while the topography of the western portion of the valley rises to the west toward the Coast Ranges.

4.1.2 - Soils

The Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) depicts two soil types within the project site.[19] These soil types and their primary characteristics are summarized in Table 1.

Table 1: Soil Types Present within Project Site

Soil Name	Slope	Description	Percent of Site
Akers-Akers, saline–sodic, complex	0–2%	The Akers series consists of very deep, well-drained soils formed in alluvium derived from granitic rock. Akers soils are on terraces. Saline–sodic soils are high in soluble salts and exchangeable sodium.	32
Grangeville sandy loam	0–2%	The Grangeville series consists of very deep, somewhat poorly drained soils that formed in moderate coarse textured alluvium dominantly from granitic rock sources. Grangeville soils are on alluvial fans and floodplains.	68

[19] Natural Resources Conservation Service (NRCS). 2020. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed July 2022.

4.2 - Vegetation Communities and Land Cover

The following section describes vegetation communities and land cover types on the project site. The location and spatial extent of these types are shown on Exhibit 5.

4.2.1 - Almond Orchard

An orchard is defined as an intentional plantation of trees or shrubs that is maintained for food production. Orchards comprise fruit or nut-producing trees which are generally grown for commercial production. Such trees are often arranged in rows. The project site currently consists of an actively managed orchard of almond (*Prunus dulcis*) that is approximately 275 acres in size and was established around 2018. All orchard areas on the project site are actively managed, with sparse herbaceous understory plant cover that consists of managed ruderal non-native grasses and forbs.

4.2.2 - Access Roads/Barren

Barren areas on the project site consist of access roads, which are currently dirt with small amounts of managed, non-native invasive grasses and forbs on edges.

4.2.3 - Planted Ornamental Trees

An existing non-native planted ornamental tree cover includes a double row of 35 olives (*Olea europaea*; between approximately 1- and 2-feet diameter at breast height [DBH]) along the southern portion of the private access road bisecting the project site south to north; a cluster of two tall elm (*Ulmus* sp.) trees (approximately 3 feet DBH each); and one approximately 3-foot-DBH cedar (*Cedrus* sp.).

4.2.4 - Valley Oak

A substantial portion of the canopy of a mature valley oak (*Quercus lobata*) overlaps the northern boundary of the project site. The trunk of this oak is estimated to be over 3 feet DBH, and is rooted on the neighboring property, at the northern bank of Modoc Ditch.

4.2.5 - Retention Basin and Modoc Ditch Irrigation Canal

Modoc Ditch is an artificial, actively managed irrigation canal aligned along the northern boundary of the project site. It is approximately 15 feet wide and carried approximately a foot of water at the time of the survey, though water levels are expected to fluctuate based on agricultural activity. Modoc Ditch flows from west to east through a dirt-bottom channel, but the channel is highly disturbed with broken pavement, boulders, and debris found throughout the bed and banks. Flows of the canal are sustained by water that is pumped in through the regional irrigation infrastructure, and the flows are typically disconnected from St. John's River to the east but can likely be connected to St. John's River under flooding conditions.

The project site contains a man-made and actively managed retention basin for irrigation purposes. Water levels likely fluctuate depending on agriculture activities and needs. Water is actively pumped into the retention basin from Modoc Canal. The retention basin was constructed during the establishment of the almond orchard in 2018.

4.2.6 - Off-site Trees

Several tall trees, predominantly of the genus *Eucalyptus* are present on neighboring parcels south of the projects site, as close as approximately 70 feet to the project site boundary. While these trees are not proposed to be impacted directly, they have the potential to provide nesting habitat for protected species, including Swainson's hawk (*Buteo swainsoni*), as detailed below.

4.3 - Common Wildlife

The vegetation community and land cover types discussed above provide habitat for few local wildlife species adapted to agricultural land use. Wildlife activity was low during the field survey and consisted primarily of avian species. The following discussions regarding the wildlife species observed or that have a potential to occur within the project site are organized by taxonomic group. Each discussion contains representative examples of a particular taxonomic group either observed or expected to occur on-site.

4.3.1 - Amphibians

Amphibian species observed on-site during the field survey include abundant bullfrog (*Lithobates catesbeianus*) tadpoles in the irrigation basin. It is possible that other disturbance-resistant common amphibian species such as Pacific chorus frog (*Pseudacris regilla*) or the western toad (*Anaxyrus boreas*) may be present at times in the irrigation basin and Modoc Ditch; however, presence of bullfrog significantly limits presence of other amphibians due to predation pressure. Therefore, and because of the artificial hydrological regime and regular maintenance however, these features would likely act as population sinks for amphibians and would not be considered suitable habitat for self-sustaining native amphibian populations.

4.3.2 - Birds

Bird species observed on-site included mourning dove (*Zenaida macroura*), phoebe (*Sayornis nigricans*), a resident pair of red-tailed hawks (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), Anna's hummingbird (*Calypte anna*), common sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and a robust population of killdeer (*Charadrius vociferus*). A nesting cavity in a large elm tree points to potential site use of woodpecker or northern flicker (*Colaptes auratus*). Almost all trees on-site showed signs of previous nesting activities, including small nests built of grass and at least one larger sticknest.

Bird species not observed but potentially present within the orchards on-site include common and disturbance-resistant passerines and corvids, such as northern mockingbird (*Mimus polyglottos*), American crow (*Corvus brachyrhynchos*), American robin (*Turdus migratorius*) and others.

Swainson's hawk is known to occur near the project site (see Section 5.3, below, and Exhibit 6). While almond orchards are not considered Swainson's hawk foraging habitat, this species is known to forage in alfalfa fields and open low crop and grasslands, and these habitat types are present adjacent to the project site.

4.3.3 - Mammals

Because of the project site's agricultural land use, mammal presence would likely be limited to small rodents, and potentially vagrant dispersing individuals of common mammal species, including potentially coyote (*Canis latrans*), cottontail rabbit (*Sylvilagus audubonii*), and striped skunk (*Mephitis mephitis*).

4.3.4 - Reptiles

Because of the agricultural land use, reptile presence would likely be limited to common reptile populations, potentially including gopher snake (*Pituophis catenifer*) and western fence lizard (*Sceloporus occidentalis*), which are common in disturbed and developed areas and were observed near the pump house during the field survey.

4.4 - State or Federally Protected Waters and Wetlands

The Modoc Ditch and the artificial retention basin (described in Section 4.2.5, above) are not expected to be regulated as State- or federally- protected waters or wetlands under CWA Sections 404/401, Porter-Cologne Water Quality Control Act, or Fish and Game Code Sections 1602 *et seq*., because the irrigation canal and associated retention basin have all been excavated within upland habitat for the purpose of on-site agricultural irrigation and drainage. However, legal authority to determine whether these features are jurisdictional and thus regulated lies with the USACE, RWQCB, and CDFW, as discussed further below.

On February 27, 2023, a preliminary *Jurisdictional Delineation (JD) of Visalia-Kelsey Street Industrial Complex Project in unincorporated, California* was completed by South Environmental for the proposed project and can be found in its entirety in Appendix C of the Draft EIR.

4.5 - Wildlife Movement Corridors

Most of the project site consists of actively managed orchards and does not contain habitat features such as riparian corridors that could function as wildlife corridors. Additionally, the project site is surrounded by active roadways, active agriculture, industrial, and residential development, all of which impede the movement of wildlife and limit the use of the project site as a potential corridor for wildlife movement. The project site is not within a known wildlife corridor.

SECTION 5: SENSITIVE BIOLOGICAL RESOURCES

The following section discusses the extent or the potential for sensitive biological resources to occur within the project site.

5.1 - Sensitive Natural Communities

None of the vegetation communities described in Section 4.2 are considered sensitive natural communities. No sensitive natural communities are present on-site.

5.2 - Special-status Plant Species

FCS evaluated 17 special-status plant species and CNPS sensitive species that have been recorded within the *Goshen, California* USGS Topographic Quadrangle Map and its eight neighboring quadrangles by the CNDDB and CNPSEI (Appendix B, Table 1).[20,21] The evaluation includes the species' status, required habitat, and potential to occur within the project site. None of the special-status plant species were determined to have potential to occur on-site primarily due to the absence of suitable habitat, past and current land use, and the extent and frequency of ground disturbance.

5.3 - Valley Oak

The valley oak discussed in Section 4.2.4 and shown on Exhibit 5 can be considered a sensitive biological resource due to its local rarity, the locally unique ecosystem services it provides (including shading, nesting, and roosting and foraging opportunities, nutrient cycling, and others), and its status as a protected tree under the City's Oak Tree Preservation ordinance.

5.4 - Special-status Wildlife Species

FCS evaluated 15 federal and State listed threatened and/or endangered wildlife species and State Species of Special Concern that have been recorded in the CNDDB as potentially occurring within the *Goshen, California* topographic quadrangle and its eight neighboring quadrangles (Appendix B, Table 2). The evaluation includes the species' status, required habitat types and features, and potential to occur within the project site and supporting analysis and rationale. Based on the field survey and background research, the only special-status species with a realistic potential to occur on-site is Swainson's hawk. This species, as well as other relevant special-status species, as discussed in more detail below.

5.4.1 - Swainson's Hawk

Swainson's hawk is listed as threatened under CESA.[22] Swainson's hawk is a medium-sized bird of prey with relatively long, pointed wings that curve up somewhat in a slight dihedral while the bird is

[20] California Department of Fish and Wildlife (CDFW). 2020. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed August 4, 2022.
[21] California Native Plant Society (CNPS). 2020. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed September 8, 2022.
[22] California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Database (CNDDB). Special Animals List. Sacramento, CA. Updated July 2020.

in flight. Adult females weigh between 900 and 1,100 grams (32 to 39 ounces), and males from 800 to 1,000 grams (28 to 35 ounces). The most distinctive identifying features of an adult Swainson's hawk are its dark head and breast band that is distinctive from the lighter colored belly, and the lighter linings on the underside of the wing that are lighter than the dark gray flight feathers.

Swainson's hawk breeds in the western United States and Canada and winters in South America as far south as Argentina. The breeding season for Swainson's hawk in the Central Valley typically lasts from March to the end of July.[23] Swainson's hawk typically forages in open grasslands and has become increasingly dependent on agriculture, especially alfalfa crops, as native communities are converted to agricultural lands. The diet of the Swainson's hawk in California consists of small rodents such as voles; however, other small mammals, birds, and insects are also preyed upon. Swainson's hawk often nest near riparian woodlands. They will also use lone trees in agricultural fields or pastures, and roadside trees that are adjacent to suitable foraging habitat.[24]

CNDDB records indicate several Swainson's hawk nesting occurrences within 5 miles of the project site (Exhibit 6). Given these recent sightings and the existence of suitable nesting habitat in the form of several large trees near suitable foraging habitat present on adjacent properties, there is a moderate potential for this species to occur on-site.

5.4.2 - Western Burrowing Owl

The western burrowing owl (*Athene cunicularia*)is a California species of special concern. Western burrowing owls are year-round residents throughout much of California, especially in the Central Valley, San Francisco Bay region, Carrizo Plain, and Imperial Valley. Migrants from other parts of western North America can augment local populations in lowland areas in the winter. The breeding season in California is February 1 to August 31. Western burrowing owls prefer open, dry, short grassland habitats with few trees and often are associated with burrowing mammals such as California ground squirrels. They occupy burrows, typically abandoned by ground squirrels or other burrowing mammals, but also use artificial burrows such as abandoned pipes, culverts, and debris piles.

The project site does not contain the above-mentioned habitat requirements for burrowing owl. No suitable burrows or signs of burrowing owls were observed on-site. However, directly adjacent fields may provide marginal or temporary burrowing owl habitat, and presence of burrowing owl on an adjacent suitable property cannot be ruled out.

5.4.3 - San Joaquin Kit Fox

The San Joaquin kit fox (*Vulpes macrotis mutica*) is federally listed as endangered under the Endangered Species Act and is State listed as threatened. Federal critical habitat for this species has not been designated. The historical range of San Joaquin kit fox included most of the San Joaquin Valley as well as low elevation basins and ranges along the eastern side of the Central Coast Ranges.

[23] California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee. Sacramento, California. May 31, 2000.
[24] California Department of Fish and Wildlife (CDFW). 2020. Swainson's Hawks in California. Website: https://wildlife.ca.gov/Conservation/Birds/Swainson-Hawks. Accessed July 2022.

By 1930, this range had been reduced by more than half, with the largest populations occurring in the southern and western portions of the San Joaquin Valley. Today, the San Joaquin kit fox occurs in the remaining native valley and foothill grasslands and chenopod scrub communities of the valley floor and surrounding foothills, from southern Kern County north to Los Banos, Merced County. Smaller, less dense populations may be found farther north and in the narrow corridor between I5 and the Interior Coast Ranges from Los Banos to Contra Costa County. The San Joaquin kit fox's range also includes portions of Monterey, Santa Clara, and San Benito Counties. The San Joaquin kit fox inhabits a variety of habitats, including grasslands; scrublands; vernal pool areas; alkali meadows and playas; and agricultural irrigated pastures, orchards, and vineyards. They prefer habitats with loose-textured soils and are found primarily in arid grasslands and open scrublands that are suitable for digging, but they occur on virtually every soil type. Dens generally are located in open areas with grass or grass and scattered brush, and seldom occur in areas with thick brush. Preferred sites are relatively flat, well-drained terrain. They are seldom found in areas with shallow soils resulting from high water tables or impenetrable bedrock or hardpan layers.

No dens suitable for kit fox or other signs of kit fox presence were observed on-site. The project site is an actively managed orchard and may therefore provide only temporary dispersal habitat. As such, the temporary presence of a vagrant individual on-site cannot be ruled out.

5.4.4 - American Badger

The American badger (*Taxidea taxus*) is a California species of special concern. The species is found throughout the State except in the north coast region. Badgers are most abundant in drier areas with friable soils and sparse vegetation. This species was last documented from the vicinity of Visalia in 1994, consisting of one individual seen in on a fallow field with abundant ground squirrel as a pray base. Because of the lack of required habitat elements on the project site, this species is very unlikely to occur on-site. No dens or burrows suitable for this species were observed.

5.4.5 - Crotch's Bumblebee

CNDDB records indicate that Crotch's bumblebee have been documented to occur within the City of Visalia. Suitable Crotch's bumblebee habitat includes areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows. The project site consists of an actively managed orchard, and no required habitat elements for this species are present. Therefore, this species is not expected to occur on-site. However, if adjacent agricultural fields cease to be actively managed and provide suitable habitat, a vagrant dispersing Crotch's bumblebee may traverse the site.

5.4.6 - Northern California Legless Lizard

The Northern California legless lizard (*Anniella pulchra*) occurs in moist, warm, and loose soil with plant coverage. Moisture is essential to this species. It often occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. It also prefers to dwell within leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather. This species can often be found under surface objects such as rocks, boards, driftwood, and logs. The nearest CNDDB recorded

occurrence of this species is from January 1934 and the next closest occurrence is over 11 miles away and was found within the Kaweah Oaks Preserve. The project site does not contain suitable habitat for this species due to heavy modification through extensive agriculture, unsuitable soils and vegetative communities, and high aridity. Because of these circumstances, the Northern California legless lizard does not have the potential to occur within the project site.

5.4.7 - Protected Functional Groups

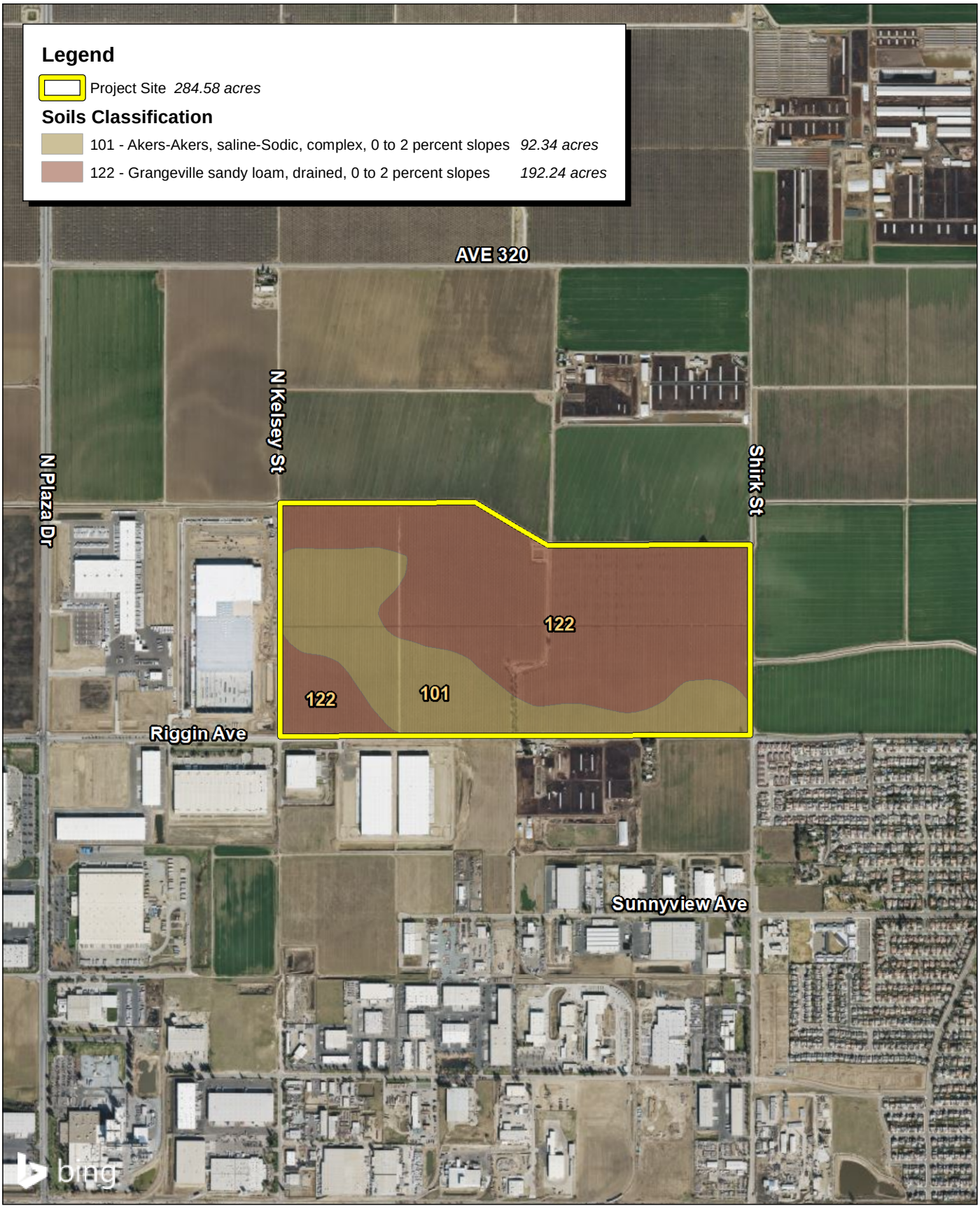
Nesting Birds

The active nests of most bird species are protected by federal and/or State laws and regulations (MBTA and Fish and Game Code). Species that are protected pursuant to MBTA are identified by the USFWS.[25] Nests are generally defined as being "active" if they contain eggs or altricial young. The project site contains trees, shrubs, and structures that provide suitable habitat for protected migratory or native resident nesting bird species relatively tolerant of human disturbance.

Roosting Bats

The larger ornamental trees and the pump house next to the retention basin on-site are potentially capable of supporting protected bat roosts (e.g., maternity roosts) of non-listed bat species tolerant to agricultural settings, if active management ceases for more than approximately one month before demolition. Protection of bats is defined in the Regulatory Settings section, above.

[25] United States Fish and Wildlife Service (USFWS). 2020. Website: https://www.federalregister.gov/documents/2020/04/16/2020-06779/general-provisions-revised-list-of-migratory-birds.



Source: Bing Aerial Imagery. USDA Soils Data Mart, Tulare County.

FIRSTCARBON SOLUTIONS™

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Exhibit 4
Soils Map

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SEEFRIED INDUSTRIAL PROPERTIES, INC.
SHIRK AND RIGGIN INDUSTRIAL PARK PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

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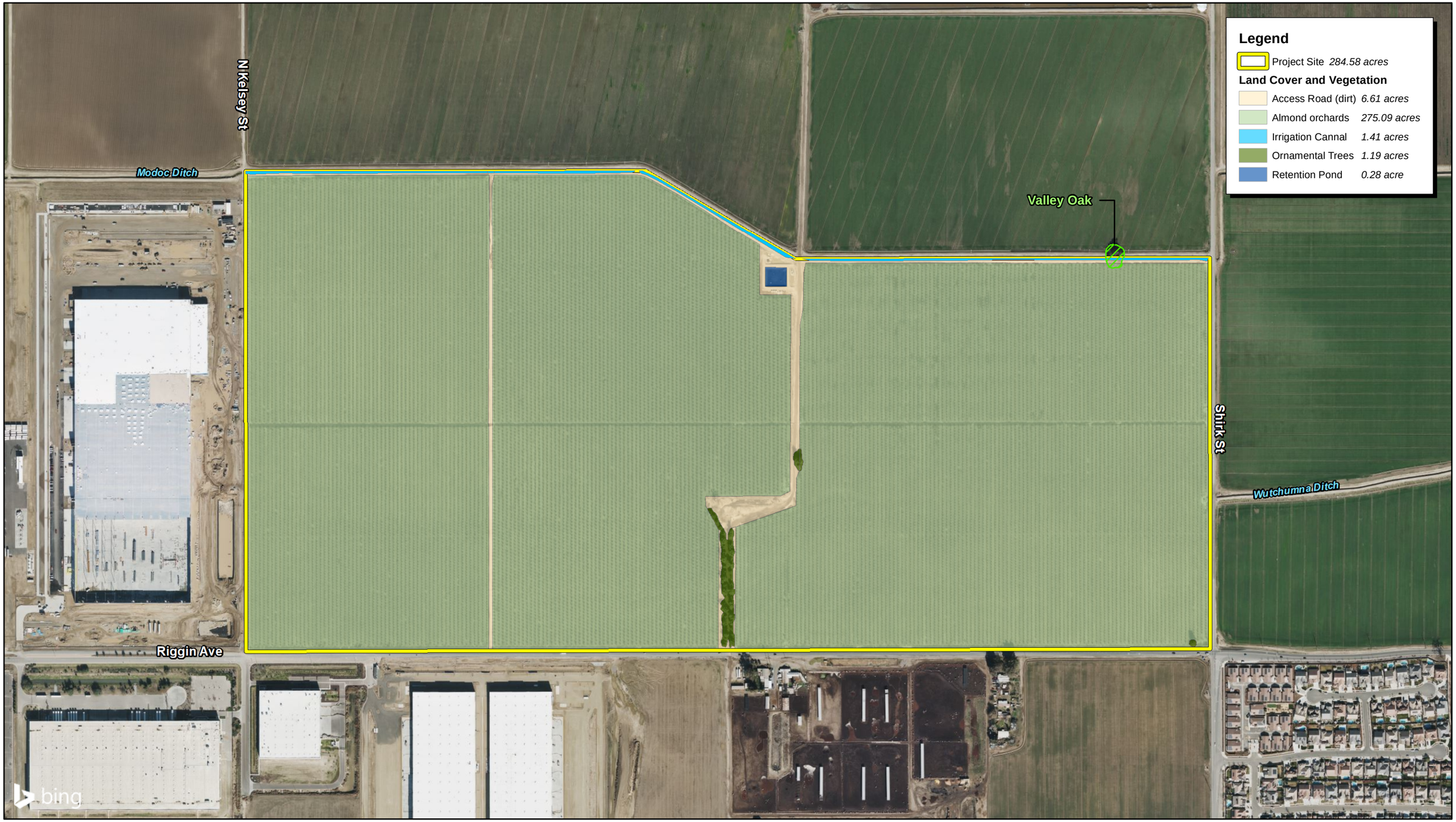

Source: Bing Aerial Imagery.

FIRSTCARBON SOLUTIONS™

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Exhibit 5
Land Cover and Vegetation

SEEFRIED INDUSTRIAL PROPERTIES, INC.
SHIRK AND RIGGIN INDUSTRIAL PARK PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

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Exhibit 6: CNDDB Special-status Species Occurrences

Per CDFW's CNDDB Data Use Guidelines v4.2 2011, this exhibit contains sensitive information relating to biological resources and is not intended for public distribution. A copy of confidential Exhibit 6: CNDDB Special-Status Species Occurrences is on file with the City of Visalia and is available to qualified professionals upon request.

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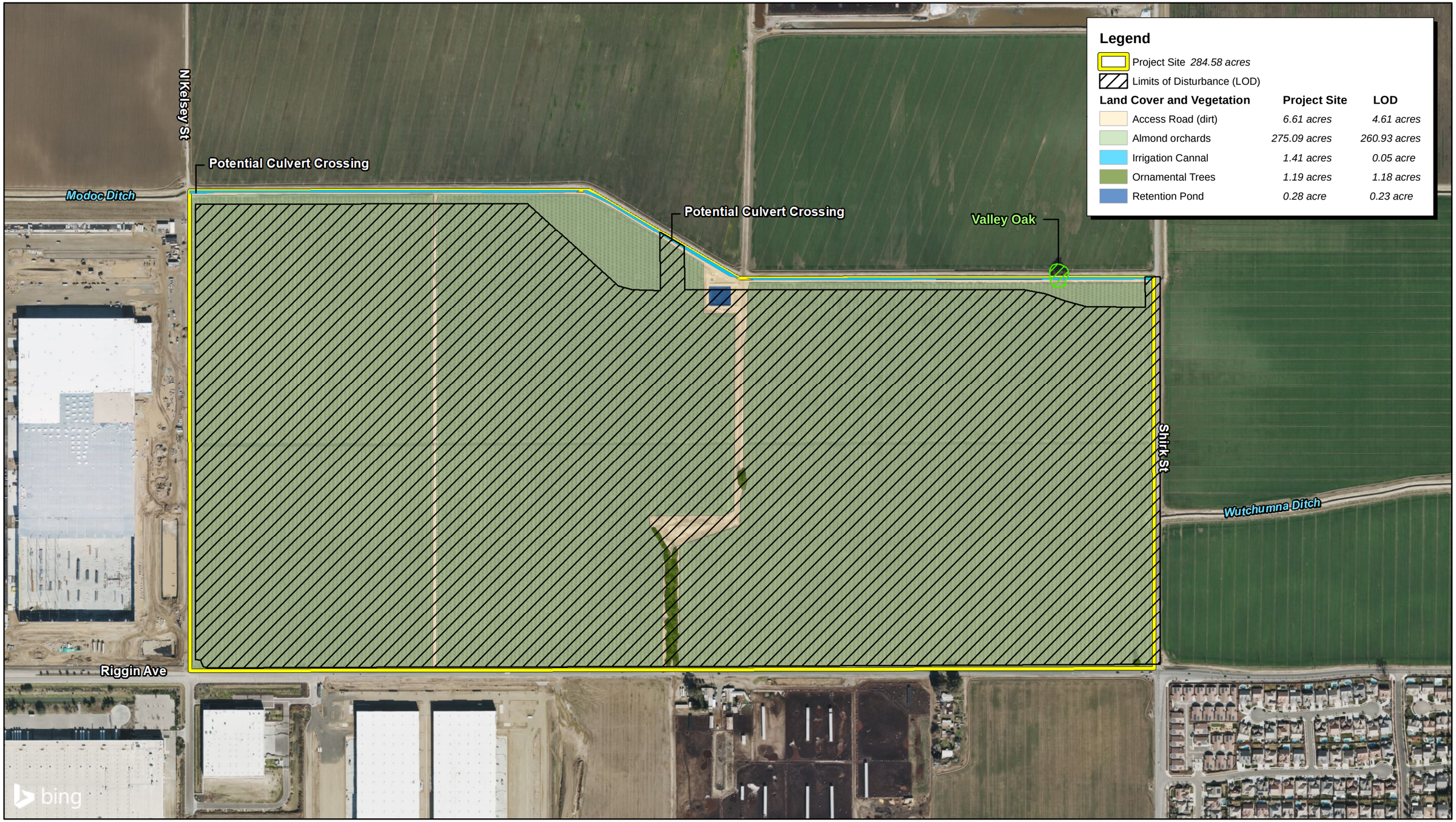

Source: Bing Aerial Imagery. 4-Creeks, July 2022.

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Exhibit 7
Impacts on Biological Resources

SEEFRIED INDUSTRIAL PROPERTIES, INC.
SHIRK AND RIGGIN INDUSTRIAL PARK PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

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SECTION 6: IMPACT ANALYSIS AND RECOMMENDATIONS

The following discussion addresses potential project impacts on regulated biological resources, including special-status wildlife species, wildlife nursery sites, and protected trees; and recommends measures to avoid and/or mitigate impacts to a less than significant level under CEQA.

As discussed in detail in Section 5, no rare or special-status plant species, sensitive natural communities, or wildlife corridors occur on-site. Therefore, these resource categories are not included in this impact analysis.

6.1 - Special-status Wildlife Species

The following section analyzes potential project-related impacts on special-status wildlife species and establishes avoidance and minimization measures to reduce potential project-related impacts to less than significant levels.

6.1.1 - Swainson's Hawk

Suitable Swainson's hawk nesting trees are located on the project site and suitable Swainson's hawk foraging habitat is present on adjacent properties north and east of the project site. Swainson's hawks readily habituate to a variety of human disturbances including construction. Swainson's hawk nests are often found along busy roadways and in a variety of settings where substantial noise and other disturbances occur, including in agricultural areas. There are conditions, however, where the potential for abandonment is increased. This can occur when new disturbances are introduced to an otherwise open, rural setting. Under these conditions, no-disturbance buffers are important to avoid nest abandonment. No disturbance buffers are intended to prevent all ground-disturbing activities and project-related entry of any sort into the buffer area. Although tolerant of human presence and activities, Swainson's hawks are most sensitive to direct observation of the nest by people. Therefore, restrictions within buffers should prohibit all entry and direct observation of the nest.

If a Swainson's hawk nest is active on or near the project site during construction, the proposed project could impact this species in several ways:

- The proposed project could cause direct harm to the species by the destruction of active nests during tree removal activities.
- The proposed project could cause indirect harm to the species through the noise, light and other man-made disturbances resulting from project construction and operation, which may result in this species abandoning its nests.

The project applicant developer would be responsible for compliance with all applicable laws and regulations in place protecting Swainson's hawk, including applicable provisions of CESA, MBTA, and the Fish and Game Code. These laws and regulations are described in Section 2 and are designed to reduce potential project-related impacts on Swainson's hawk.

The project site does not currently provide foraging habitat due to the existing orchard operations. Therefore, development of the proposed project would not remove foraging area for this species.

To further reduce potential impacts on Swainson's hawk to less than significant levels under CEQA, FCS proposes implementation of the following Mitigation Measures (MMs) to increase the potential to detect Swainson's hawk nests and to establish adequate nest protection zones in order to decrease the chance of accidental violation of above laws and to conform with applicable CDFW Guidelines:[26]

In 2000, the Swainson's Hawk Technical Advisory Committee prepared the above-noted Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley that focused on the timing of surveys and, as an alternative to the 1994 CDFW guidance (requiring 0.5 mile no-disturbance buffer), provided information on disturbance buffers and the risk to active nests. Although the members of the Technical Advisory Committee and other Biologists have years of supporting observational data from a variety of construction or other related disturbances, the distance guidance in the Technical Advisory Committee document primarily used data from the California Department of Water Resources Delta Temporary Barriers project and other Delta projects. Annual surveys and nest monitoring are conducted to avoid nest abandonment resulting from project activities. This has resulted in a more reasonable data-based approach to assessing disturbance impacts and establishing buffers. Based on these data, the Technical Advisory Committee guidance indicates that the lowest risk of nest abandonment is achieved at a distance of 600 feet. The Technical Advisory Committee guidance on distance buffers has been regularly used by for many years as an alternative to the 1994 CDFW guidance. Therefore, it has been determined that a 600-foot no-disturbance buffer prohibiting all entry during the breeding season would be sufficient for the proposed project, should an active Swainson's hawk nest become established.

MM BIO-1 Pre-construction Surveys for Swainson's Hawk

Prior to initial ground disturbance or building permits of any project area, if during the nesting season for Swainson's hawk (March 20 to July 20), a qualified Biologist shall conduct Swainson's hawk nesting surveys on-site and within a 0.5-mile radius of the project site to determine whether nests are present and if so, occupied. Occupancy shall be determined through observation of all accessible areas, including from public roads or other publicly accessible observation areas of Swainson's hawk activity (e.g., foraging) on and near the project site. If ground disturbance occurs outside the nesting season, no further action is required.

A qualified Biologist shall follow the survey protocol outlined in the California Department of Fish and Wildlife (CDFW) Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley, which recommends surveys according to the following survey periods:

i. **January–March 20:** Conduct one survey total.

[26] California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee. Sacramento, California. May 31, 2000.

ii. **March 20–April 5:** Conduct three surveys total. Surveys shall be conducted between sunrise to 10:00 a.m. and/or 4:00 p.m. to sunset.
iii. **April 5–April 20:** Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:30 p.m. to sunset.
iv. **April 21–June 10:** Initiating surveys are not recommended. Monitoring of known nest sites only.
v. **June 10–July 30:** (post-fledging) Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:00 p.m. to sunset.

Pre-construction surveys shall be completed for at least the two survey periods immediately prior to the subject ground-disturbing activities being initiated, with the latest survey no more than 10 days prior to the start of the subject ground-disturbing. A copy of the survey results shall be submitted to the lead agency as evidence of compliance.

MM BIO-2 Swainson's Hawk Avoidance and Minimization and Construction Monitoring

If nests are located and determined to be occupied, minimization measures must be implemented by the relevant applicant in connection with a specific individual development application, and construction monitoring conducted as follows:

1. Construction activities shall be prohibited within 600 feet of an active and occupied Swainson's hawk nest, or within 600 feet of nests under construction, to prevent nest abandonment unless a smaller buffer is approved pursuant to subsection (2) below. This incorporates the maximum avoidance buffer size stated in the California Department of Fish and Wildlife (CDFW) Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley.
2. If site-specific conditions or the nature of the construction activity (e.g., other nearby development, limited activities) indicate that a smaller buffer, or no buffer at all, could be used, the project developer may seek approval from the qualified Biologist who in coordination with the CDFW shall determine the appropriate buffer size, which, once approved, shall govern.
3. No tree containing an active Swainson's hawk nest shall be removed.

If (i) no nests are located or (ii) if nests are located and determined not to be occupied, then no minimization measures shall need to be implemented and no further mitigation under MM BIO-2 shall be required.

6.1.2 - Western Burrowing Owl

While no suitable habitat for burrowing owl exists on-site (see Section 5.4.2), and no burrowing owl or signs thereof, were observed on adjacent fields during the time of the survey, it cannot be ruled out that nesting burrowing owl may be present before within disturbance distance of the proposed project, currently considered to be 500 feet. If project activities include significant increase in noise or other indirect disturbance of an active burrowing owl within 500 feet of an active burrowing nest

were to occur, premature nest abandonment and loss of viable eggs or young could take place. Loss of burrowing owl would be considered a significant impact. However, with implementation of MM BIO-3, detection, and protection of active burrowing nests on adjacent fields would reduce this potential impact to less than significant.

MM BIO-3 Pre-construction Surveys for Burrowing Owl (includes avoidance and passive relocation if found)

To determine whether burrowing owl have occupied the project site prior to its development, a qualified Biologist shall perform a pre-construction burrowing owl survey to determine burrow locations within 30 days prior to construction activities using California Department of Fish and Wildlife (CDFW) Guidelines. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. Surveys for occupied burrows shall be completed within all construction areas and within 300 feet of the proposed project impact area (where possible and appropriate based on locations of barren or ruderal habitats). At least 15 days prior to the expected start, or restart, of any project-related ground disturbance activities, the project applicant shall provide a burrowing owl survey report with mapping exhibits to the CDFW. If no burrowing owl are detected during the pre-construction survey, no further action is necessary.

If burrowing owl are detected during the pre-construction survey, the following actions shall be taken to offset impacts during construction (as outlined in the CDFW 2012 Guidelines):

- During the non-breeding season (September 1 through January 31), no disturbance shall occur within an approximately 160-foot radius of an occupied burrow. During the nesting season (February 1 through August 31), occupied burrows shall not be disturbed within a 300-foot radius unless a qualified Biologist approved by the CDFW verifies through non-invasive methods that either (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.
- If owls must be moved away from the disturbance area, passive relocation techniques (as outlined by the CDFW [i.e., use of one-way doors]) should be used rather than trapping. At least one or more weeks will be necessary to accomplish this and to allow the owls to acclimate to alternate burrows.
- If unpaired owls or paired owls are present in or within 300 feet of areas scheduled for disturbance or degradation (e.g., grading) and nesting is not occurring, owls are to be removed per CDFW-approved passive relocation protocols. Passive relocation requires the use of one-way exclusion doors, which must remain in place at least 48 hours prior to site disturbance to ensure owls have left the burrow prior to construction. A CDFW-approved exclusion plan would be required to implement this measure.

- If paired owls are nesting in areas scheduled for disturbance or degradation, nest(s) shall be avoided from February 1 through August 31 by a minimum 300-foot buffer or until fledging has occurred. Following fledging, owls may be passively relocated.

6.1.3 - San Joaquin Kit Fox

Potential presence of San Joaquin kit fox is unlikely because no signs of suitable denning habitat were observed during the field surveys, and if it occurred, occurrences would be limited to vagrant individuals dispersing across the project site in search of suitable habitat. The project site does not include suitable habitat, and no suitable dens were observed on-site. However, a pre-construction survey to confirm absence of this species from the project site is recommended (MM BIO-4) along with) standard San Joaquin fox avoidance measures.

MM BIO-4 **Pre-construction Special-status Species Wildlife Surveys and Protective Measures if Found, Including Standard Avoidance Measures for San Joaquin Kit Fox.**

Not more than 14 days before start of vegetation removal, ground disturbance grading, or other earthwork, a qualified Biologist shall conduct surveys to determine the presence/absence of the following special-status wildlife species: Crotch's bumblebee, San Joaquin kit fox, western burrowing owl, and American badger. Should any of the foregoing special-status wildlife species be detected, the qualified Biologist shall coordinate with the California Department of Fish and Wildlife (CDFW) and/or the United States Fish and Wildlife Service (USFWS) (as appropriate) to determine adequate protection measures as may be required under applicable laws and regulations, and the relevant project developer shall implement all such measures in connection with the development proposal at issue. Copies of all reports and communication with the appropriate wildlife agencies shall be submitted to the lead agency as evidence of compliance.

The following standardized recommendations as outlined by the USFWS for the protection of San Joaquin Kit Fox shall be implemented during project construction:

1. Project-related vehicles should observe a daytime speed limit of 20-mph throughout the site in all project areas, except on county roads and State and Federal highways; this is particularly important at night when kit foxes are most active. Night-time construction should be minimized to the extent possible. However, if it does occur, then the speed limit should be reduced to 10-mph. Off-road traffic outside of designated project areas should be prohibited.
2. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than 2-feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for

trapped animals. If at any time a trapped or injured kit fox is discovered, the Service and the California Department of Fish and Game (CDFG) shall be contacted as noted under measure 13 referenced below.

3. Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe should not be moved until the Service has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.
4. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from a construction or project site.
5. No firearms shall be allowed on the project site.
6. No pets, such as dogs or cats, should be permitted on the project site to prevent harassment, mortality of kit foxes, or destruction of dens.
7. Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional project-related restrictions deemed necessary by the Service. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox.
8. A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the Service.
9. An employee education program should be conducted for any project that has anticipated impacts to kit fox or other endangered species. The program should consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and/or agency personnel involved in the project. The program should include the following: A description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet

conveying this information should be prepared for distribution to the previously referenced people and anyone else who may enter the project site.

10. Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. should be re-contoured if necessary, and revegetated to promote restoration of the area to pre-project conditions.
11. In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the Service should be contacted for guidance.
12. Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFG immediately in the case of a dead, injured or entrapped kit fox.
13. The Sacramento Fish and Wildlife Office and CDFG shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information.
14. New sightings of kit fox shall be reported to the California Natural Diversity Database (CNDDB). A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the Service at the address below.

6.1.4 - American Badger

Potential presence of American badger is unlikely because no dens or burrows suitable for this species were observed during the field surveys, and if it occurred, it would be limited to vagrant individuals dispersing across the project site to find suitable habitat. The project site does not include suitable habitat, and no suitable dens or burrows were observed on-site. However, a pre-construction survey to confirm absence of this species from the project site is recommended (MM BIO-4). Standard avoidance measures for the San Joaquin kit fox would also act to protect the American badger.

6.1.5 - Crotch's Bumblebee

Potential presence of Crotch's bumblebee is unlikely because entire project site consists of actively managed orchard, and no required habitat elements for this species are present, and if it occurred, it would be limited to vagrant individuals dispersing across the project site to find suitable habitat. The project site does not include suitable habitat. Therefore, implementation of the proposed project would not result in significant impacts on this species. However, a pre-construction survey to confirm absence of this species from the site is recommended (MM BIO-4).

6.1.6 - Nesting Birds

Birds protected under the MBTA, or California Fish and Game Code are legally protected and considered sensitive during the active nesting period and are therefore included in this impact

analysis for special-status species. The extensive almond orchards, numerous ornamental trees, and the stand of large eucalyptus trees along (outside) the southern boundary of the project site provide suitable habitat for a variety of species of nesting birds, including Swainson's hawk. Construction activities that occur during the avian nesting season (generally February 1 to August 31) could disturb nesting sites for bird species protected under the MBTA or the Fish and Game Code. The removal of trees during the nesting season could result in direct harm to nesting birds, while noise, light and other man-made disturbances may cause nesting birds to abandon their nests.

The project developer would be required to comply with all applicable laws and regulations protecting active bird nests, including MBTA and Fish and Game Code. These laws and regulations are described in Section 2 and are designed to reduce potential project-related impacts on protected nesting birds.

To reduce potential impacts on protected bird nests to less than significant levels under CEQA, FCS proposes implementation of the following mitigation measures to increase the potential to detect protected bird nests and to establish adequate nest protection zones to decrease the chance of accidental violation of applicable laws.

MM BIO-5 Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found).

1. Removal of trees shall occur in compliance with and as required by the City's Tree Preservation Ordinance.
2. If project development requires trees to be removed during the nesting season, pre-construction nesting bird surveys shall be conducted 7 days prior to tree removal to determine whether active nests are present.
3. If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on species and anticipated disturbance level. A qualified Biologist will determine the nest protection zone. The relevant applicant of the development proposal at issue shall physically mark the nest protection zone with Environmentally Sensitive Area fencing, pin flags, and/or yellow caution tape. The nest protection zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently, as determined by a qualified Biologist. No construction activities or construction foot traffic is allowed to occur within the nest protection zones until the young have fledged and are foraging independently, as determined by a qualified Biologist.
4. The qualified Biologist shall monitor the active nests periodically during construction activities to prevent any significant potential impacts that may result from the construction of the proposed project, until the young have fledged. Copies of the survey report shall be submitted to the lead agency as evidence of compliance.

If no active nests are located, then no minimization measures shall need to be implemented and no further mitigation under MM BIO-5 shall be required.

6.1.7 - Roosting Bats

If protected bat roosts are present on the project site or within disturbance distance, demolition activities have the potential to disturb/disrupt protected bat roosts, potentially leading to direct destruction or premature roost abandonment and loss of bats (including young or rare/sensitive bat species).

The project developer would be required to comply with all applicable laws and regulations (including the Fish and Game Code) related to the take of nongame mammals naturally occurring in California, including bats. These laws and regulations are listed in Section 2 and are intended to reduce potential project-related impacts on naturally occurring nongame mammals, including bats.

To reduce potential impacts on roosting bats to less than significant levels, FCS proposes implementation of the following mitigation measures to increase the potential to detect protected bat roosts and reduce the likelihood of disturbing or disrupting such roosts.

MM BIO-6 Protection of Roosting Bats (includes pre-construction survey, and implementation of avoidance buffer, if found).

If tree removal or demolition of existing structures is proposed in connection with project development, trees and/or structures with features capable of supporting roosting bats shall be surveyed by a qualified Biologist for bat roosts or evidence of bat roosting (guano, urine staining and scent, dead bats) not more than 14 days before the start of ground disturbance, including vegetation removal. If active roosts are discovered, a protection zone of no less than 50 feet around the active roost shall be established by the qualified Biologist. Disturbance may occur within the buffer once active roosting ceases, as determined by the qualified Biologist.

If roosts are determined to be present and must be removed, the bats shall be excluded from the roosting site before the tree or structure is removed. A bat Exclusion Plan shall be reviewed and approved by the California Department of Fish and Wildlife (CDFW) prior to implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave, but not reenter), or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts shall be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). Copies of the survey report shall be submitted to the lead agency as evidence of compliance.

If no active roosts are located, then no minimization measures shall need to be implemented and no further mitigation under MM BIO-6 shall be required.

6.2 - State or Federally Protected Waters or Wetlands

The proposed project would remove or modify the existing retention basin and would potentially require new culvert crossings over Modoc Ditch and extension of one existing culvert crossing (Exhibit 7).

As stated in Section 4.4, Modoc Ditch and the retention basin are not expected to be considered State- or federally protected aquatic resources pursuant CWA Sections 404/401 and/or Fish and Game Code Section 1602. Moreover, because both features are parts of actively managed irrigation infrastructure, and therefore disconnected from natural flows downstream, it is not expected that the proposed modifications would cause indirect impacts on State- or federally protected aquatic resources downstream.

As described above, a preliminary JD was conducted by South Environmental for the proposed project. According to the JD, the Modoc Ditch is likely an irrigation ditch that was solely constructed for the purposes of irrigation of agricultural areas. It has no downstream connection to federal or State water resources. Modoc Ditch upstream connection to the Saint John's River is likely artificial and if irrigation activities surround the Modoc Ditch were to end, water would stop flowing into the ditch and it would subsequently dry up. Therefore, impacts to the Modoc Ditch would likely be exempt from permitting with the RWQCB due to the lack of connection to waters of the State and the status as an irrigation ditch constructed in an otherwise upland area, solely for the purpose of agricultural irrigation. Modoc Ditch also lacks native plant communities or habitats and is of a low-quality habitat for wildlife. Therefore, impacts to Modoc Ditch would not likely require permitting with the CDFW due to the project impacts not resulting in negative effects to habitat for wildlife or aquatic habitats. Regardless, the proposed project would be required to comply with all applicable federal and State water quality laws and regulations, including CWA 402 (NPDES), the Porter-Cologne Water Quality Control Act (including stormwater control permits), and Fish and Game Code as described in Section 3.4.3. Compliance with all applicable provisions of the CWA and Porter-Cologne Water Quality Control Act would be sufficient for the proposed project to reduce potential impacts to State- and federally protected waters or wetlands to a less than significant level under CEQA.

It is notable that the CDFW did not request submittal of a Notification of Streambed Alteration in its October 17, 2022, comment letter submitted to the City of Visalia NOP, indicating that none is required. No additional mitigation measures would typically be warranted in such instances.

However, in accordance with City standards and to further confirm that the project site does not contain any State or federally protected aquatic resources, MM BIO-7 shall be required for the proposed project.

MM BIO-7 Preliminary Jurisdictional Delineation

The project developer shall submit the preliminary Jurisdictional Delineation (JD) and coordinate with the appropriate regulating agencies (Central Valley Regional Water Quality Control Board [RWQCB], California Department of Fish and Wildlife [CDFW] and the United States Army Corps of Engineers [USACE]) to determine whether the Modoc Ditch is protected under Section 404 and 401 of the Clean Water Act (CWA), Porter-Cologne Water Quality Control Act, and/or Fish and Game Code 1602.

If Modoc Ditch is considered jurisdictional by the regulating agencies, the relevant project developer shall, in accordance with all applicable laws and regulations,

obtain the relevant permit applications based on coordination with the appropriate regulating agencies, if required prior to impacting any waters.

As part of these authorizations, compensatory mitigation may be required by the regulating agencies to offset the loss of aquatic resources. If so, and as part of the permit application process, a qualified professional shall draft a Mitigation and Monitoring Plan to address implementation and monitoring requirements under the permit(s) to ensure that the subject development proposal would result in no net loss of habitat functions and values. The Mitigation and Monitoring Plan shall contain, at a minimum, mitigation goals and objectives, mitigation location, a discussion of actions to be implemented to mitigate the impact, monitoring methods and performance criteria, extent of monitoring to be conducted, actions to be taken in the event that the mitigation is not successful, and reporting requirements. The Mitigation and Monitoring Plan shall be approved by the appropriate regulatory agencies and compensatory mitigation shall take place either on-site or at an appropriate off-site location, if required. Copies of the Plan and associated report shall be submitted to the lead agency as evidence of compliance.

Any material/spoils generated from project activities containing hazardous materials shall be located away from jurisdictional areas or special-status habitat and protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate and feasible. Protection measures should follow project-specific criteria as developed in a Storm Water Pollution Prevention Plan (SWPPP).

Equipment containing hazardous liquid materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and at least 50 feet outside the delineated boundary of jurisdictional water features.

Any spillage of material shall be stopped if it can be done safely and in a feasible manner. In the event of any such spillage, the contaminated area shall be cleaned by the party responsible for the spillage, and any contaminated materials properly disposed. For all spills, the project foreman or designated environmental representative shall be notified.

6.3 - Wildlife Nursery Sites

Active bird nests and bat maternity roosts are potential wildlife nursery sites. Potential project-related impacts on active bird nests and bat roosts are analyzed and discussed under Section 6.1.2 and 6.1.3, above, and are considered potentially significant. However, implementation of MM BIO-5 and MM BIO-6 would avoid significant impacts on active bird nests and bat roosts by establishing protection zones if nests or roosts are found and would reduce this impact to less than significant.

6.4 - Protected Trees

The valley oak (Section 4.2.4; Exhibit 5) rooted across Modoc Canal and overhanging the project site for a substantial portion of its canopy is protected under the City's Oak Tree Preservation ordinance, including against "Encroachment into canopy drip-line of oak trees during construction" (Article 4; Section 2.2.7). The proposed project involves no vertical structures, soil disturbance or access road construction at this location (Exhibit 7). Therefore, impacts on the valley oak would be less than significant.

The project would require removal of up to approximately 1.19 acre of non-native ornamental trees (described in Section 4.2.3). These trees would only be considered protected or regulated if they are within the City's right-of-way. This may be the case for the cedar tree in the southeast corner of the project site, potentially within the right-of-way of Riggin Avenue.

With compliance with the City's Street Tree Ordinance, however, potential impacts on trees regulated by the City's Street Tree Ordinance would be less than significant without additional mitigation.

Appendix A:
Professional Qualifications

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FIRSTCARBON SOLUTIONS™

ROBERT CARROLL—BIOLOGIST II

Overview

Robert Carroll has more than 10 years of relevant experience. More specifically, his experience includes CEQA Biological Resources Sections, standalone Biological Resources Assessments (BRA) in support of various CEQA documents, Biological Assessments following the USFWS requirements, Clean Water Act (CWA) Jurisdictional Delineations, US Army Corps of Engineers (USACE) nationwide permits (NWPs), CDFW Streambed Alteration Agreements (SAAs), and Regional Water Quality Control Board (RWQCB) 401 Water Quality Certification and Waste Discharge permits.

Education

- Bachelor of Science, Fisheries Science, Concentration in Water Resources, Cum Laude, Oregon State University, Corvallis, OR, 2016
- Bachelor of Arts, Marketing, College of Business Administration, Marquette University, Milwaukee, WI, 2007

Professional Work Experience

- Oregon State University, Langdon Lab, Hatfield Marine Science Center, City of Newport, OR, 2015
- Oregon Department of Fish and Wildlife, City of Corvallis, OR, 2014–2015
- Orange County Coastkeepers, City of Costa Mesa, CA, 2012–2013
- US Peace Corps, Philippines, 2010–2012

RELATED EXPERIENCE AND CLIENT SUMMARY

Project Experience, Central Valley FocusedProject Hornet, City of Turlock, Stanislaus County, CA

Mr. Carroll conducted Swainson's hawk protocol-level surveys, nesting detection surveys, and active bird nest status determination surveys, for a total of over 100 survey hours. Over the course of the project, 16 active bird nests were detected and monitored. Mr. Carroll assisted in the determination of protection buffers, and coordination with the project team regarding compliance with bird nests protection measures.

Fresno Warehouse Project, City of Fresno, Fresno County CA

Mr. Carroll conducted field work and and authored the standalone BRA and subsequent CEQA document. Additionally, Mr. Carroll conducted Swainson's hawk protocol-level surveys, nesting detection surveys, and active bird nest status determination surveys, for a total of over 40 survey hours. Over the course of the project, one active bird nest was detected and monitored. Mr. Carroll assisted in the coordination with the project team regarding compliance with bird nests protection measures.

Dogtown Road Bridges Replacement Projects (San Domingo Creek, French Gulch, and Indian Creek) Construction Biological Permitting Services, Calaveras County, CA

Mr. Carroll assisted Calaveras County with Caltrans NEPA/CEQA documentation and the completion of regulatory permit applications for the replacement of three structurally deficient bridges and associated improvements to Dogtown Road. Mr. Carroll is preparing and submitting regulatory permit application packages for the project, which include Clean Water Act Section 404 Nationwide Permit, Clean Water

Act Section 401 Water Quality Certification, a Section 1602 Streambed Alteration Agreement, and a Habitat Mitigation and Monitoring Plan.

Veterans Boulevard Grade Separation Phase 1 and Phase 2 Pre-construction Surveys, City of Fresno, CA

Mr. Carroll assisted with pre-construction Surveys in accordance with the EIR and CEQA requirements to support Phase 1 and Phase 2 construction of the Veterans Boulevard Grade Separation Project in the City of Fresno. In addition, Mr. Carroll also conducted a Worker Environmental Awareness Training prior to project implementation. Pre-construction surveys included loggerhead shrike, burrowing owl, California horned lark, white-tailed kite, Swainson's hawk, numerous special-status bat species, and species protected by the MBTA (16 USC 707) and the California FGC (Section 3503).

Appendix B:
Special-status Species Occurrence Evaluation

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Table 1: Special-status Plant Species Evaluated

Scientific Name Common Name	Status			Habitat Description[4]	Anticipated Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Atriplex cordulata var. cordulata heartscale	—	—	1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland (sandy). Elevation: 0 and 560 m. Blooming period: April–October	**None:** The project site does not contain scrub, meadow, or grassland habitat to support this species.
Atriplex cordulata var. erecticaulis Earlimart orache	—	—	1B.2	Valley and foothill grassland. Elevation: 40–100 m. Blooming period: August–September (November)	**None:** The project site does not contain suitable grassland habitat to support this species.
Atriplex depressa brittlescale	—	—	1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools. Alkaline, clay soils. Elevation: 1–300 m. Blooming period: April–October	**None:** The project site does not contain suitable described habitats to support this species.
Atriplex minuscula lesser saltscale	—	—	1B.1	Chenopod scrub, playas, valley and foothill grassland. Elevation: 15–200 m. Blooming period: May–October	**None:** The project site does not contain suitable scrub, playa, or grassland habitat to support this species.
Atriplex persistens vernal pool smallscale	—	—	1B.2	Vernal pools (alkaline). Elevation: 10–115 m. Blooming period: June–October	**None:** The project site does not contain suitable vernal pool habitat to support this species.
Atriplex subtilis subtle orache	—	—	1B.2	Valley and foothill grasslands. Elevation: 40–100 m. Blooming period: June–September	**None:** The project site does not contain suitable grassland habitat to support this species.
Caulanthus californicus California jewelflower	FE	SE	1B.1	Chenopod scrub, pinyon and juniper woodland, valley and foothill grassland. Elevation: 61–1000 m. Blooming period: February–May	**None:** The project site does not contain suitable scrub, woodland, or grassland habitat to support this species.
Delphinium recurvatum recurved larkspur	—	—	1B.2	Chenopod scrub, cismontane woodland, valley and foothill grassland. Elevation: 3–790 m. Blooming period: February–May	**None:** The project site does not contain suitable scrub, woodland, or grassland habitat to support this species.

Scientific Name Common Name	Status			Habitat Description[4]	Anticipated Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Eryngium spinosepalum spiny-sepaled button-celery	—	—	1B.2	Valley and foothill grasslands, vernal pools. Elevation: 80–975 m. Blooming period: April–June	**None:** The project site does not contain suitable grassland or vernal pool habitat to support this species.
Euphorbia hooveri Hoover's spurge	FT	—	1B.2	Vernal pools. Elevation: 25–250 m. Blooming period: July–September (October)	**None:** The project site does not contain suitable vernal pool habitat to support this species.
Imperata brevifolia California satintail	—	—	2B.1	Chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), riparian scrub. Mesic soils. Elevation: 0–1215 m. Blooming period: September–May	**None:** The project site does not contain suitable scrub or meadow/seep habitat to support this species.
Lasthenia chrysantha alkali-sink goldfields	—	—	1B.1	Vernal pools (alkaline). Elevation: 0–200 m. Blooming period: February–April	**None:** The project site does not contain suitable vernal pool habitat to support this species.
Lasthenia glabrata ssp. coulteri Coulter's goldfields	—	—	1B.1	Marshes and swamps (coastal salt), playas, vernal pools. Elevation: 1–1220 m. Blooming period: February–June	**None:** The project site does not contain suitable marsh, playa, or vernal pool habitat to support this species.
Orcuttia inaequalis San Joaquin Valley Orcutt grass	FT	SE	1B.1	Vernal pools. Elevation: 10–755 m. Blooming period: April–September	**None:** The project site does not contain suitable vernal pool habitat to support this species.
Pseudobahia peirsonii San Joaquin adobe sunburst	FT	SE	1B.1	Cismontane woodland, valley and foothill grassland. Adobe, clay soils. Elevation: 90–800 m. Blooming period: February–April	**None:** The project site does not contain suitable woodland or grassland habitat to support this species.
Puccinellia simplex California alkali grass	—	—	1B.2	Chenopod scrub, meadows and seeps, valley and foothill grasslands, vernal pools. Elevation: 2–930 m. Blooming period: March–May	**None:** The project site does not contain suitable scrub, meadow or grassland habitat to support this species.
Sagittaria sanfordii Sanford's arrowhead	—	—	1B.2	Marshes and swamps (shallow freshwater). Elevation: 0–650 m. Blooming period: May–October (November)	**None:** The project site does not contain suitable marsh/swamp habitat to support this species.

Scientific Name Common Name	Status			Habitat Description[4]	Anticipated Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		

Code Designations

[1] Federal Status: 2020 USFWS Listing

- **ESU** = Evolutionary Significant Unit is a distinctive population.
- **FE** = Listed as endangered under the Endangered Species Act.
- **FT** = Listed as threatened under the Endangered Species Act.
- **FC** = Candidate for listing (threatened or endangered) under the Endangered Species Act.
- **FD** = Delisted in accordance with the Endangered Species Act.
- **FPD** = Federally Proposed to be Delisted.
- **MBTA** = protected by the Migratory Bird Treaty Act
- **—** = Not federally listed

[2] State Status: 2020 CDFW Listing

- **SE** = Listed as endangered under the California Endangered Species Act (CESA).
- **ST** = Listed as threatened under CESA.
- **SSC** = Species of Special Concern as identified by the CDFW.
- **FP** = Listed as fully protected under the Fish and Game Code.
- **CFG** = FGC = protected by Fish and Game Code 3503.5
- **CR** = Rare in California.
- **—** = Not State listed

[3] CNPS: 2020 CNPS Listing

- **Rank 1A** = Plants species that presumed extinct in California.
- **Rank 1B** = Plant species that are rare, threatened, or endangered in California and elsewhere.
- **Rank 2** = Plant species that are rare, threatened, or endangered in California, but more common elsewhere.
- **Rank 3** = Plants about which we need more information—A Review List
- **Rank 4** = Plants of limited distribution—A Watch List

Blooming period: Months in parentheses are uncommon.

[4] **Habitat description**: Habitat description adapted from the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Electronic Inventory (CNPSEI).

Table 2: Special-status Wildlife Species Evaluated

Scientific Name Common Name	Status		Habitat Description[3]	Anticipated Potential to Occur and Rationale
	USFWS[1]	CDFW[2]		
Reptiles				
Anniella pulchra Northern California legless lizard	—	— SSC	Occurs in moist warm loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs.	**None:** Project site has been heavily modified with extensive agriculture. The site does not contain suitable soils and vegetation communities to support this species. The closest CNDDB record is approximately 5 miles southeast within the City of Visalia. Moisture is essential, and project site is highly arid.
Emys marmorata western pond turtle	—	— SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking.	**None:** The project site does not contain suitable water features and terrestrial habitat to support this species. No western pond turtle were observed on site during multiple surveys.
Birds				
Agelaius tricolor tricolored blackbird	—	ST SSC	Forages in open habitats such as farm fields, pastures, cattle pens, large lawns. Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Breeds in large freshwater marshes, dense stands of hydrophytic vegetation (cattails, bulrushes, etc.)	**None:** The project site does not contain suitable habitat to support this species; lacks fields for foraging and marshes for breeding.
Athene cunicularia burrowing owl	—	— SSC	Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	**None:** The project site does not include open landscapes with low-growing vegetation and small mammal burrows >4 inches for nesting and foraging. There are several CNDDB records within 10 miles of the project site (mostly northwest). No signs of burrowing owls or suitable burrows were observed during multiple surveys.

Scientific Name Common Name	Status		Habitat Description[3]	Anticipated Potential to Occur and Rationale
	USFWS[1]	CDFW[2]		
Buteo swainsoni Swainson's hawk	—	ST SSC	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Moderate:** The project site contains several large trees which are suitable nesting habitat for this species. However, the site itself does not contain typical suitable foraging habitat. CNDDB documents many occurrences within 5 miles southwest of the project site as recently as 2017.[1] Two Swainson's hawk observations at the site boundary are documented through eBird.
Coccyzus americanus occidentalis western yellow-billed cuckoo	FT	SE	Rare summer resident of valley foothill and desert riparian habitats in scattered locations in California. Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, adjacent to slow-moving watercourses, backwaters, or seeps. Willow almost always a dominant component of the vegetation. In Sacramento Valley, may use adjacent orchards, especially of walnut. Nests typically in sites with at least some willow, dense low-level or understory foliage, high humidity, and wooded foraging spaces.	**None:** The project site does not contain riparian, willow habitat with suitable understory for foraging and nesting to support this species.
Lanius ludovicianus loggerhead shrike	—	— SSC	Requires an open habitat with an area to forage from elevated perches. Open pastures and grasslands with shorter vegetation are preferred. Builds nest on stable branch in dense shrub or tree, usually well-concealed.	**None:** No suitable habitat is present for this species on the project site.
Mammals				
Eumops perotis californicus western mastiff bat	—	— SSC	Suitable habitat consists of extensive open areas with abundant roost locations provided by crevices in rock outcrops and buildings.	**None:** Other than potential foraging habitat, the project site does not contain crevices for roosting or reproduction to support this species.
Taxidea taxus American badger	—	— SSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils, specifically grassland environments. Natal dens occur on slopes.	**None:** Lack of suitable habitat and high level of disturbance at site preclude presence.

Scientific Name Common Name	Status		Habitat Description[3]	Anticipated Potential to Occur and Rationale
	USFWS[1]	CDFW[2]		
Vulpes macrotis mutica San Joaquin kit fox	FE	ST	Lives in the desert and grasslands of the San Joaquin Valley. They prefer areas with minimal shrubs and grasses. Suitable habitats are open, level areas with loose-textured soils (to build underground dens) supporting scattered, shrubby vegetation with little human disturbance. Some agricultural areas may support these foxes.	**None:** No suitable habitat is present for this species. No signs of suitable denning sites were found during multiple surveys.
Amphibians				
Ambystoma californiense California tiger salamander	FT	ST WL	Found in grassland, oak savanna, edges of mixed woodland and lower elevation coniferous forest. Nocturnal, and fossorial, spending most time underground in animal burrows, especially those of California ground squirrels, valley pocket gophers, and moles. This salamander needs both suitable upland terrestrial habitat with mammal burrows for refuge and temporary breeding ponds in order to survive.	**None:** The project site does not contain suitable terrestrial habitat or breeding ponds to support this species.
Lithobates pipiens northern leopard frog	—	— SSC	Highly aquatic, occur in or near quiet, permanent, and semi-permanent water in many habitats. Naturally disperse along systems of irrigation canals.	**None:** The project site does not contain suitable aquatic habitat or breeding ponds to support this species.
Spea hammondii western spadefoot	—	— SSC	Occurs primarily in grasslands, but occasional populations also occur in valley-foothill hardwood woodlands. Some populations persist for a few years in orchard or vineyard habitats. Grasslands with shallow temporary pools are optimal habitats. Scaphiopods (Family) are rarely found on the surface. Most of the year is spent in underground burrows up to 0.9 m deep, which they typically construct themselves; may use mammal burrows.	**None:** The project site does not contain suitable grassland areas to support this species.

Scientific Name Common Name	Status		Habitat Description[3]	Anticipated Potential to Occur and Rationale
	USFWS[1]	CDFW[2]		
Invertebrates				
Bombus crotchii Crotch bumble bee	—	CE	Crotch's bumblebee inhabits grassland and scrub areas, requiring a hotter and drier environment than other bumblebee species, and can only tolerate a very narrow range of climatic conditions. Crotch's bumblebee nests underground, often in abandoned rodent dens.	**None:** The project site does not contain suitable grassland and scrub areas to support this species.
Branchinecta lynchi vernal pool fairy shrimp	FT	—	Vernal pool fairy shrimp occur primarily in vernal pools, seasonal wetlands, and stagnant ditches that fill with water during fall and winter rains and dry up in spring and summer.	**None:** The project site does not contain suitable vernal pool habitat to support this species.
Lepidurus packardi vernal pool tadpole shrimp	FE	—	Vernal pool tadpole shrimp occur in a wide variety of seasonal habitats, including vernal pools, clay flats, alkaline pools, ephemeral stock tanks, roadside ditches, and road ruts.	**None:** The project site does not contain suitable vernal pool habitat to support this species.

Code Designations

[1] Federal Status: 2020 USFWS Listing	[2] State Status: 2020 CDFW Listing
ESU = Evolutionary Significant Unit is a distinctive population.	**SE** = Listed as endangered under California Endangered Species Act (CESA).
FE = Listed as endangered under the Endangered Species Act.	**ST** = Listed as threatened under CESA.
FT = Listed as threatened under the Endangered Species Act.	**SSC** = Species of Special Concern as identified by the CDFW.
FC = Candidate for listing (threatened or endangered) under the Endangered Species Act.	**FP** = Listed as fully protected under the Fish and Game Code.
FD = Delisted in accordance with the Endangered Species Act.	**CFG** = FGC = protected by Fish and Game Code 3503.5
FPD = Federally Proposed to be Delisted.	**CE** = Candidate endangered under CESA.
MBTA = protected by the Migratory Bird Treaty Act	**—** = Not State listed
— = Not federally listed	

[3] **Habitat description**: Habitat description adapted from CNDDB.

Sources:

California Department of Fish and Wildlife (CDFW). Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed June 14, 2022.

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C.2 - Jurisdictional Delineation

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1443 E. Washington Blvd., #288 Pasadena, California 91104 / www.southenvironmental.com

February 27, 2023

Tsui Li
Project Manager
FirstCarbon Solutions
415.244.9112

RE: Jurisdictional Delineation of Visalia - Kelsey Street Industrial Complex Project in unincorporated, California

Dear Tsui,

This letter includes results of a Jurisdictional Delineation and an assessment of impacts to jurisdictional features from the Visalia - Kelsey Street Industrial Complex Project (project) within unincorporated, California. The scope of this letter report includes a description of the project, methodology, results of the survey, a delineation of the jurisdictional resources on the study area (project site and a 200-foot buffer), and an assessment of potential impacts to jurisdictional features.

Project Description

Location

The project site includes 284.58-acres that is north of Riggin Avenue, west of Road 92, south of Modoc Ditch and east of N Kelsey Street in unincorporated area of Tulare, California (Figure 1 and Figure 2). The project site is a developed agricultural field with an almond tree grove and bare ground roads for agricultural work. The project site is generally topographically flat. The project site is located on part of one assessor's parcel (APN 77-120-003) on both the Goshen and Visalia USGS 7.5-minute quads in Section 16 of Township 18 South and Range 24 East. The areas surrounding the project site to the north, east and southeast include agricultural fields. The area surrounding the project site to the south also includes commercial and/or industrial development and housing. The area surrounding the project site to the west, northwest, and southwest includes commercial and/or industrial warehouses similar to that proposed on the developments proposed on the project site.

Source: ESRI USA Topo Maps and World Topo Map 2022

Visalia - Kelsey Street Industrial Complex Project

Figure 1. Project Location

Project Site

Survey Area (200-Foot Buffer)

0 1,000 2,000 Feet

Scale: 1:24,000

N

Project Site is within unincorporated, California, in Tulare County on the USGS Goshen and Visalia 7.5-minute quadrangle maps in Section 16 of Township 18S South and Range 24 East

Center Coordinate (Decimal Degrees):
Latitude: 36.3596979N Longitude: -119.3596979W

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Source: BING Aerial Imagery 2022

Visalia - Kelsey Street Industrial Complex Project

Figure 2. Project Vicinity

0 500 1,000 Feet

N

Scale: 1:10,000

Project Site

Survey Area (200-Foot Buffer)

SOUTH ENVIRONMENTAL

Proposed Development

The proposed development for the project site includes the construction of eight industrial warehouse buildings, with associated driveways, parking spots, and semi-truck parking spots. Notably, Clancy Street will also be developed on the project site and will traverse north-south through the center of the proposed developments and over Modoc Ditch on the north side of the project. The entire project site will be developed by the project. The development includes the following features at the northern edge of the project site associated with existing drainage: 1.) a culvert (Culvert #1) crossing under N. Kelsey Street in the northwest part of the project site; 2.) a culvert crossing (Culvert #2) that will extend from the newly developed Clancy Street to the northern project site border; and 3.) an existing culvert (Culvert #3) crossing under Road 92 that will be extended into the northeast part of the project site. The proposed development for the project site is presented in Attachment C, Site Plan.

Regulatory Setting

Federal Regulations

Clean Water Act Sections 404 and 401

Section 404 of the Clean Water Act (CWA) establishes a program to regulate the discharge of dredged and fill material into waters of the United States (U.S.), including wetlands. Activities in waters of the U.S. or wetlands regulated under this program include fill as a result of projects such as development, water resource projects (such as dams and levees), infrastructure development and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the U.S.

Section 401 of the CWA requires that any person applying for a federal permit or license which may result in a discharge of pollutants into waters of the United States (such as a Clean Water Act Permit under Section 404), must obtain a state water quality certification stating that the activity complies with all applicable water quality standards, limitations, and restrictions. No license or permit may be issued by a federal agency until certification required by section 401 has been granted or waived.

California Regulations

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act requires the adoption of water quality control plans (basin plans) that give direction to managing water pollution in California. The basin plans get adopted and administered by the Regional Water Quality Control Board (RWQCB). The plans incorporate the beneficial uses of the waters of the State and then provide objectives that should be met to maintain and protect these uses. Along with the Regional Water Boards, the State Water Resources Board can issue and enforce permits containing waste discharge requirements to maintain clean surface water and groundwater. Each basin plan identifies the specific beneficial uses of water in their region for the past, present, and future. These basin plans also all have objectives for which the plan clearly states steps that are being taken or will be taken to meet the objectives. These objectives are created for the purpose of keeping the water clean and safe to use beneficially. The Regional Board has the authority to give out permits for the purpose of waste disposal or waste assimilation.

State of California Fish and Game Code Section 1600

Fish and Game Code Section 1602 outlines the Lake and Streambed Alteration Agreement (LSAA) permitting process, and states:

- An entity shall not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake

Fish and Game Code Section 1602 requires any entity (defined as any person, State or local governmental agency, or public utility) to notify the CDFW before beginning any activity that will do one or more of the following:

- substantially divert or obstruct the natural flow of and river, stream, or lake, or
- substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

A permit, known as a Lake or Streambed Alteration Agreement, from CDFW is required to conduct any of the activities described above.

Methodology

This jurisdictional delineation is based on information compiled through a field survey and a review of appropriate reference materials and literature regarding the resources of the region. The jurisdictional delineation was conducted by South Environmental principal biologist Matthew South. The sources and literature referenced in this assessment are provided below in Section 4. Bibliography.

Literature Review

The assessment of the jurisdictional features began with a review of literature relating to the topography, soils, and hydrology that are known to occur on and in the vicinity of the project site, and include the following sources:

- United States Geologic Service (USGS) Goshen and Visalia 7.5"quad topographic maps,
- US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soils Database (USDA 2022)
- National Hydrography Dataset (USGS 2022a)
- National Wetlands Inventory (USFWS 2022)
- National Watershed Boundary Dataset (USGS 2022b)
- Historic aerial photographs (historicaerials.com),
- Federal Emergency Management Agency (FEMA) flood GIS database (FEMA 2022)

Jurisdictional Delineation

A delineation of waters of the U.S. and "waters of the state" was conducted on December 19, 2022 throughout the study area and included the area within the bed and banks of any jurisdictional features and any possible associated riparian areas. The limits of jurisdictional features were recorded in the field using ArcGIS Field Maps mobile application and a Trimble Geode GPS Receiver was used to ensure that the accuracy of the measurements was less than 15-inches of error.

Waters of the U.S.

Guidance documents released by the U.S. Army Corps of Engineers (USACE) following the US Supreme Courts' 2006 Rapanos Decision define waters of the U.S. as any of the following:

- Traditional Navigable Waters (TNWs),
- wetlands adjacent to TNWs,
- tributaries of TNWs (relatively permanent, minimum of a 3-month seasonal flow)
- wetlands directly adjacent to tributaries of TNWs.

Wetlands

The delineators used methods described in the USACE 1987 *Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008) to determine the presence or absence of wetlands. During the site survey the following three wetland indicators were evaluated:

1. Dominance of hydrophytic wetland vegetation,
2. Presence of hydric soils, and
3. Periods of surface flooding or ponding water (visible surface water or saturated soils).

The USACE Arid West 2016 *Regional Wetland Plant List* was used to determine the wetland indicator status of plants that were observed in the Review Area, and changes in vegetation, soils, or hydrologic features are used to identify boundaries of wetlands, when present. Completed *Wetland Determination Data Form – Arid West Region* worksheet were completed for the project and are included in Appendix B.

Non-Wetland Waters

Non-wetland waters of the US are waters that lack wetland vegetation or hydric soils and have a clearly defined Ordinary High-Water Mark (OHWM), which indicates periods of surface flow. The OHWM was delineated using the methods in two USACE guidance documents: *A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley 2008) and *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010). A completed Datasheet for Identification of the OHWM is found in Appendix B.

Waters of the State

Central Valley Water Quality Control Board

South Environmental assumes all waters of the US are also considered waters of the state and are under the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The limits of wetlands, or the OHWM for non-wetland waters delineated in the project site will also be considered the limits of waters of the state under the jurisdiction of the RWQCB.

California Department of Fish and Wildlife (CDFW)

Waters of the state that are under the jurisdiction of the California Department of Fish and Wildlife (CDFW) are delineated at the top of the bank of a stream and extend to riparian habitats or vegetation associated with watercourses. Riparian vegetation is that which depends on surface or groundwater associated with the stream to exist and other vegetation that is either more dense or vigorous than the surrounding communities will also be considered under the jurisdiction of the CDFW. Riparian vegetation associated with the stream would include vegetation that is one of the following: within the streambed, shades the streambed, provides erosion control or stability of areas surrounding the streambed, or provides input from falling leaves or debris into the streambed.

Results

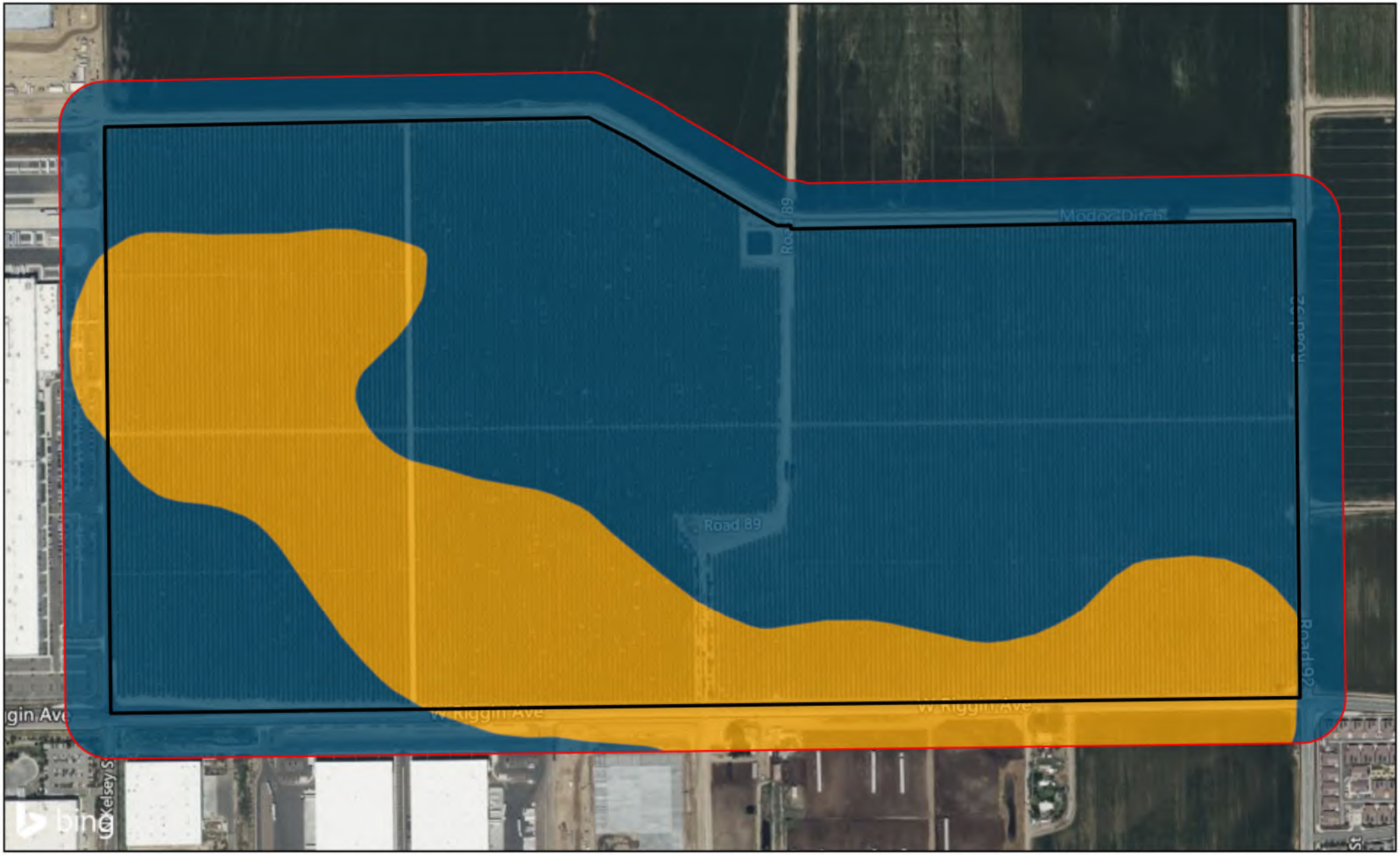
Topography and Climate

The topography on the study area is generally planar, with small undulations from relative low elevations to relative high elevations based primarily on agricultural activities. The project site elevation ranges from approximately 298 feet above mean sea level (amsl) to 308 feet amsl. The low elevation occurs in the southwest, and the high elevation occurs in the southeast. The climate in the region is hot and dry, with average summer high temperatures in the mid-90s and average winter lows in the lower 40s and upper 30s. Average yearly rainfall is 3.32-inches, and the wettest months are November – March, and almost no precipitation between June-September.

Soils

Two soils occur on the project site as shown in Figure 3:

- **Akers-Akers, saline-Sodic, complex, 0 to 2 percent slopes** occurs in the southern and western parts of the project site. This is an alluvial fan soil derived from granitic rock sources that is well-drained.



Source: BING Aerial Imagery 2022

Visalia - Kelsey Street Industrial Complex Project

Figure 3. Soils

Project Site

Survey Area (200-Foot Buffer)

Soils

Akers-Akers, saline-Sodic, complex, 0 to 2 percent slopes

Grangeville sandy loam, drained, 0 to 2 percent slopes

0 350 700 Feet

Scale: 1:7,000

N

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- **Grangeville sandy loam, drained, 0 to 2 percent slopes** occurs in the northern, central, eastern, and southwestern parts of the project site. This is an alluvial fan and floodplain soil derived from granitic rock sources and is somewhat poorly drained.

Plant Communities

There are two plant communities and two land cover types on the study area, and they are shown in Figure 4 below and acres of each is summarized in Table 1 below.

Table 1. Summary of Plant Communities on the Study Area

Community or Cover Type	Acres on Study Area	Acres on the Project Site
Agricultural Field	27.35	- -
Almond Tree Grove	274.24	274.24
Bare Ground/Dirt Road	24.78	9.91
Developed/Ornamental Landscape	31.27	0.43
Total	**357.64**	**284.58**

- **Agricultural Field** is found on 27.35-acres of the study area and does not occur on the project site. This area occurs entirely within parts of the northern, eastern, and southeastern study area. All of the agricultural land cover was tilled at the time of the survey; therefore, the crop types were not discernable and the fields were bare dirt.

- **Almond tree grove** is found on 274.24-acres of the study area and on 274.24-acres of the project site. This area comprises most areas of the project site and includes and agricultural orchard with a monoculture of almond trees. The almond tree grove contains domestic almond (*Prunus dulcis*) and has (tall) olive trees (*Olea europaea)* in some areas for functional wind-break purposes such as along the western edge.

Source: BING Aerial Imagery 2022

Visalia - Kelsey Street Industrial Complex Project

Figure 4. Plant Communities and Land Cover

- Project Site
- Survey Area (200-Foot Buffer)
- Agricultural Field
- Almond Tree Grove
- Bare Ground/Dirt Road
- Developed / Ornamental Landscape

0 350 700 Feet

Scale: 1:7,000

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- **Bare ground** is found on 24.78-acres of the study area and on 9.91-acres of the project site. The bare ground areas are largely dirt roads that provide farmer's access to the agricultural fields, and dirt roads on the edges of Wutchumna Ditch and Modoc Ditch, which are developed dirt-bottom irrigation/stormwater channels found between the agricultural developments on the north border of the project site (Modoc Ditch) and on the opposite side of road on the east edge of the project site (Wutchumna Ditch). Bare ground areas within the project site are paths and roads used for agricultural work pertaining to the almond tree grove. Both Wutchumna Ditch and Modoc Ditch have some vegetation cover that is not populated enough to define a distinct vegetation community and are largely bare dirt with a few dead grasses and forbs and one very large and mature valley oak (*Quercus lobata*) on Modoc Ditch on the northern edge of the project site.

- **Developed / Ornamental Landscape** is found on 31.27-acres of the study area and 0.43-acres of the project site. These areas are within the boundary between the project site and study area in the western and southern parts of the study area. The developments include N Kelsey Street, Riggin Avenue, Road 92, and buildings and driveways along N Kelsey Street and Riggin Avenue. Ornamental landscape occurs in coordination with developments along N Kelsey Street and Riggin Avenue. Ornamental plants occur adjacent to the developments including species such as Olive trees and a variety of ornamental ground cover largely located in planters along the roads edge.

Jurisdictional Features

The project site is located within the Upper Kaweah watershed (HUC8). It is also within the Mosquito Creek-Cross Creek sub-watershed (HUC12) and within the East Branch Cross Creek-Cross Creek sub-watershed (HUC12). As shown in Figure 5, there are three stream features delineated on the study area and outside the project site: Drainage #1, Modoc Ditch, and Wutchumna Ditch. Drainage #1 is constructed within developed landscaped planters associated with the warehouse complex on the east of the site and is used for stormwater control for developments along Kelsey Road. Modoc Ditch is a stormwater and irrigation channel that is maintained and is just outside the northern border of the project site. Modoc Ditch has a downstream terminal connection with a collection pond that the NWI identifies as PEM1K, which is a palustrine system that is emergent and is persistently and artificially flooded. Modoc Ditch has an upstream confluence with St. Johns River. Wutchumna Ditch has a downstream terminus point at a culvert under Road 92 and has an upstream confluence with St. Johns River. Drainage #1 likely ends with terminal collection areas for the city of Visalia. Both Modoc Ditch and Wutchumna Ditch have an upstream confluence with St. Johns River. St. Johns River lacks a downstream connection

Source: BING Aerial Imagery 2022

Visalia - Kelsey Street Industrial Complex Project

Figure 5. Jurisdictional Delineation

0 350 700 Feet

N

Scale: 1:7,000

- Photo Point
- Culvert
- OHWM Form
- Tree
- RWQCB Non-Wetland Waters of the State
- CDFW Streambed and Riparian
- Project Site
- Survey Area (200-Foot Buffer)

SOUTH ENVIRONMENTAL

to a Traditional Navigable Water (TNW); therefore, all jurisdictional water features within the study area are most likely under the (State) jurisdiction of the RWQCB and the CDFW.

Table 2. Summary of Jurisdictional Features in the Study area

Feature	Non-Wetland Waters of the State (RWQCB) – acres/linear feet	CDFW Streambed and Riparian – acres/linear feet
Drainage #1	0.16/2,031	0.84/2,031
Modoc Ditch	0.52/5,677	2.48/5,677
Wutchumna Ditch	0.02/164	0.07/164
Total	0.70/7,872	3.39/7,872

The results of this jurisdictional delineation are based on the best professional judgement of the qualified delineator, using the most up-to-date regulations, written policy, and guidance from regulatory agencies. However, all conclusions regarding potential jurisdiction in this report should be considered preliminary and at the final discretion of the regulatory agencies.

Drainage #1

Drainage #1 is an unnamed constructed stormwater feature that flows through a gravel-lined channel that has a series of culverts under driveways and roads associated with the eastern adjacent warehouse development. A total of 2,031-linear feet (0.84-acres) of Drainage #1 is on the study area, including 1.) 0.16-acres that are waters of the state within the OHWM and 2.) 0.84-acres of CDFW streambed plus associated riparian habitat. Drainage #1 originates within the northwest study area and traverses south, then west and out of the project site. Drainage #1 terminates within a culvert to the west of the study area, and likely has a terminal point that is a water collection area for the city of Visalia. Due to this terminus and a lack of connection to a TNW, Drainage #1 is likely a water of the State under the jurisdictions of the RWQCB and CDFW.

An OHWM Datasheet, P04, was completed within an ornamental landscape area in the northwestern part of the study area. The location is within the OHWM bounds for Drainage #1. The width of the OHWM for P04 was approximately 3.5 feet and the TOB extended a few feet on each side on both sides of Drainage #1. This area of Drainage #1 was dry at the time of the survey. A change in vegetation cover, change in substrate, and a break in bank slope indicated the OHWM. The indicators of the limited active floodplain for P04 included the presence of bed and bank. The sediment texture for the active floodplain/TOB ranged from pebble to cobble that was placed into the channel during construction and was part of the drainage design.

A Wetland Data Determination Form was not taken for Drainage #1 due to the lack of a soil profile. The OHWM boundaries for Drainage #1 were determined to be a *non-wetland* water of the State under the jurisdiction of the RWQCB. Because the TOB was equal to the OHWM bounds on both sides of Drainage #1, the CDFW streambed jurisdiction is equivalent to the TOB/OHWM bounds for Drainage #1. No CDFW vegetated streambed or riparian jurisdiction exists for Drainage #1.

Modoc Ditch

Modoc Ditch is a irrigation/stormwater channel that is constructed just outside the northern border of the project site. It flows from west to east through a dirt-bottom channel, but the channel is highly disturbed with broken pavement, boulders, and debris found throughout the bed and banks. The pavement likely indicates that the channel may have once been concrete lined but has since been broken and the debris remains in the streambed and banks. A total of 5,677-linear feet (2.48-acres) of Modoc Ditch is on the study area, including 1.) 0.52-acres that are jurisdictional within the OHWM and 2.) 2.48-acres of CDFW streambed and riparian areas. Modoc Ditch originates off-project site to the north, traverses south into the survey, becomes culverted under Road 92, and traverses west with multiple subterranean culverts until it traverses out of the study area. Modoc Ditch has a downstream terminal connection several miles from the project site with a collection pond that the NWI identifies as PEM1K, which is a palustrine system that is emergent and is persistently and artificially flooded. Modoc Ditch and has an upstream confluence with St. Johns River. St. Johns River lacks a downstream connection to a TNW; therefore, Modoc Ditch is likely a water of the State under the jurisdiction of the RWQCB and CDFW.

Feature	Non-Wetland Waters of the State (RWQCB) – acres/linear feet	CDFW Streambed and Riparian – acres/linear feet
Drainage #1	0.16/2,031	0.84/2,031
Modoc Ditch	0.52/5,677	2.48/5,677
Wutchumna Ditch	0.02/164	0.07/164
Total	0.70/7,872	3.39/7,872

An OHWM Datasheet, P02, was completed within the bare ground area within the northeastern part of the study area. The location is within the OHWM bounds for Modoc Ditch where it traverses from north to south across the study area. The width of the OHWM for P02 was approximately 4 feet and the TOB was approximately 1.25 -2.00 feet beyond the OHWM bounds to both the west and east. The span from the OHWM to TOB differentiates in other areas near P02. This area of Modoc Ditch was moist at the time of the survey. A change in average sediment texture, a change in vegetation cover, and a break in bank slope indicated the OHWM. The active floodplain near

P02 is controlled on both sides by topographic uplifts that are equivalent to the TOB; the ditch has been constructed and maintained to control water flow. Still within the TOB, the indicators of the active floodplain for P02 included drift and/or debris, presence of bed and bank, and surface relief. Surface relief maintains the active floodplain for Modoc Ditch to be within the TOB for Modoc Ditch. The sediment texture for the active floodplain ranged from fine-grained to cobble sized.

An OHWM Datasheet, P03, was completed within the bare ground area within the northern part of the study area. The location is within the OHWM bounds for Modoc Ditch where it traverses from east to west across the study area. The width of the OHWM for P03 was approximately 4 feet and the TOB was approximately 2.5 -3.5 feet beyond the OHWM bounds to both the north and south. The span from the OHWM to TOB differentiates in other areas near P03. This area of Modoc Ditch was moist at the time of the survey. A change in average sediment texture and a break in bank slope indicated the OHWM. The active floodplain near P03 is controlled on both sides by topographic uplifts that are equivalent to the TOB; the ditch has been constructed and maintained to control water flow. Still within the TOB, the indicators of the active floodplain for P03 included the presence of bed and bank and surface relief. Surface relief maintains the active floodplain for Modoc Ditch to be within the TOB for Modoc Ditch. The sediment texture for the active floodplain ranged from fine-grained to coarse-grained near P03.

Wutchumna Ditch

A total of 165-linear feet (0.07-acres) of Wutchumna Ditch is on the study area, including 1.) 0.02-acres that are within the OHWM and 2.) 0.05-acres of CDFW streambed and riparian. Wutchumna Ditch begins off project site to the east, traverses to the west, and becomes terminally culverted under Road 92. There is some culverts and infrastructure on the west side of the road where Wutchumna Ditch ends, and based on aerial photos of the site, it is likely that this infrastructure once outlet flows onto the project site that flowed to the southeast corner of the project site. However, the culvert on the project site was closed at the time of the survey and no drainage patter, bed and bank, or other indicators of hydrology were present at the time of the survey. Therefore, it was determined that the ditch no longer flows onto the project site and is contained on the east side of the road. Wutchumna Ditch also has an upstream confluence with St. Johns River. St. Johns River lacks a downstream connection to a TNW; therefore, Wutchumna Ditch is likely a water of the State under the jurisdiction of the RWQCB and CDFW.

An OHWM Datasheet, P01, was completed within the bare ground area within the eastern part of the study area. The location is within the OHWM bounds for Wutchumna Ditch where it traverses

from east to west across the study area. The width of the OHWM for P01 was approximately 4 feet and the TOB was approximately 5.0 – 6.0 feet beyond the OHWM bounds to both the north and south. The span from the OHWM to TOB differentiates in other areas near P01. This area of Wutchumna Ditch was moist at the time of the survey. A change in average sediment texture, a change in vegetation cover, and a break in bank slope indicated the OHWM. The active floodplain near P03 is controlled on both sides by topographic uplifts that are equivalent to the TOB; the ditch has been constructed and maintained to control water flow. Still within the TOB, the indicators of the active floodplain for P03 included drift and/or debris, presence of bed and bank and surface relief. Surface relief maintains the active floodplain for Wutchumna Ditch to be within the TOB for Wutchumna Ditch. The sediment texture for the active floodplain ranged from fine-grained to coarse-grained near P03.

CDFW Jurisdictional Trees

One valley oak was surveyed during the site visits to help define jurisdictional boundaries for the CDFW jurisdiction within Modoc Ditch. Table 1 below lists the tree that assisted with delineating the edge of the riparian canopy for Modoc Ditch.

Table 3. Summary of Surveyed Trees in the Study area

Tree Label	Species	Diameter at Breast Height (DBH) (Inches)	CDFW Riparian Habitat	Water Feature
T1	Valley oak	90 (estimated)	Yes	Modoc Ditch

Artificial Irrigation Pond

A 0.25-acre artificial pond occurs on the north-central edge of the property, adjacent to Modoc Ditch. This artificial pond is likely used for irrigation of the agricultural almonds and was dry at the time of the delineation. This artificial pond is likely not under the jurisdiction of CDFW because it lacks habitat for wildlife based on the absence of vegetation and maintained nature of the pond. Due to the size, it is not considered waters of the state because the threshold for permitting is 1.0-acre. Therefore, this artificial pond is not under the jurisdiction of CDFW or RWQCB.

Image 1. Depicts the artificial irrigation pond on the north edge of the project site.

Impacts Analysis

The proposed development for the project site includes the construction and operation of eight industrial buildings, with associated driveways, parking spots, and semi-truck parking and loading areas. Clancy Street will also be developed on the project site and will traverse north-south through the center of the project site. Three culverts will be installed along the northern border of the project and will impact jurisdictional features in Modoc Ditch. The proposed development for the project site is presented in Attachment C, Site Plan.

Direct Impacts: Modoc Ditch lines the northern boundary for the project and will have permanent direct impacts from development of Culvert 1, Culvert 2, and Culvert 3 shown below in Figures 6, and 6A-^C. Total project impacts include 0.0039-acre (27-linear feet) of direct and permanent impacts to non-wetland waters of the State under the jurisdiction of the RWQCB, and a total of 0.021-acre (34-linear feet) of direct and permanent impacts to streambed and riparian areas under the jurisdiction of the CDFW. The impacts are shown in Figures 6-6C below and summarized in Table 4. The canopy of the valley oak tree (T1) along Modoc Ditch overhangs the project site, but this tree would not be impacted by project activities as no pruning is expected and the trunk and roots are on the north side of the ditch away from construction and would avoid impacts as a result.

Source: BING Aerial Imagery 2022

Visalia - Kelsey Street Industrial Complex Project

Figure 6. Impacts to Jurisdictional Resources

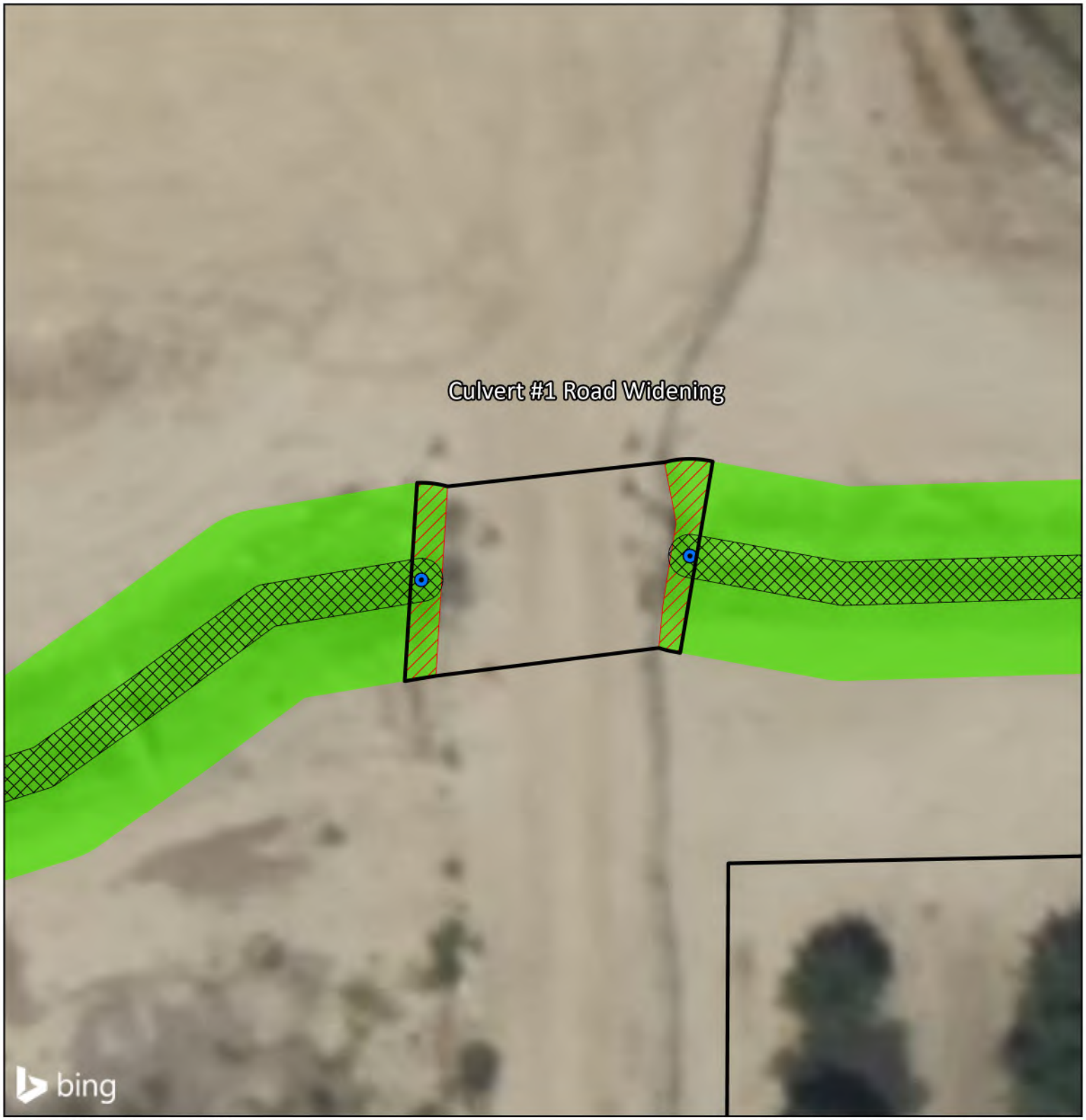
0 350 700 Feet

N

Scale: 1:7,000

- Culvert
- Project Site
- Survey Area (200-Foot Buffer)
- RWQCB Non-Wetland Waters of the State
- CDFW Streambed and Riparian

SOUTH ENVIRONMENTAL



Source: BING Aerial Imagery 2022

Visalia - Kelsey Street Industrial Complex Project

Figure 6A. Impacts to Jurisdictional Resources at Culvert #1

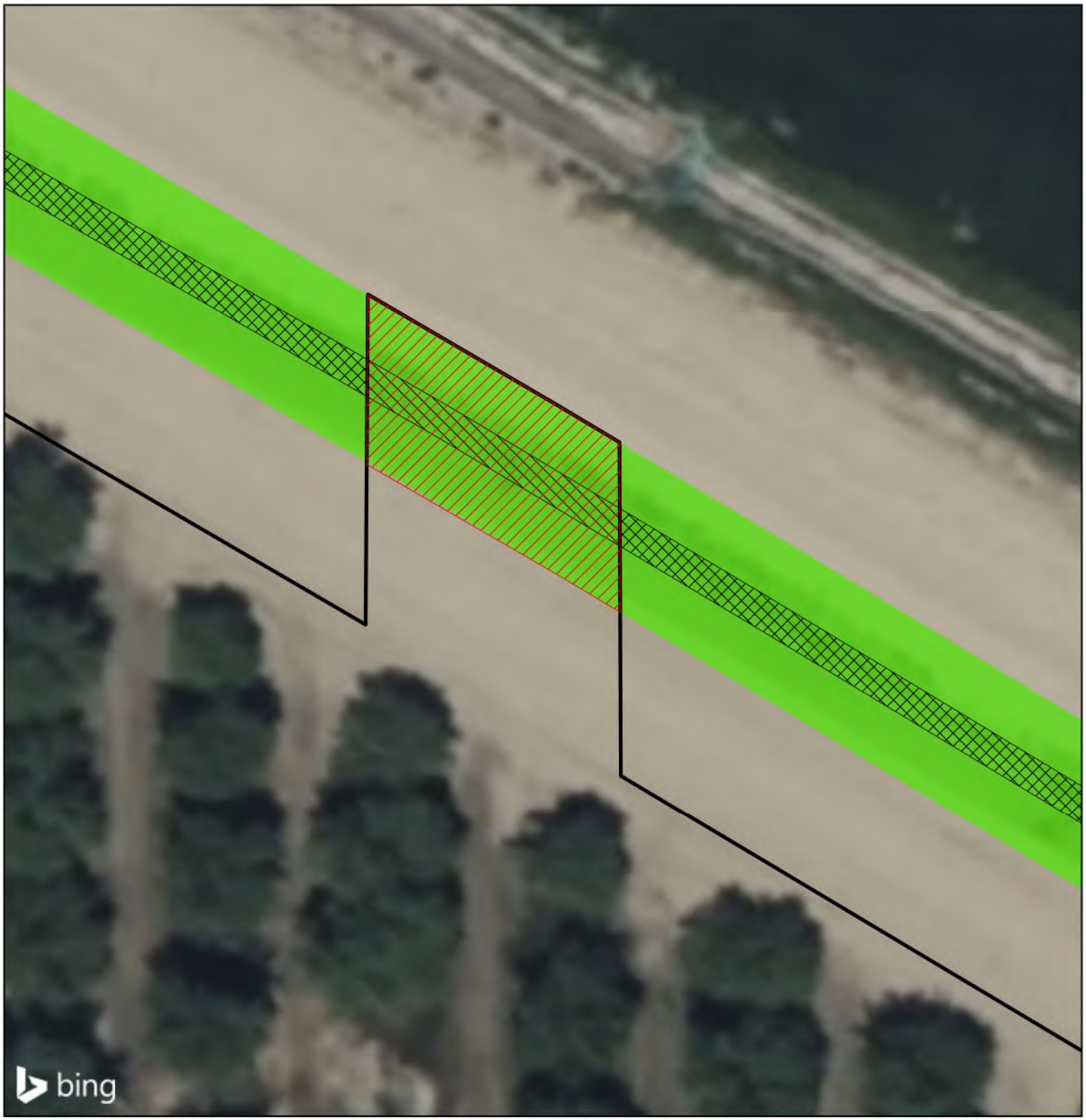
0 5 10 Feet

Scale: 1:150

N

- Project Site
- Survey Area (200-Foot Buffer)
- Culvert
- RWQCB Non-Wetland Waters of the State
- Direct Impact Areas
- CDFW Streambed and Riparian

SOUTH ENVIRONMENTAL



Source: BING Aerial Imagery 2022

Visalia - Kelsey Street Industrial Complex Project

Figure 6B. Impacts to Jurisdictional Resources at Culvert #2

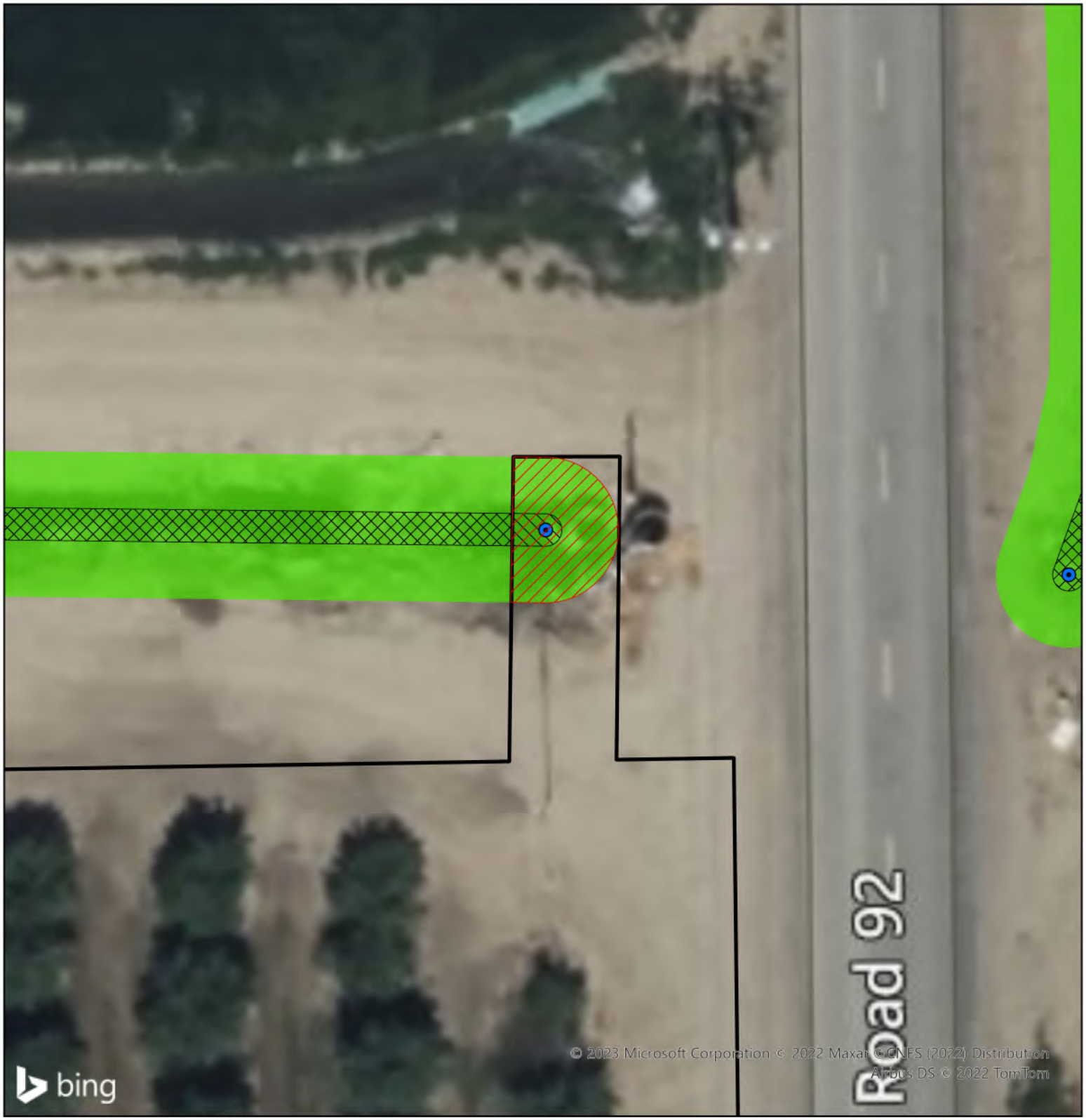
0 10 20 Feet

Scale: 1:200

N

- Project Site
- Survey Area (200-Foot Buffer)
- RWQCB Non-Wetland Waters of the State
- CDFW Streambed and Riparian
- Direct Impact Areas

SOUTH ENVIRONMENTAL



Source: BING Aerial Imagery 2022

Visalia - Kelsey Street Industrial Complex Project

Figure 6C. Impacts to Jurisdictional Resources at Culvert #3

0 10 20 Feet

Scale: 1:200

N

- Culvert
- Project Site
- Survey Area (200-Foot Buffer)
- RWQCB Non-Wetland Waters of the State
- CDFW Streambed and Riparian
- Direct Impact Areas

SOUTH ENVIRONMENTAL

Indirect Impacts: No indirect impacts are expected from the project if BMPs are implemented. Wutchmna Ditch and Drainage #1 are on the opposite side of existing paved roads than the project and have distance from the proposed project construction effects. Indirect impacts to water quality and or the streambed from fugitive dust or site runoff are not expected to occur to these features due to the distance from the project site. However, the project site is immediately adjacent to Modoc Ditch on the north side and the project should take measures to avoid indirect impacts from fugitive dust, site runoff, and inadvertent impacts outside of the project site. These would include the best management practices (BMPs) listed below in the Recommendations to ensure no indirect effects occur to Modoc Ditch. With the implementation of BMPs and other recommendations the project would avoid indirect impacts to the streambed and water quality of Modoc Ditch.

Non-Wetland Waters of the United States (USACE)

There is no non-wetland water of the U.S. on the project site; therefore, no impacts are anticipated for non-wetland waters USACE jurisdiction.

Wetland Waters of the Unites States (USACE)

There is no wetland water of the U.S. on the project site; therefore, no impacts are anticipated for wetland waters USACE jurisdiction.

Non-Wetland Waters of the State (RWQCB)

As shown in Figures 6-6C and summarized in Table 4, the total direct and permanent impacts anticipated from the project include 0.0039-acre (27 linear feet) within Modoc Ditch that are non-wetland waters of the state under the jurisdiction of the RWQCB within the OHWM. These impacts are from construction of the three culverts that will be permanently placed into Modoc Ditch.

Wetland Waters of the State (RWQCB)

There is no wetland water of the State on the project site; therefore, no impacts are anticipated for wetland waters RWQCB jurisdiction.

Streambed and Riparian Habitat (CDFW)

As shown in Figures 6-6C and summarized in Table 4, the total permanent impacts anticipated from the project include 0.021-acre (34 linear feet) in streambed habitat that is under the

jurisdiction of CDFW. These impacts are permanent impacts to the streambed from the three proposed culverts.

There is some CDFW riparian (canopy) on the project site. The valley oak, T1, which was surveyed to contribute riparian habitat for Modoc Ditch has part of its canopy within the project site. Although part of the canopy for T1 is with the project site bounds, and the entire project site will be developed, T1 will not be impacted. The project site developments will not facilitate the need to remove or trim T1 and the root zone will remain entirely intact.

Table 4. Summary of Impacts to Jurisdictional Features

Feature	Non-Wetland Waters of the State (RWQCB) – acres/linear feet		CDFW Streambed and Riparian - acres	
	Permanent	Temporary	Permanent	Temporary
Modoc Ditch – Culvert #1	0.0004	0	0.002	0
Modoc Ditch – Culvert #2	0.003	0	0.015	0
Modoc Ditch – Culvert #3	0.0005	0	0.004	0
Total	0.0039	0	0.021	0

Recommendations and Conclusions

Modoc Ditch occurs in the project site and the proposed direct and permanent impacts from construction of Culvert #1, Culvert #2, and Culvert #3 will include 0.014-acre of Modoc Ditch that comprises 1.) 0.0026-acre of RWQCB areas within the OHWM and 2.) 0.021-acre of CDFW streambed within Modoc Ditch. However, Modoc Ditch is likely an irrigation ditch that was solely constructed for the purposes of irrigation of agricultural areas. It has no downstream connection to federal or state water resources. Modoc Ditch's upstream connection to Saint John's River is likely artificial and if irrigation activities surrounding Modoc Ditch were to end, water would stop flowing in the ditch and it would dry up. Therefore, impacts to Modoc Ditch would be exempt from permitting with RWQCB due to the lack of connection to waters of the state and the status as an irrigation ditch constructed in an otherwise upland area, solely for the purpose of agricultural irrigation. Modoc Ditch also lacks native plant communities or habitats and is low quality habitat for wildlife. Therefore, impacts to Modoc Ditch would not require permitting with CDFW due to the project impacts not resulting in negative effects to habitat for wildlife or aquatic habitats. We

do recommend that the project seeks concurrence from CDFW and RWQCB that the impacts from the project to Modoc Ditch would not require permitting.

Measures included in the proposed development work details should include BMPs and other measures to avoid off-site indirect impacts to Modoc Ditch or water quality. These measures include:

- Project activities within 100-ft of off-site drainage features shall be planned when no surface water is present. No work should occur within 100-feet of off-site drainage after rain events or when there is forecast of 50% chance of rain.
- The contractor shall clearly delineate the boundaries of the project with fencing and no staging, project equipment, parking or other project related disturbance shall occur outside these boundaries.
- Project-related vehicles and equipment shall be staged at least 100-feet away from off-site jurisdictional areas.
- During construction, heavy equipment and vehicles shall be operated in accordance with standard Best Management Practices (BMPs). All equipment used in the workspace shall be properly maintained such that no leaks of oil, fuel, or residues will take place. Provisions shall be in place to remediate any accidental spills.
- Materials shall be stored at least 100-ft from off-site drainage features, as feasible, or equipment will utilize secondary containment.
- Construction parking and staging will occur in previously disturbed and developed areas that are greater than 100-feet from off-site jurisdictional areas.

If you have any questions regarding the information in this report, please contact Matthew South by mobile phone: 303.818-3632 or by email: msouth@southenvironmental.com.

Sincerely,

Matthew R. South

List of Attachments

1. **Attachment A**. Photograph Exhibit
2. **Attachment B**. Arid West Ephemeral and Intermittent Streams OHWM Datasheets
3. **Attachment C**. Site Plan

Bibliography

Sawyer, J.O, Todd Keeler-Wolf, and Julie M. Evens. 2009. A Manual of California Vegetation, 2nd Edition.

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Attachment A

Photograph Exhibit

Photo 1. View of both the culvert under Riggin Avenue and filled former agricultural irrigation channel along Road 92, facing south.

Photo 2. View of filled former agricultural irrigation channel along Road 92, facing north.

Photo 3. View of Riggins Avenue, bare ground, and almond tree grove edge, facing west.

Photo 4. View of Wutchumna Ditch from Road 92, facing east.

Photo 5. View of Modoc Ditch where it is parallel to Road 92, facing north.

Photo 6. View of Road 92, bare ground, and almond tree grove, facing south.

Photo 7. View of Modoc Ditch from Road 92, facing west.

Photo 8. View of Modoc Ditch from under riparian cover, facing east.

Photo 9. View of Modoc Ditch, facing west.

Photo 10. View of rip-rap, culvert under bare ground, and Modoc Ditch, facing east.

Photo 11. View of Modoc Ditch from culverted area under bare ground, facing west.

Photo 12. View of Modoc Ditch, facing west.

Photo 13. View of Drainage #1 along North Kelsey Street, facing north.

Photo 14. View of Drainage #1 along North Kelsey Street, facing south.

Attachment B

Arid West Ephemeral and Intermittent Streams

OHWM Datasheets

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Visalia Kelsey Street Industrial Complex
Project Number:
Stream: Watchumna Ditch
Investigator(s): Matthew South

Date: 12/19/22 **Time:** 10:30 am
Town: unincorporated **State:** CA
Photo begin file#: P01 **Photo end file#:**

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: OHWM bands for Watchumna Ditch

Projection: NAD83 **Datum:** 308

Coordinates: 36.3588252, -119.3676647

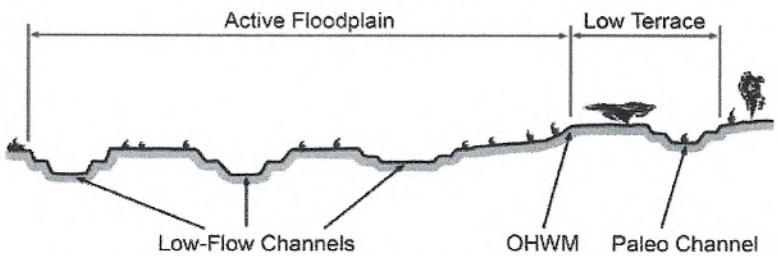
Potential anthropogenic influences on the channel system:
Trash / debris from Road 92

Brief site description:
bare ground area with some vegetation within Watchumna Ditch

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 12/22 1/23
- [X] Topographic maps
- [ ] Geologic maps
- [ ] Vegetation maps
- [X] Soils maps
- [ ] Rainfall/precipitation maps
- [ ] Existing delineation(s) for site
- [X] Global positioning system (GPS)
- [ ] Other studies
- [ ] Stream gage data
  Gage number:
  Period of record:
  - [ ] History of recent effective discharges
  - [ ] Results of flood frequency analysis
  - [ ] Most recent shift-adjusted rating
  - [ ] Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

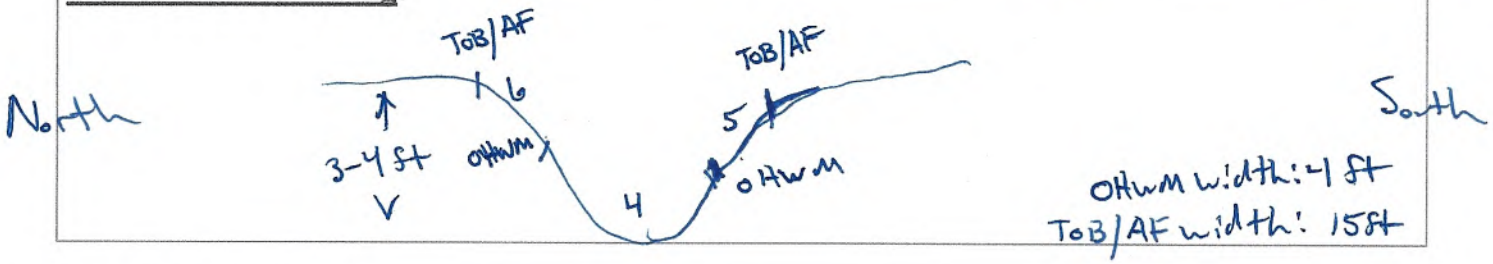


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - [X] Mapping on aerial photograph
   - [X] Digitized on computer
   - [X] GPS
   - [ ] Other:

Project ID: VKSIC **Cross section ID:** P01 **Date:** 12/19/22 **Time:** 10:30 am

Cross section drawing:



OHWM

GPS point: 36.3588252, -119.3276647

Indicators:

- [x] Change in average sediment texture
- [ ] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

Floodplain unit: [x] Low-Flow Channel [x] Active Floodplain [ ] Low Terrace

GPS point: 36.3588252, -119.3276647

Characteristics of the floodplain unit:

Average sediment texture: fg-cg

Total veg cover: 30 % Tree: ____ % Shrub: 10 % Herb: 20 %

Community successional stage:

- [ ] NA
- [x] Early (herbaceous & seedlings)
- [x] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [x] Drift and/or debris
- [x] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [x] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments:

The active floodplain is equivalent to the ToB; the ditch was constructed to maintain water flow.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Visalia Kelsey Street Industrial Complex
Project Number:
Stream: Modoc Ditch N/S
Investigator(s): Matthew South

Date: 12/19/22 **Time:** 10:45
Town: unincorporated **State:** CA
Photo begin file#: P02 **Photo end file#:**

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: N/S Modoc Ditch - OHWM bounds
Projection: NAD83 **Datum:** 305
Coordinates: 36.36242211, -119.3677653

Potential anthropogenic influences on the channel system:

Trash/debris from Road 92

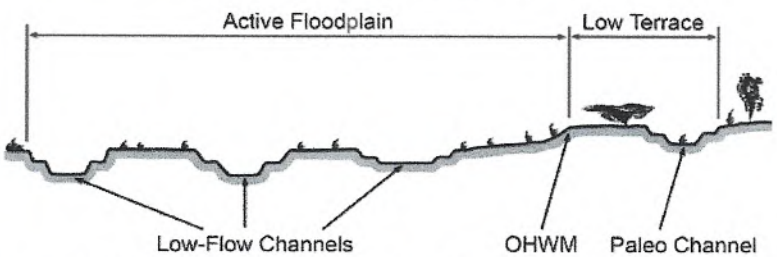
Brief site description:

bare ground area with some vegetation within Modoc Ditch.

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 12/22, 1/23
- [X] Topographic maps
- [ ] Geologic maps
- [ ] Vegetation maps
- [X] Soils maps
- [ ] Rainfall/precipitation maps
- [ ] Existing delineation(s) for site
- [X] Global positioning system (GPS)
- [ ] Other studies
- [ ] Stream gage data
  Gage number:
  Period of record:
  - [ ] History of recent effective discharges
  - [ ] Results of flood frequency analysis
  - [ ] Most recent shift-adjusted rating
  - [ ] Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

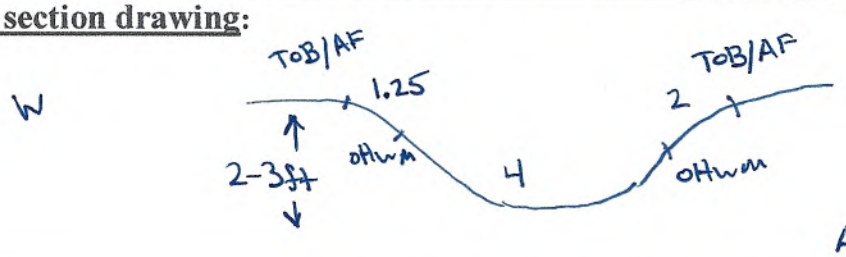


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - [X] Mapping on aerial photograph
   - [X] Digitized on computer
   - [X] GPS
   - [ ] Other:

Project ID: VKSIC **Cross section ID:** P02 **Date:** 12/19/22 **Time:** 10:45

Cross section drawing:



OHWM width: 4
AF/ToB width: ≈ 7.25 ft

OHWM

GPS point: 36.3624211, -119.3677653

Indicators:

- [x] Change in average sediment texture
- [ ] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

Floodplain unit:

- [x] Low-Flow Channel
- [x] Active Floodplain
- [ ] Low Terrace

GPS point: 36.3624211, -119.3677653

Characteristics of the floodplain unit:

Average sediment texture: fg-cobble
Total veg cover: 25 % Tree: 0 % Shrub: 5 % Herb: 20 %
Community successional stage:

- [ ] NA
- [x] Early (herbaceous & seedlings)
- [x] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [x] Drift and/or debris
- [x] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [x] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments: The active floodplain is equivalent to the ToB; the ditch was designed to maintain water flow.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Visalia Kelsey Street Industrial Complex
Project Number:
Stream: Modoc Ditch E/W
Investigator(s): Matthew South

Date: 12/19/22 **Time:** 11:00
Town: unincorporated **State:** CA
Photo begin file#: P03 **Photo end file#:**

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details:
E/W Modoc Ditch - OHWM Bounds
Projection: NAD 83 **Datum:** WGS
Coordinates: 36.36237765, -119.36182999

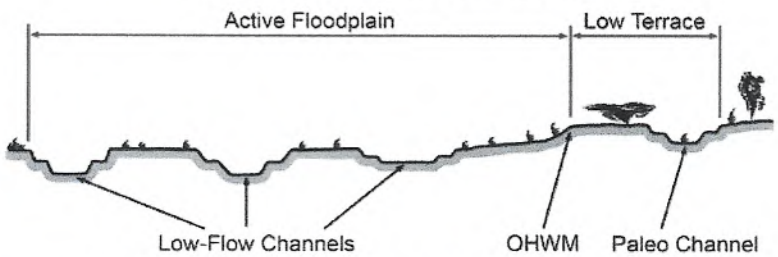
Potential anthropogenic influences on the channel system:
Trash / debris from bare ground dirt access road.

Brief site description:
Bare area with some vegetation within Modoc Ditch, including valley oak.

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 12/22, 1/23
- [X] Topographic maps
- [ ] Geologic maps
- [ ] Vegetation maps
- [X] Soils maps
- [ ] Rainfall/precipitation maps
- [ ] Existing delineation(s) for site
- [X] Global positioning system (GPS)
- [ ] Other studies
- [ ] Stream gage data
  Gage number:
  Period of record:
  - [ ] History of recent effective discharges
  - [ ] Results of flood frequency analysis
  - [ ] Most recent shift-adjusted rating
  - [ ] Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

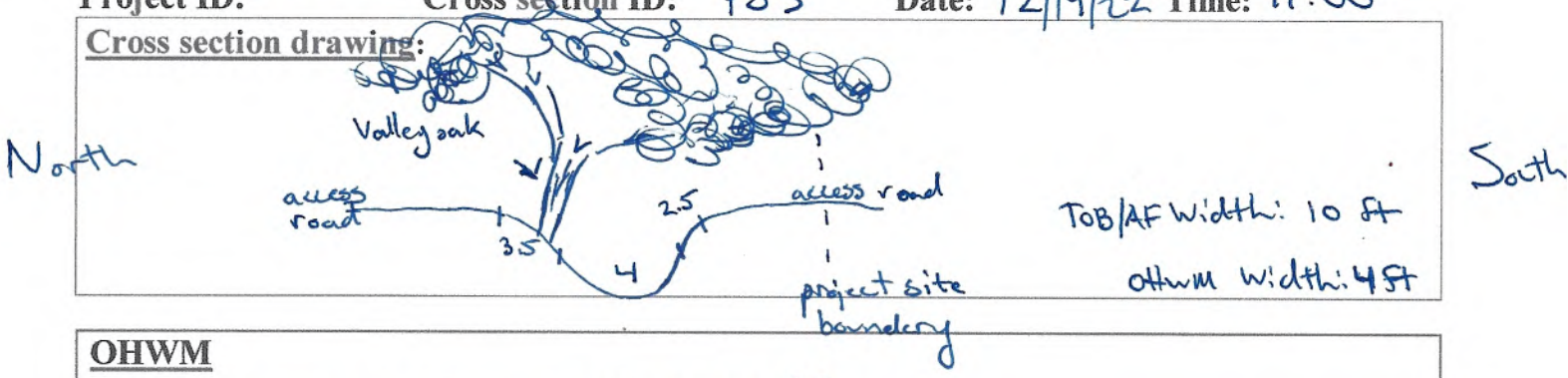


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - [X] Mapping on aerial photograph
   - [X] Digitized on computer
   - [X] GPS
   - [ ] Other:

Project ID: VKSIC **Cross section ID:** P03 **Date:** 12/19/22 **Time:** 11:00

Cross section drawing:



OHWM

GPS point: 36.3623765, -119.3698299

Indicators:

- [x] Change in average sediment texture
- [ ] Change in vegetation species
- [ ] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

Floodplain unit: [x] Low-Flow Channel [x] Active Floodplain [ ] Low Terrace

GPS point: 36.3623765, -119.3698299

Characteristics of the floodplain unit:

Average sediment texture: fg-coarse grained

Total veg cover: 55 % Tree: 55 % Shrub: 0 % Herb: 0 %

Community successional stage:

- [ ] NA
- [ ] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [x] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [ ] Drift and/or debris
- [x] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [x] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments: The active floodplain is equivalent to the TOB, the ditch was designed to maintain water flow.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Visalia - Kelsey Street Industrial Complex
Project Number:
Stream: Drainage #1
Investigator(s): Matthew South
Date: 12/19/22
Town: Unincorporated
Photo begin file#: P04
Time: 11:30
State: CA
Photo end file#:

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [ ] / N [X] Is the site significantly disturbed?

Location Details: Drainage #1

Projection: NAD83 **Datum:** 298
Coordinates: 36.3617949, -119.3858902

Potential anthropogenic influences on the channel system:

Trash/debris from developments at Kelsey Street

Brief site description:

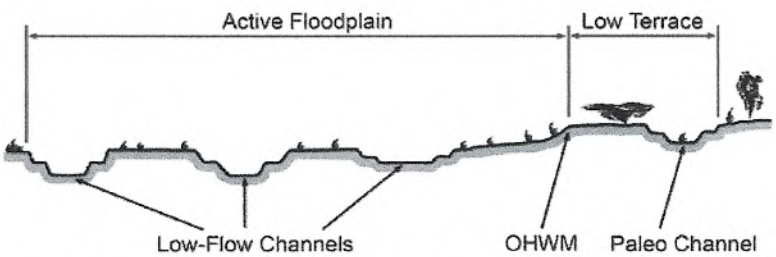
Ornamental landscape area within a development

Checklist of resources (if available):

- [X] Aerial photography
  Dates: 12/22, 1/23
- [X] Topographic maps
- [ ] Geologic maps
- [ ] Vegetation maps
- [X] Soils maps
- [ ] Rainfall/precipitation maps
- [ ] Existing delineation(s) for site
- [X] Global positioning system (GPS)
- [ ] Other studies

- [ ] Stream gage data
  Gage number:
  Period of record:
  - [ ] History of recent effective discharges
  - [ ] Results of flood frequency analysis
  - [ ] Most recent shift-adjusted rating
  - [ ] Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units



Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - [X] Mapping on aerial photograph
   - [X] Digitized on computer
   - [X] GPS
   - [ ] Other:

Project ID: VKSIC **Cross section ID:** P04 **Date:** 12/19/22 **Time:** 11:30

Cross section drawing:

OHWM/ToB/AF width: 3.5 feet

OHWM

GPS point: 36.3617949, -119.3858902

Indicators:

- [ ] Change in average sediment texture
- [ ] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

Floodplain unit:

- [x] Low-Flow Channel
- [x] Active Floodplain
- [ ] Low Terrace

GPS point: 36.3617949, -119.3858902

Characteristics of the floodplain unit:

Average sediment texture: pebble-cobble

Total veg cover: 0 % Tree: 0 % Shrub: 0 % Herb: 0 %

Community successional stage:

- [x] NA
- [ ] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

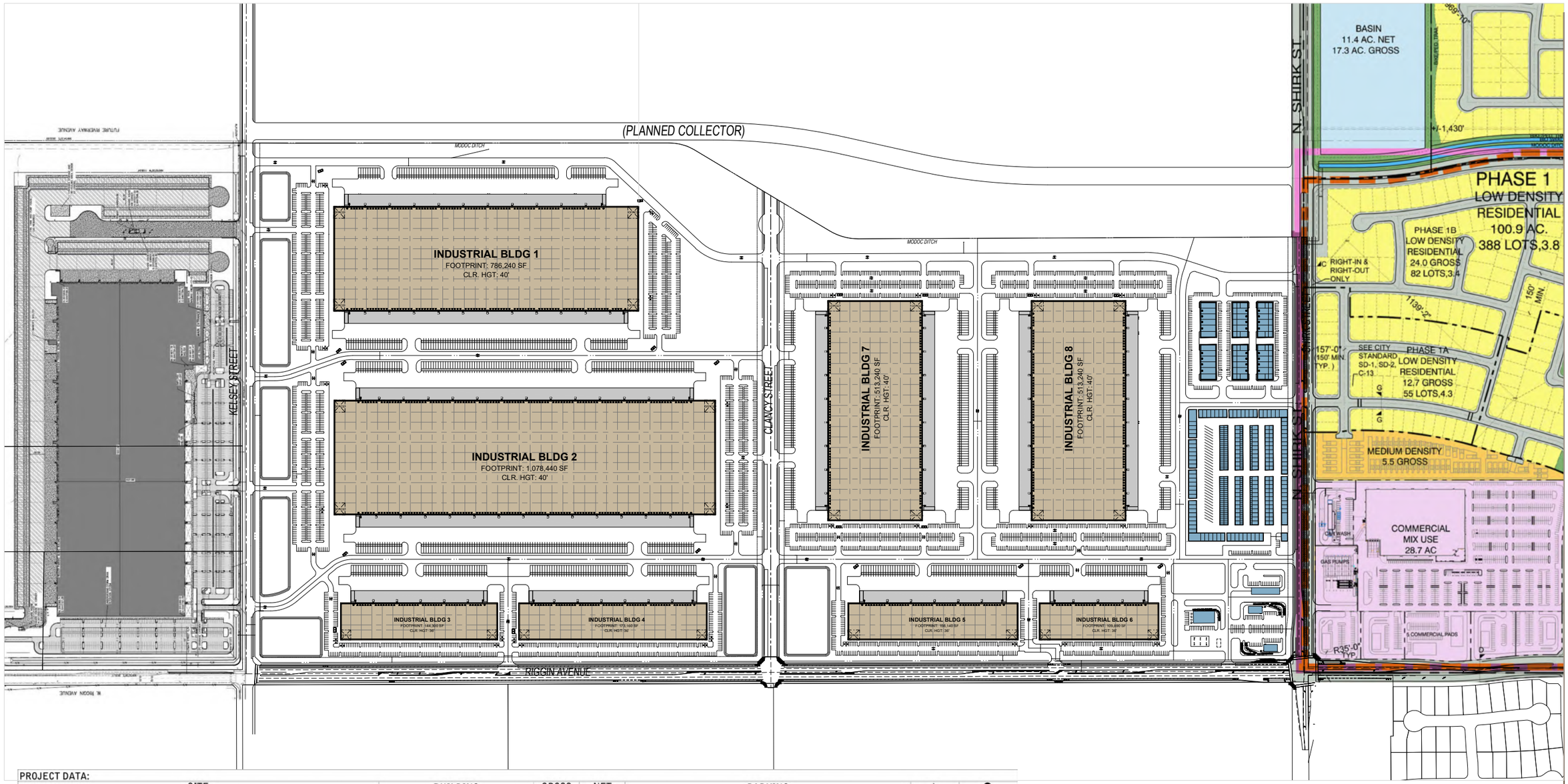
Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [ ] Drift and/or debris
- [x] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [ ] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments: The active floodplain extends only to the ToB boundaries; the drainage was designed for water control

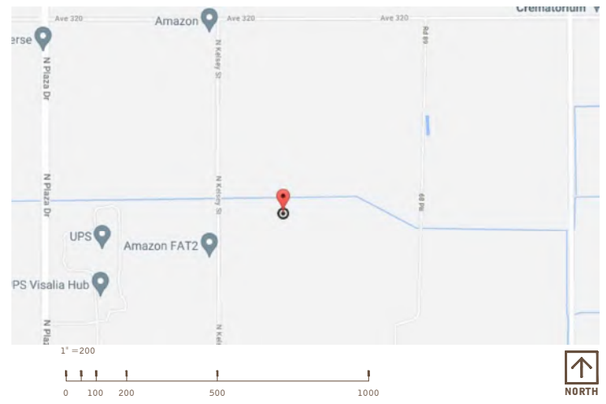
Attachment C

Site Plan



PROJECT DATA:

SITE						BUILDING		GROSS	NET	PARKING				▲	○
SITE	SITE AREA (SF)	SITE AREA (ACRE)	DETENTION (SF)	DETENTION (%)	NET SITE AREA (SF)	BLDG.	BUILDING FOOTPRINT	GROSS COVERAGE	NET COVERAGE	PARKING PROVIDED	PARKING RATIO	REQ. ACC. STALLS	TRAILER PARKING	DOCK-HIGH DOORS	GRADE-LEVEL DOORS
						1	786,240			598	@0.76/1000 SF	*12 STALLS*	193	171	4
						2	1,078,440			687	@0.64/1000 SF	*14 STALLS*	246	214	4
						3	144,300			244	@1.69/1000 SF	*7 STALLS*	47	43	2
						4	173,160			275	@1.59/1000 SF	*7 STALLS*	60	54	2
						5	156,140			244	@1.56/1000 SF	*7 STALLS*	57	47	2
						6	109,890			177	@1.61/1000 SF	*6 STALLS*	37	29	2
1	12,194,988	279.96	1,363,370	11.2%	10,831,618	7	513,240	30.5%	34.3%	578	@1.13/1000 SF	*12 STALLS*	147	128	4
						8	513,240			528	@1.03/1000 SF	*11 STALLS*	147	128	4
						FLEX IND	84,480			269	@3.18/1000 SF	*7 STALLS*	-	-	-
						SELF STORAGE	144,800			35	@0.24/1000 SF	*2 STALLS*	-	-	-
						CARWASH	4,560			17	@3.73/1000 SF	*1 STALLS*	-	-	-
						DRIVE-THRU 1	2,368			37	@15.62/1000 SF	*2 STALLS*	-	-	-
						DRIVE-THRU 2	2,368			37	@15.62/1000 SF	*2 STALLS*	-	-	-
						C-STORE	6,922			24	@3.47/1000 SF	*1 STALLS*	-	-	-
TOTAL	12,194,988	280	1,363,370	11.2%	10,831,618		3,720,149	30.5%	34.3%	3,750	@1.01/1000 SF	*102 STALLS*	934	814	24



scheme: 04

Conceptual Site Plan

Kelsey Street
Visalia, CA 93292

WARE MALCOMB

SNR21-0165-00
08.31.2022

SHEET
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