

**BIOLOGICAL RESOURCES REPORT  
LABCON – FISHER DRIVE PETALUMA  
DEVELOPMENT PROJECT**

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## TABLE OF CONTENTS

<b>1.0 INTRODUCTION</b> .....	<b>1</b>
<b>2.0 PROPOSED PROJECT</b> .....	<b>2</b>
2.1 Detailed Description of Project Location .....	2
2.2 Detailed Project Description.....	2
<b>3.0 REGULATORY BACKGROUND</b> .....	<b>3</b>
3.1 Federal Regulations .....	3
3.2 State Regulations.....	8
Section 401 of the Federal Clean Water Act/Porter Cologne Water Quality Control Act.....	8
3.3 Other Requirements .....	12
3.4 Local Requirements .....	12
<b>4.0 EXISTING BIOLOGICAL SETTING</b> .....	<b>14</b>
4.1 Land Use .....	14
4.2 Topography .....	14
4.3 Soils.....	14
4.4 Climate.....	15
4.5 Hydrology .....	15
4.6 Plant Communities.....	15
4.7 Animal Populations.....	16
4.8 Sensitive Habitats.....	17
4.8.1 Wetlands .....	17
4.8.2 Riparian Corridors .....	18
4.9 Special Status Species .....	18
4.9.1 Special Status Plant Species.....	19
4.9.2 Special Status Animal Species.....	19
<b>5.0 BIOLOGICAL IMPACTS AND MITIGATION MEASURES</b> .....	<b>20</b>
5.1 Standards of Significance .....	20
5.2 Impacts and Mitigation Measures .....	20
<b>6.0 REFERENCES</b> .....	<b>24</b>

## LIST OF ATTACHMENTS

### ATTACHMENT 1. Figures

- Figure 1. Project Site Location Map
- Figure 2. USGS Topographic Map of the Project Site
- Figure 3. Aerial Photo of the Project Site
- Figure 4. 50 Foot Setback from Adobe Creek Top of Bank

### ATTACHMENT 2. Tables

- Table 1. Special Status Plants with Potential to Occur in the Vicinity of the Project Site, Sonoma County, California
- Table 2. Special Status Animal Species that Have Been Reported in the Vicinity of the Project Site, Sonoma County, California

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## 1.0 INTRODUCTION

On behalf of Greg LeDoux & Associates, Inc., Huffman-Broadway Group, Inc. (HBG) has prepared a Biological Resources Report for their proposed, Labcon – Fisher Drive Petaluma Development Project to be developed on a 6.52-acre site consisting of Parcels 2 - 8 of the Lakeville Business Park property immediately south of and adjacent to 3200 Lakeville Highway in Petaluma, California (Project Site). It is expected that this Biological Resources Report conducted within the 6.2-acre biological resources review area will be used for project planning and design and in decision-making with respect to the documentation necessary for the project pursuant to the California Environmental Quality Act (CEQA).

The objective of this study was to provide a determination of the potential for the Project Site to support sensitive habitats as defined by state or federal regulation and/or pursuant to the California Environmental Quality Act (CEQA) or for the Project Site to support special status species of flora and fauna. The objective of the study is also to determine if construction of the proposed project would result in potentially significant biological impacts and, if so, to recommend mitigation measures to reduce biological impacts to levels of insignificance as defined by CEQA guidelines.

HBG's analysis included: (1) a review of pertinent literature on habitat characteristics of the site, including sensitive habitats and species of plants and animals expected to utilize the Project Site and a review of planning documents referencing ecological aspects of the site; (2) review of the California Natural Diversity Data Base (CNDDDB) to determine if any populations of endangered, threatened, or rare species have occurred historically or are currently known to exist in the project vicinity; (3) field surveys of the site conducted by HBG biologists on March 30 and April 28, 2022 for the purposes of determining the presence or absence of sensitive habitats and/or suitable habitat for special status plants and animals; and (4) an evaluation to determine whether the proposed construction would result in impacts to sensitive habitats or special status species.

## 2.0 PROPOSED PROJECT

### 2.1 Detailed Description of Project Location

The Project Site is a 6.52-acre multi-lot property located at the Lakeview Business Park Planned Community Development (PCD) in the City of Petaluma, Sonoma County, California. The project Site is in the Petaluma River, CA 2021 7.5-minute U.S. Geological Survey (USGS) quadrangle in Section 35 of Township 5 north, Range 7 west. The table below lists the Project Site's lot address and Assessor's Parcel Number (APN) information associated with the City of Petaluma, California. The location of the Project Site is shown in Attachment 1, Figure 1. Attachment 1, Figure 2 shows the location of the site on the Petaluma River, CA 2021 7.5-minute USGS quadrangle map, and Attachment 1, Figure 3 shows an aerial photo of the Project Site. This analysis also included the adjacent open space areas on 3200 Lakeville Highway that will be used for project transfer.

Address	Lot #	APN
1607 Fisher Drive	Lot 2	005-280-042
1621 Fisher Drive	Lot 3	005-280-043
1635 Fisher Drive	Lot 4	005-280-044
1649 Fisher Drive	Lot 5	005-280-045
1663 Fisher Drive	Lot 6	005-280-006
1677 Fisher Drive	Lot 7	005-280-007
1691 Fisher Drive	Lot 8	005-280-008

### 2.2 Detailed Project Description

The applicant is proposing to develop a 175,000 square foot industrial facility. The project boundary for the proposed project is shown in Attachment 1, Figure 3.

The building footprint will be 150,000 square feet and including a second story of 25,000 square feet with the product transfer connection to 3200 Lakeville Highway at the north end of the building. The lower floor will include Warehouse, Production Areas, and a small office element. Offices and Presentation Room will be located on the upper floor. The building entry and lobby will be located at the southern elevation with the employee entrance at the north elevation. Two elevators will be installed, one in the lobby and one at the employee entrance.

The building, and parking areas are positioned outside the creek setback and riparian areas. The parking lot has been designed for a maximum capacity. A reserve area for parking will be landscaped or left with natural grasses, and be located in areas that will benefit the community as a landscape/open space buffer. The meandering pedestrian path along Cader Lane will be extended and continue along the Fisher Drive frontage connecting to the existing pathway at South McDowell Boulevard Extension.

Low impact development methods and storm water retention elements are accounted for in the bioswales, permeable surfaces, as well as drought tolerant landscaping. The drainage is planned to be directed to the south and east; there will be no drainage toward or into Adobe Creek.

### 3.0 REGULATORY BACKGROUND

This section describes federal, state, and City laws, regulations, and policies that may be applicable to the Project Site and require further analysis based on site conditions. The table below provides a summary of the environmental laws and regulations discussed in more detail in the subsections below together with the agency having the legislative mandate to implement the regulatory program.

Federal	Responsible Agency	California and City	Responsible Agency
<b>Section 404 of the Clean Water Act</b>	Corps and U.S. Environmental Protection Agency (USEPA)	<b>Section 401 of the Federal Clean Water Act/Porter-Cologne Water Quality Control Act</b>	State Water Resources Control Board (SWRCB) and San Francisco Bay Regional Water Quality Control Board (RWQCB)
<b>Section 402 of the Clean Water Act</b>	USEPA	<b>California Endangered Species Act</b>	California Department of Fish and Wildlife (CDFW)
<b>Endangered Species Act</b>	U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NOAA Fisheries)	<b>CDFW-Lake and Streambed Alteration Agreement</b>	CDFW
<b>Migratory Bird Treaty Act</b>	USFWS	<b>CDFW-Fish and Game Code Sections 3503, 3503.5 and 3513</b>	CDFW
		<b>CDFW Sensitive Plant Communities</b>	CDFW
		<b>CDFW Species of Special Concern</b>	CDFW
		<b>CDFW Fully Protected Animal Species</b>	CDFW
		<b>California Environmental Quality Act (CEQA)</b>	City (as lead agency)

#### 3.1 Federal Regulations *Clean Water Act-Section 404*

The U.S. Army Corps of Engineers (USACE or Corps) regulates discharges of dredged or fill material into Waters of the United States under Section 404 of the Clean Water Act (CWA; 33 U.S.C. §1251 et seq.). “Discharge of fill material” is defined as the addition of fill material into Waters of the U.S., including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 Code of Federal Regulations [CFR] §328.2(f)). In addition, Section 401 of the CWA requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

The USACE and the U.S. Environmental Protection Agency (US EPA) are responsible for implementing the Section 404 program. Section 404(a) authorizes the Corps to issue permits,

after notice and opportunity for comment, for discharges of dredged or fill material into Waters of the United States (WOTUS) (33 U.S.C. §1344). Section 404(b) requires that the Corps issue permits in compliance with EPA guidelines, which are known as the Section 404(b)(1) Guidelines (40 CFR Part 230). Specifically, the Section 404(b) (1) guidelines require that the Corps only authorize the “least environmentally damaging practicable alternative” (LEDPA) and include all practicable measures to avoid and minimize impacts to the aquatic ecosystem. The guidelines also prohibit discharges that would cause significant degradation of the aquatic environment or violate state water quality standards.

Waters of the U.S. include both wetlands and “other waters of the U.S.” Wetlands and other waters of the U.S. are described by US EPA and Corps regulations (40 CFR §230.3(s) and 33 CFR §328.3(a), respectively). US EPA and the Corps define wetlands as “...those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (US EPA regulations at 40 CFR § 230.3(t); Corps’ regulations at 33 CFR §328.3(b)). Both natural and manmade wetlands and other waters (not vegetated by a dominance of rooted emergent vegetation) are subject to regulation. Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows.

The geographic extent of wetlands is defined by the collective presence of a dominance of wetland vegetation, wetland hydrology conditions, and wetland soil conditions as determined following the Corps’ 1987 Wetlands Delineation Manual (1987 Manual); the Corps’ 2008 Regional Supplement to Corps of Engineers Wetland Delineation Manual: Arid West, Version 2.0 (Arid West Regional Supplement); and supporting guidance documents.

The geographic extent of other waters of the U.S. is defined by an ordinary high-water mark (OHWM) in non-tidal waters (33 CFR §328.3(e)) and by the High Tide Line within tidal waters (33 CFR §328.3(d)). The OHWM is defined by the Corps as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (33 CFR §328.3(e)). Tidal waters are also under the jurisdiction of the Corps. The landward limits of jurisdiction in tidal waters extend to the high tide line...“or, when adjacent non-tidal waters of the United States are present, to the limits of jurisdiction for such non-tidal waters” (33 CFR§328.4(b)). High tide is further defined to include the line reached by spring high tides and other high tides that occur with periodic frequency (33 CFR §328.3(d)).

**SWANCC and Rapanos.** In the U.S. Supreme Court decision *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (SWANCC)*, No. 99-1178 (2001), some isolated wetlands may be excluded from the Corps’ Section 404 jurisdiction because they are (1) non-tidal, (2) non-navigable, (3) not hydrologically connected to navigable waters or adjacent to such waters, and (4) not subject to foreign or interstate commerce. Subsequent to SWANCC, the U.S. Supreme Court decided on *Rapanos v. United States* and *Carabell v. United*

*States*, 126 U.S. 2208 (2006) (herein referred to as Rapanos). In 2007, guidance was given to US EPA regions and Corps districts to implement the Supreme Court's decision which addresses the jurisdiction over waters of the U.S. under the Clean Water Act. The Rapanos guidance requires the Corps to conduct detailed analysis of the functions and values of wetlands and other waters of the U.S. potentially onsite and in some cases offsite, to determine if there is a nexus to traditional navigable waters (33 CFR Part 329) and to evaluate the significance of the nexus to the traditional navigable water. Neither the Court nor the recently issued guidance draw a clear line with respect to the geographic reach of jurisdiction, particularly in drainages where flows are ephemeral and where wetlands are adjacent to but not directly abutting relatively permanent water.

***Navigable Waters Protection Rule.***

In 2020, the Trump Administration obtained approval of the Navigable Waters Protection Rule (NWPR) that altered the reach of the nation's Clean Water Act. The NWPR has four categories of jurisdictional waters and twelve categories of excluded waters/features. There is no standalone interstate waters category and no case-specific significant nexus analysis. Key changes were made for defining tributary, adjacent wetland, ditches, lakes, ponds, and impoundments. New definitions for defining typical year versus normal, perennial, intermittent, ephemeral, snowpack, and ditches. No change was made to the definition of wetlands or the methodology for defining wetlands. Under the NWPR, WOTUS includes 1) territorial seas and traditional navigable waters; 2) tributaries; 3) lakes and ponds, and impoundments of jurisdictional waters; and 4) adjacent wetlands.

***Navigable Waters Protection Rule Vacated.*** In June 2021, the US EPA and the Corps announced their intent to revise the definition of "waters of the United States" that would restore regulations defining "waters of the United States" that had been in place for decades until 2015, along with updates for consistency with relevant Supreme Court decisions; a second proposed rule would build on that regulatory foundation.

Subsequently, a ruling in the U.S. District Court for the District of Arizona on August 30, 2021, in the case of Pascua Yaqui Tribe v. U.S. Environmental Protection Agency, may result in the Final NWPR being overturned permanently. The US EPA and the Corps are reviewing the U.S. District Court's order vacating and remanding the NWPR, have halted implementation of the NWPR, and are currently interpreting "waters of the United States" consistent with the pre-2015 WOTUS definition and US EPA and USACE regulatory policies and guidance regime until further notice.

A key milestone in the regulatory process announced in June occurred November 18, 2021, with the signing of a proposed rule to revise the definition of "waters of the United States." As described on the US EPA website, the agencies propose to put back into place the pre-2015 definition of "waters of the United States," updated to reflect consideration of Supreme Court decisions. This familiar approach would support a stable implementation of "waters of the United States" while the agencies continue to consult with states, tribes, local governments, and a broad array of stakeholders in both the current implementation and future regulatory actions. (<https://www.epa.gov/wotus/current-implementation-waters-united-states>).



### ***Section 402 of the Clean Water Act***

In 1972, the Clean Water Act was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollution Discharge Elimination System (NPDES) permit. Section 402 of the Clean Water Act requires that a discharge of any pollutant or combination of pollutants to surface waters that are deemed waters of the United States be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments established a framework for regulating municipal, industrial, and construction-related storm water discharges under the CWA Section 402 NPDES Program. On November 16, 1990, the US EPA published final regulations that establish stormwater permit application requirements for specified categories of industries. The regulations provide, that discharges of stormwater from construction projects that encompass one or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit.

The federal NPDES permit program has been delegated to the State of California with limited federal oversight. The California State Water Resources Control Board (SWRCB) has developed a general construction stormwater permit to implement the requirements for the federal NPDES permit. The permit requires submittal of a Notice of Intent to comply, fees, and the implementation of a Storm Water Pollution Prevention Plan that specifies Best Management Practices (BMPs) that will prevent construction pollutants from entering stormwater and keep products of erosion from migrating offsite into downstream receiving waters. The Construction General Permit includes post-construction requirements that site design provide no increase in overall site runoff or the concentration of drainage pollutants and requires implementation of Low Impact Development (“LID”) design features. The Construction General Permit is implemented and enforced by California’s nine Regional Water Quality Control Boards (RWQCBs).

The RWQCBs have also adopted requirements for NPDES stormwater permits for medium and large municipalities, and the SWRCB has adopted a General Permit for the discharge of storm water from small municipal storm sewer systems. This General Permit requires projects to develop and implement a post-construction Storm Water Management Plan (SWMP) to reduce the discharge of pollutants to the maximum extent practicable.

### ***Endangered Species Act***

The United States Congress passed the Federal Endangered Species Act (ESA) in 1973 to protect those species that are endangered or threatened with extinction. The ESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The ESA establishes an official listing process for plants and animals considered to be in danger of extinction, requires development of specific plans of action for the recovery of listed species, and restricts activities perceived to harm or kill listed species or affect critical habitat (16 USC 1532, 1536).

The ESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or

collecting wildlife species, or any attempt to engage in such conduct (16 USC 1532, 50 CFR 17.3). Taking can result in civil or criminal penalties. Federal regulation 50 CFR 17.3 further defines the term “harm” in the take definition to mean any act that actually kills or injures a federally listed species, including significant habitat modification or degradation. Therefore, the ESA is invoked when the property contains a federally listed threatened or endangered species that may be affected by a permit decision. In the event that listed species are involved and a Corps permit is required for impacts to jurisdictional waters, the Corps must initiate consultation with US Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) pursuant to Section 7 of the ESA (16 USC §1536; 40 CFR §402). Section 7 of the ESA requires federal agencies to ensure that their actions do not jeopardize the continued existence of listed species or adversely modify critical habitat (16 USC §1536). In the regulations found at 50 CFR §402.2, destruction or adverse modification is defined as a “direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species.” Critical habitat is defined in ESA Section 3(5)(A) as specific areas within the geographical range occupied by a species where physical or biological features “essential to the conservation of the species” are found and that “may require special management considerations or protection.” Critical habitat may also include areas outside the current geographical area occupied by the species that are nonetheless “essential for the conservation of the species.” Critical habitat designations identify, with the best available knowledge, those biological and physical features (primary constituent elements) which provide for the life history processes essential to the conservation of the species.

If formal consultation is required, USFWS or NMFS will issue a biological opinion stating whether the permit action is likely to jeopardize the continued existence of the listed species, recommending reasonable and prudent measures to ensure the continued existence of the species, establishing terms and conditions under which the project may proceed, and authorizing incidental take of the species.

For discretionary permit actions by non-federal entities, Section 10 of the ESA provides a mechanism for obtaining take authorization through submittal and approval of a Habitat Conservation Plan that details species impacts, measures to minimize or mitigate such impacts, and funding mechanisms to implement mitigation requirements.

### ***Migratory Bird Treaty Act***

The Migratory Bird Treaty Act (MBTA) (16 USC 703-712) implements international treaties devised to protect migratory birds and any of 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. The regulations governing migratory bird permits are in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. Most bird species within California fall under the provisions of the Act. Excluded species include nonnative species such as house sparrow, starling, and ring-necked pheasant and native game species such as quail.

On December 22, 2017, the U.S. Department of Interior’s Office of the Solicitor issued Memorandum M-37050, which states an interpretation that the Migratory Bird Treaty Act does

not prohibit the accidental or “incidental” taking or killing of migratory birds. In response to the Trump Administration’s attempted changes to the MBTA, eight states, including California, filed suit in September 2018, arguing that the new interpretation inappropriately narrows the MBTA and should be vacated. On August 11, 2020, the Southern District of New York ruled in favor of the long-standing interpretation of the MBTA to protect migratory birds, reinstating the historical ban on incidental take. Just days before leaving office, the Trump Administration finalized its pullback of MBTA regulations, despite the ruling of the federal court, and the elimination of protections pursuant to the MBTA went into effect in January 2021. On his first day in office, new President Joe Biden placed the Trump Administration’s changes to the MBTA on hold, pending further review. The Biden Administration announced the repeal of the January 2021 changes and the reinstatement of protections for migratory birds in December 2021.

### ***Fish and Wildlife Coordination Act***

The USFWS also has responsibility for project review under the Fish and Wildlife Coordination Act. This statute requires that all federal agencies consult with USFWS, NMFS, and the state’s wildlife agency (California Department of Fish and Wildlife (CDFW)) for activities that affect, control, or modify streams and other water bodies. Under the authority of the Fish and Wildlife Coordination Act, USFWS, NMFS, and CDFW review applications for permits issued under Section 404 and provide comments to the Corps about potential environmental impacts.

## **3.2 State Regulations**

### ***Section 401 of the Federal Clean Water Act/Porter Cologne Water Quality Control Act***

***CWA Section 401 Water Quality Certification.*** Pursuant to section 401 of the federal Clean Water Act, projects that require a Corps permit for the discharge of dredge or fill material must obtain water quality certification from the state water quality authority that confirms a project complies with state water quality standards before the Corps permit is valid. State water quality is regulated/administered by the California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). A water quality certification from a RWQCB must be consistent with not only the Clean Water Act, but with CEQA, the California Endangered Species Act (CESA), and the SWRCB’s requirement to protect beneficial uses of waters of the State.

***Porter-Cologne Act.*** The State also maintains independent regulatory authority over the placement of waste, including fill, into waters of the State under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act). Waters of the State are defined more broadly than “waters of the US” to mean “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code section 13050(e)). Examples include, but are not limited to, rivers, streams, lakes, bays, marshes, mudflats, unvegetated seasonally ponded areas, drainage swales, sloughs, wet meadows, natural ponds, vernal pools, diked baylands, seasonal wetlands, and riparian woodlands. Waters of the State include all waters within the state’s boundaries, whether private or public, including waters in both natural and artificial channels. They include all “waters of the United States”; all surface waters that are not “waters of the United States, e.g., non-jurisdictional wetlands; groundwater; and the territorial seas.

The SWRCB's *State Wetland Definition and Procedures for Discharges of Dredge or Fill Material to Waters of the State* adopted April 2, 2019 (the Procedures) along with the *Implementation Guidance for the Procedures* dated April 2020 (the Implementation Guidance) defines a wetland as an area that *under normal circumstances, (1) has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.* The Procedures, along with the Implementation Guidance, state that the permitting authority (e.g., RWQCB) shall rely on any wetland area delineation from a final aquatic resource report verified by the Corps. If the Corps does not require an aquatic resource delineation report, an applicant must submit a delineation of all waters, but these delineations will be verified by the RWQCB staff during application review. Similarly, if the Corps does not require a delineation, but similar information is prepared for CDFW, the applicant can submit that information to the RWQCB, who will determine if it is sufficient for the Water Board's purposes. In addition, as a matter of policy, the SWRCB / RWQCBs consider wetlands and waters determined to be non-jurisdictional by the Corps / USEPA under SWANCC or Rapanos guidance remain jurisdictional as waters of the State subject to SWRCB / RWQCB jurisdiction.

The Procedures along with the Implementation Guidance also include procedures for the submission, review, and approval of applications for activities that could result in the discharge of dredged or fill material to any Waters of the State and include elements of the Clean Water Act Section 404(b)(1) Alternatives Analysis Guidelines, thereby bringing uniformity to the SWRCB's regulation of discharges of dredged or fill material to all waters of the state. Typically, the Corps requires a Clean Water Act 404(b)(1) Alternatives Analysis for wetland impacts greater than 0.50 acres. The Procedures require an alternatives analysis to be completed in accordance with a three-tier system. The level of effort required for an alternatives analysis within each of the three tiers shall be commensurate with the significance of the impacts resulting from the discharge.

The California State Water Resource Control Board has also developed a general construction storm water permit to implement the requirements of the federal National Pollution Discharge Elimination System (NPDES) permit. Projects approved by a RWQCB must, therefore, include the preconstruction requirement for a Stormwater Pollution Prevention Plan and the post-construction requirement for a Stormwater Management Plan.

### ***California Endangered Species Act***

The State of California enacted the California Endangered Species Act (CESA) in 1984. The CESA is similar to the FESA but pertains to state listed endangered and threatened species. CESA requires state agencies to consult with the CDFW when preparing CEQA documents. The CESA generally prohibits the taking of state listed endangered or threatened plant and wildlife species, however, for projects resulting in impacts to state listed species, CDFW may authorize take through issuance of an Incidental Take Permit (ITP) pursuant to Fish and Game Code Section 2081 of the California Fish and Game Code. Section 2081 requires preparation of

mitigation plans in accordance with published guidelines that require, among other things, measures to fully mitigate impacts to State listed species. CDFW exercises authority over mitigation projects involving state listed species, including those resulting from CEQA mitigation requirements. No authorization of take under Section 2081 is permitted for species listed in state statutes as Fully Protected Species. Where Fully Protected Species are involved, projects must be designed to avoid all take of the species. CDFW cannot issue an ITP until CEQA compliance has been achieved, usually through the CEQA Lead Agency providing documentation by preparing a negative declaration or EIR.

The CDFW may also issue a consistency determination (CD) as opposed to an ITP if a species is listed by both the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). Fish and Game Code Section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal ESA Section 7 consultation) or a federal incidental take permit (federal Section 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA. If the federal documents are found to be consistent with CESA, a CD is issued and no further authorization or approval is necessary under CESA.

### ***California Department of Fish and Wildlife - Lake and Streambed Alteration Agreement***

Section 1602 of the California Fish and Game Code requires any person, governmental agency, or public utility proposing any activity that will divert or obstruct the natural flow or change the bed, channel or bank of any river, stream, or lake, or proposing to use any material from a streambed, to first notify CDFW of such proposed activity. Based on the information contained in the notification form and a possible field inspection, CDFW may propose reasonable modifications in the proposed construction as would allow for the protection of fish and wildlife resources. Upon request, the parties may meet to discuss the modifications. If the parties cannot agree and execute a Lake and Streambed Alteration Agreement, then the matter may be referred to arbitration. CDFW cannot issue a Streambed Alteration Agreement until the CEQA Lead Agency has provided documentation in the form of a Notice of Determination that the project has complied with CEQA.

CDFW's regulations implementing the Fish and Game Code define the relevant rivers, streams, and lakes over which the agency has jurisdiction to constitute "all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams and streambeds which have intermittent flows of water." (Title 14 *California Code of Regulations* [CCR] § 720). The CDFW takes jurisdiction under its Lake and Streambed Alteration Agreement Program for any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. The CDFW does not have a methodology for the identification and delineation of the jurisdictional limits of streams except for the general guidance provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607 California Fish and Game Code* (CDFG 1994). In making jurisdictional determinations, CDFW staff typically rely on field observation of physical features that provide evidence of water flow through a bed and channel such as observed flowing water, sediment deposits and drift deposits and that the stream supports fish or other aquatic life. Riparian habitat is not specifically mentioned in the Fish and Game Code

provisions governing Lake and Streambed Alteration Agreement, but CDFW often asserts jurisdiction over areas within the flood plain of a body of water where the vegetation (grass, sedges, rushes, forbs, shrubs, and trees) is supported by the surface or subsurface flow.

### ***California Department of Fish and Wildlife - Fish and Game Code Section 3503, 3503.5 and 3513***

The State of California also incorporates the protection of nongame birds and birds of prey, including their nests, in Sections 3503, 3503.5, and 3513 of the California Fish and Game Code. Section 3503 of the Fish and Game Code makes it unlawful to take, possess, or needlessly destroy the nests or eggs of any bird. Section 3503.5 makes it unlawful to take or possess birds of prey (hawks, eagles, vultures, owls) or destroy their nests or eggs. In December of 2018, California issued new guidance specifying that state law includes “a prohibition on incidental take of migratory birds, notwithstanding any federal reinterpretation of the Migratory Bird Treaty Act” by the Department of Interior.

### ***California Department of Fish and Wildlife - Sensitive Plant Communities.***

CDFW has designated special status natural communities which are considered rare in the region, rank as threatened or very threatened, support special status species, or otherwise receive some form of regulatory protection. Sensitive plant communities are those natural plant communities identified in local or regional plans, policies, ordinances, regulations, or by the CDFW which provide special functions or values. Documentation pertaining to these communities, as well as special status species (including species of special concern), is kept by CDFW as part of the California Natural Diversity Data Base (CNDDDB). All known occurrences of sensitive habitats are mapped onto 7.5-minute US Geological Survey (USGS) topographic quadrangle maps maintained by the CNDDDB. Sensitive plant communities are also identified by CDFW on their List of California Natural Communities Recognized by the CNDDDB. Impacts to sensitive natural communities must be considered and evaluated under CEQA.

### ***California Department of Fish and Wildlife - Species of Special Concern***

CDFW tracks species in California whose numbers, reproductive success, or habitat may be threatened. Species that may be considered for review are included on a list of “Species of Special Concern” developed by the CDFW. Even though these species may not be formally listed under FESA or CESA, such plant and wildlife species must be evaluated during the CEQA review of development projects, and mitigation should be developed to prevent significant impacts to such species.

### ***California Department of Fish and Wildlife - Fully Protected Animal Species***

The classification of Fully Protected was an effort by the California Legislature in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Protection of Fully Protected species is described in four sections of the Fish & Game Code that lists fully protected species (Fish & Game Code §§ 3511, 4700, 5050, and 5515). These statutes prohibit take or possession of fully protected species at any time. CDFW is unable to authorize incidental take of Fully Protected species when activities are proposed in areas inhabited by these species, except pursuant to an approved Natural Community Conservation



Plan. Most Fully Protected species have also been listed as threatened or endangered species under state endangered species laws and regulations. Permits may be issued for the take of Fully Protected bird species for necessary scientific research and relocation of the bird species for the protection of livestock (as per California Fish and Game Code Section 3511(a)(1)).

### 3.3 Other Requirements

#### *California Native Plant Society*

The California Native Plant Society (CNPS), a nongovernmental organization, has no regulatory authority but provides information that is often used by regulatory bodies. CNPS maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS 2014:

<https://www.cnps.org/cnps/rareplants/inventory/> ). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review, especially for those plant species including in Lists 1 and 2. The following identifies the definitions of the CNPS listings:

<https://www.cnps.org/cnps/rareplants/ranking.php>

- |                                |  |
|--------------------------------|--|
| California Rare Plant Rank 1A: | Plants presumed extirpated in California and either rare or extinct elsewhere.     |
| California Rare Plant Rank 1B: | Plants rare, threatened, or endangered in California and elsewhere.                |
| California Rare Plant Rank 2A: | Plants presumed extirpated in California, but more common elsewhere.               |
| California Rare Plant Rank 2B: | Plants rare, threatened, or endangered in California, but more numerous elsewhere. |
| California Rare Plant Rank 3:  | Plants about which more information is needed – a review list.                     |
| California Rare Plant Rank 4:  | Plants of limited distribution – a watch list.                                     |

### 3.4 Local Requirements

#### *City of Petaluma General Plan 2025*

In addition to federal and state regulations, the development of the property must be accomplished consistent with the land use designations and natural resource and other policies of the Petaluma General Plan. The main guiding principle regarding biological resources of the General Plan is to “Protect and enhance biological and natural resources within the Urban Growth Boundary<sup>1</sup>”. General Plan policies in support of this principle include protection and enhancement of the Petaluma River and its tributaries through a comprehensive river management strategy, conservation of wildlife ecosystems and sensitive habitat areas in the

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<sup>1</sup> The Urban Growth Boundary (UGB) was established by voter approval as part of Measure I in November 1998 and extended by Measure T in November 2010. The measure ensures that urban development and provision of city water and sewer services are contained within the UGB through December 31, 2025. Although four possible expansion areas were identified as locations where development could occur before the UGB expires in 2025, the General Plan assumes that all growth through 2015 will occur within the current UGB, reflecting community sentiment. Further information on the UGB and detailed policies related to growth management are included in Chapter 1: Land Use, Growth Management, and the Built Environment.

following order of protection preference: 1) avoidance, 2) on-site mitigation, and 3) off-site mitigation, and the protection of special status species and supporting habitats within Petaluma, including species that are State or Federal listed as endangered, threatened, or rare.

***Adobe Creek Restoration Plan and Management Program***

The Adobe Creek Restoration Plan and Management Program was developed by the City of Petaluma and the Sonoma County Water Agency to enhance, restore, and manage Adobe Creek. The Adobe Creek is a tributary of the Petaluma River and flows through the southeastern side of Petaluma. The plan focuses on two stream reaches of Adobe Creek, the McDowell Reach, south of Lakeville Highway, and Sartori Reach, north of Sartori Drive. It provides guidelines for channel designs and vegetation management that promote the development of a mature riparian canopy to enhance wildlife function while maintaining adequate capacity for flood control. One of the goals of the management guidelines is to show that careful hand pruning of willows and other in-stream plants during the initial restoration period can lead the way to a more self-sustaining system that will reduce the long-term maintenance costs of flood control channels while improving the habitat for fish and wildlife. The plan also seeks to integrate schools, resource agencies, public agencies, local residents, and community organizations in a focused effort to restore Adobe Creek.

No habitat conservation plans are in place for this location.



#### 4.0 EXISTING BIOLOGICAL SETTING

The description of the biological setting for the property is based on field visits to the site by HBG Wetland Regulatory Scientist Greg Huffman on March 30 and April 28, 2022. The investigator visited the site for purposes of conducting observations of the composition and distribution of plant species, wildlife observations, identification of sensitive habitats, and a comparison of site characteristics for similarity to sites known to support special status species within the area.

#### 4.1 Land Use

The City of Petaluma’s General Plan 2025 Draft Land Use Map indicates that the Project Site is located within the Business Park (BP) designation for the 3200 Lakeville Highway and PCD Properties. There is an adjacent land use designated Open Space (OS) on the north and northwest boundary of the Project Site which consists of Adobe Creek bank and bed locations, and riparian areas. The site currently consists of a ruderal environment which has been graded for the purpose of future development. The vegetation within the Project Site is maintained to avoid fuel growth (Attachment 1, Figure 3).

#### 4.2 Topography

Topographically, the site has relatively flat relief. Adobe Creek is adjacent to the north and northwest boundaries of the site. Attachment 1, Figure 2 shows the location of the site on the Petaluma River, CA 2021 7.5-minute USGS quadrangle map, and Attachment 1, Figure 3 shows an aerial photo of the Project Site.

#### 4.3 Soils

Soil survey information for the Project Site was obtained from the National Resources Conservation Service Web Soil Survey (NRCS 2022). One soil type is mapped as occurring on the Project Site: *Clear Lake clay, sandy substratum, 0 to 2 percent slopes*. The table below summarizes the basic properties of these soils. It should be noted that there was evidence that the soil listed on the table had been filled over at various locations within the Project Site. The geotechnical study performed by RGH Consultants states that there were soil stockpiles within the Project Site that had been removed at some point prior to their 2022 study (RGH Consultants 2022).

Summary of Pertinent Characteristics of Soils Mapped Onsite by NRCS					
Soil Name	Landform / Parent Material	Typical Profile (inches)	Natural Drainage Class / Runoff Class	Depth to Water Table (In)	Frequency of Flooding/ Ponding
Clear Lake clay, sandy substratum, 0 to 2 percent slopes	Basin floors / Basin alluvium derived from volcanic and sedimentary rock over fan alluvium derived from volcanic and sedimentary rock	Apg1 - 0 to 2 inches: clay Apg2 - 2 to 8 inches: clay Assg - 8 to 25 inches: clay Bssg1 - 25 to 39 inches: clay Bssg2 - 39 to 46 inches: clay Bkssg - 46 to 52 inches: clay 2Bkg - 52 to 60 inches: clay loam 2Btg - 60 to 72 inches: fine sandy loam	Poorly drained / High	About 0 inches	None / None

Summary of Pertinent Characteristics of Soils Mapped Onsite by NRCS					
Soil Name	Landform / Parent Material	Typical Profile (inches)	Natural Drainage Class / Runoff Class	Depth to Water Table (In)	Frequency of Flooding/ Ponding
		2C - 72 to 84 inches: stratified loamy coarse sand to clay loam			

**4.4 Climate**

Like other portions of northern California, Petaluma experiences a Mediterranean climate characterized by warm, dry summers and cool, wet winters. Based on “WETS Station PETALUMA AIRPORT” precipitation and temperature data for the period of record (1971 – 2021), the average annual precipitation amount received in the vicinity of the property is 24.87 inches of rainfall and 0.0 inch received as snow. The wettest month, in which average monthly rainfall exceeds 4.7 inches, is January (4.75 inches) with the lowest average amount occurring in July (0.03). Record data also indicates that the annual average daily temperature is 58.2° F. Average high and low temperatures range between 70.8° F and 45.6° F with the coldest months typically including December and January where temperatures are in the high 30s and the hottest months being July, August, and September where temperatures are in the low 80s.

**4.5 Hydrology**

The Project Site lies within the US Geological Survey (USGS) National Hydrography Dataset (NHD) Hydrologic Unit Code (HUC) HUC 8 “San Pablo Bay” subbasin (18050002), HUC 10 “Petaluma River-Frontal San Pablo Bay Estuaries” watershed (1805000206), and HUC 12 “Adobe Creek-Frontal San Pablo Bay Estuaries” subwatershed (180500020605). Drainage on the site is to the southwest in the direction of the Petaluma River. The FEMA Rate Map City of Petaluma indicates the Project site is within FEMA Zone X (area of minimal flood hazard). Natural drainage consists of sheet flow over the ground surface that concentrates in man made surface drainage elements such as roadside gutters, and natural drainage elements such as swales and creeks (RGH Consultants 2022).

**4.6 Plant Communities**

Vegetation communities are assemblages of plant species growing in an area of similar biological and environmental factors. Vegetation communities and habitats at the project site were identified based on vegetation types as described in Holland’s Preliminary Descriptions of Terrestrial Natural Communities of California (Holland, 1986) and the currently accepted List of Natural Communities (CDFW 2010). The List of Natural Communities is based on A Manual of California Vegetation, Second Edition (Sawyer and Keeler-Wolf 2009), which is the National Vegetation Classification applied to California. The project site contains one habitat type: Urban/Non-native Grassland.

Dominant plant species found in the open field within the property were non-native grasses and herbaceous plants including wild oats (*Avena fatua*), common vetch (*Vicia sativa*), rip-gut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), perennial rye grass (*Festuca*

*perennis*), field bindweed (*Convolvulus arvensis*), foxtail barley (*Hordeum murinum*), field mustard (*Brassica rap*), wild radish (*Raphanus sativus*), and common mallow (*Malva neglecta*). There is also a stand of coyote brush (*Baccharis pilularis*) located within the northwest corner of the property.

Scattered landscaping trees line the north, northeast, west, and northwestern property boundaries and are situated several feet above the riparian habitat in the Adobe Creek floodplain along the margin of Urban/Non-native Grassland. The landscaping trees consist of Apple (*Malus sp.*), Willow (*Salix sp.*), Strawberry Tree (*Arbutus unedo*), Box Elder (*Acer negundo*), Oregon Ash (*Fraxinus latifolia*), Laurel (*Prunus lyonii*), Chinese pistache (*Pistacia chinensis*), Holly Oak (*Quercus ilex*), Canary Island Pine (*Pinus canariensis*) and Coast Redwood (*Sequoia sempervirens*) (Duckles 2022).

The riparian corridor of Adobe Creek is dominated by native Arroyo willows (*Salix lasiolepis*) intermixed with Box elder (*Acer negundo*), and White alder (*Alnus rhombifolia*) trees (Attachment 1, Figure 4). The riparian understory is dominated by herbaceous vegetation with scattered patches of Himalayan blackberry (*Rubus armeniacus*), blue elderberry (*Sambucus nigra*), and other shrubs. Herbaceous understory species are dominated by non-natives, but patches of native plants do occur as either naturally occurring or planted specimens. These include California bee plant (*Scrophularia californica*), California poppy (*Eschscholzia californica*), California mugwort (*Artemisia douglasiana*), tall flatsedge (*Cyperus eragrostis*), and rush (*Juncus sp.*). Representative non-native understory species include annual grasses, black mustard (*Brassica nigra*), milk thistle (*Silybum marianum*), Italian thistle (*Carduus pycnocephalus*), cut-leaved geranium (*Geranium dissectum*), bristly ox-tongue (*Helminthotheca echioides*), sweet fennel (*Foeniculum vulgare*), and poison hemlock (*Conium maculatum*).

#### **4.7 Animal Populations**

The project site provides limited habitat for wildlife species, mostly those adapted to open areas and disturbed environments. Grasses and herbaceous plants within the Project Site provide limited nesting and roosting sites for birds, and cover and foraging habitat for species of birds, mammals, reptiles, and amphibians.

Trees and shrubs within the Adobe Creek riparian corridor just beyond the north and northwestern boundary of the property provide suitable substrate for nesting birds as well as foraging areas for both migratory and resident species. Tree cavities or exfoliating bark within these trees could potentially provide roosting sites for a number of species of bat known to occur in the general area. The riparian habitat of Adobe Creek provides shelter and cover for a variety of wildlife species such as birds, amphibians, reptiles, and mammals. As with many riparian systems, the creek at this location provides a movement corridor for wildlife adapted to urban environments such as those found in the project area.

Bird species likely to occur on the site would include species adapted for urban environments and disturbed conditions and that would be common to abundant in the region. Expected common year-round residents could include mourning dove (*Zenaida macroura*), rock pigeon

(*Columba livia*), killdeer (*Charadrius vociferous*), Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), northern mockingbird (*Mimus polyglottos*), black phoebe (*Sayornis nigricans*), savannah sparrow (*Passerculus sandwichensis*), California towhee (*Melospiza crissalis*), house finch (*Haemorhous mexicanus*) and house sparrow (*Passer domesticus*). Winter residents would include white-crowned sparrow (*Zonotrichia leucophrys*) and yellow-rumped warbler (*Setophaga coronata*). Turkey vulture (*Cathartes aura*) and red-tailed hawk (*Buteo jamaicensis*) are also likely common in the project vicinity. Amphibian species would likely include Pacific treefrog (*Pseudacris regilla*), among others. Reptiles such as western fence lizard (*Sceloporus occidentalis*), Pacific gopher snake (*Pituophis catenifer*), and common garter snake (*Thamnophis sirtalis elegans*) may also be present. Expected mammals would be those adapted to disturbed, urban environments such as Virginia opossum (*Didelphis virginiana*), black-tailed jackrabbit (*Lepus californicus*), deer mouse (*Peromyscus maniculatus*), striped skunk, (*Mephitis mephitis*), raccoon (*Procyon lotor*), Botta's pocket gopher (*Thomomys bottae*), and California vole (*Microtus californicus*).

## **4.8 Sensitive Habitats**

### **4.8.1 Wetlands**

During the March 30, 2022, field survey, Greg Huffman of HBG conducted an investigation at the proposed Project Site to assess whether aquatic resources are present that may potentially be subject to US Army Corps of Engineers (Corps) and US Environmental Protection Agency (US EPA) regulation as wetlands or other waters of the United States under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344) or Corps jurisdiction under Section 10 of the Rivers and Harbors Act (RHA) (33 U.S.C. 403). HBG conducted this study in accordance with Code of Federal Regulations (CFR) definitions of jurisdictional waters, the *Corps' 1987 Wetlands Delineation Manual* (Corps Delineation Manual), the *Corps' 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Regional Supplement) and supporting Corps and US EPA guidance documents and policy. The HBG investigation also included an assessment of whether aquatic resources are present that are potentially subject to state regulatory jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB) under their CWA Section 401 and / or Porter-Cologne Act Programs or the regulatory jurisdiction of the California Department of Fish and Wildlife (CDFW) under their Lake and Streambed Alteration Agreement Program (Fish and Game Code Section 1602). The review included an investigation of existing landforms, vegetation, hydrology, and soil conditions indicative of aquatic resources.

The HBG investigation found no areas within the Project Site with a potential to support wetlands or other waters of the U.S. subject to Corps/USEPA jurisdiction or that would potentially be subject to RWQCB jurisdiction under their CWA Section 401 and / or Porter-Cologne Act Programs or jurisdiction of CDFW under the California Fish and Game Code. Adobe Creek, a perennial stream located beyond the north and northwest boundary of the study area would be subject to USACE Corps jurisdiction under Section 404 of the CWA, RWQCB jurisdiction under their CWA Section 401 and / or the Porter-Cologne Act Programs, and CDFW under their Lake and Streambed Alteration Agreement Program.

#### **4.8.2 Riparian Corridors**

To satisfy Goal 4-1-G of the City's General Plan, Program D. of Policy 4-P-1 provides guidance for the protection and enhancement the Petaluma River and its tributaries through a comprehensive river management strategy. Setbacks are to be created for all tributaries to the Petaluma River extending a minimum of 50 feet outward from the top of each bank, with extended buffers where significant habitat areas, vernal pools, or wetlands exist. Development shall not occur within the setback, except as part of greenway enhancement (for example, trails and bikeways). Where there is degradation within the zone, restoration of the natural creek channels and riparian vegetation is mandatory at time of adjacent development. A 50-foot setback starting from the top of bank of Adobe Creek is required for the proposed project as defined above by the City of Petaluma (Attachment 1, Figure 4). No improvements are proposed within the 50-foot setback.

#### **4.9 Special Status Species**

Special status species to be evaluated in reviews pursuant to the California Environmental Quality Act (CEQA) include those species listed by the federal and state governments as endangered, threatened, or rare or candidate species for these lists. Endangered or threatened species are protected by the federal Endangered Species Act of 1973 as amended, the California Native Plant Protection Act of 1977, and the California Endangered Species Act of 1970. The California Environmental Quality Act (CEQA) provides additional protection for unlisted species that meet the "rare" or "endangered" criteria defined in Title 14, California Code of Regulations Section 15380. Special status species also include those species listed by CDFW as Species of Concern (species that face extirpation in California if current population and habitat trends continue), those listed as Fully Protected by CDFW (a designation that provides additional protection to those animals that were rare or faced possible extinction), and bird species designated as Bird Species of Conservation Concern by the USFWS. These state and federal Species of Concern must be evaluated in the context of evaluation under CEQA. Special status species included in CEQA review also include bat species protected by the California Fish and Game Code and that have been designated with conservation priority by the Western Bat Working Group. CEQA also requires evaluation of impacts to plant species on California Native Plant Society (CNPS) Lists 1 and 2.

The CDFW maintains records for the distribution and known occurrences of special status species and sensitive habitats in the California Natural Diversity Database (CNDDDB). The CNDDDB is organized into map areas based on 7.5 minute topographic quadrangle maps produced by the U.S. Geological Survey (USGS). All known occurrences of special status species are mapped onto quadrangle maps maintained by the CNDDDB. The database gives further detailed information on each occurrence, including specific location of the individual, population, or habitat (if possible) and the presumed current state of the population or habitat. The project site is located on the Petaluma River 7.5 minute quadrangle map (Attachment 1, Figure 2).

Attachment 2, Tables 1 and 2 present a list of special status plants and animals, respectively, that have been reported by the CNDDDB in the project vicinity within 10 miles of the site. An

evaluation of the potential for all potential sensitive species to occur at the site is included in Attachment 2, Tables 1 and 2.

#### **4.9.1 Special Status Plant Species**

Plant species noted in the CNDDDB as occurring within a 10-mile radius of the site, or that are known to occur in the general vicinity based on the knowledge of HBG biologists, are discussed in Table 1. The table includes all species of flora mentioned in the CNDDDB within approximately ten miles of the site.

The non-native grassland on the project site, vegetated with non-native grasses and weedy species, does not provide suitable habitat for any of the special status plant species noted in Table 1. The urbanized nature of the project site and the presence of a high component of non-native species of flora make this site a poor candidate for supporting special status plant species. The project site also does not provide habitat for other special status plants listed in Table 1 that require specialized habitats such as brackish marsh, riparian scrub, cismontane woodland, valley and foothill grassland, or chaparral, or that are found in serpentine or other specialized soils. The project site is not suitable habitat for native species and is not expected to support special status species of flora.

#### **4.9.2 Special Status Animal Species**

Animal species noted in the CNDDDB as occurring within a 10-mile radius of the site, or that are known to occur in the general vicinity based on the knowledge of HBG biologists, are discussed in Table 2. None of the animal species discussed in the table have the potential to occur on the site. This finding is made based on the habitat requirements of species listed in the table and is based on a field review of habitats present at the site and the immediate vicinity and an evaluation of the suitability of on-site habitats to support these species.

## 5.0 BIOLOGICAL IMPACTS AND MITIGATION MEASURES

### 5.1 Standards of Significance

According to CEQA Guidelines (Appendix G), the project would be considered to have a significant impact on biological resources if it would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Wildlife and Game or U.S. Fish and Wildlife Service.
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) 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.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

### 5.2 Impacts and Mitigation Measures

**(1) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

***Special Status Plants.*** The proposed project would not result in any significant adverse impacts on special status plant species. The Project Site consists of a weedy field that is not suitable habitat for native species and would not be expected to support special status species of plant. All the species included in Table 1 require habitat conditions that are not found at the subject property. No special status plant species occur on the subject property, therefore no impacts to special status plants would result from implementation of the proposed project. The proposed project would not substantially reduce the number or restrict the range of a rare, endangered, or threatened plant species.



***Special Status Animals.*** The Project would not result in any significant adverse impacts on special status species and would not substantially reduce the number or restrict the range of a rare, endangered, or threatened species of fauna. None of the animal species discussed in Table 2 have the potential to occur at the construction site. The special status animal species mentioned in Table 2 would not find suitable habitat conditions at the Project Site. No impacts to special status animal species would occur due to construction proposed at the site.

**(2) Would the project 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 California Department of Fish and Wildlife or US Fish and Wildlife Service?**

Adobe Creek and adjacent riparian habitat are adjacent to the north and northwest boundaries of the project site. The project would not have a substantial adverse effect to either Adobe Creek or the adjacent riparian corridor as no work is proposed within these significant habitat areas. The proposed project construction would also not conflict with the City's required 50-foot setback from the top of bank of Adobe Creek along the north and northeastern edge of the Project Site, which is currently dominated by non-native grasses. Implementation of a Stormwater Pollution Prevention Plan (SWPPP), with identification of proper construction techniques and Best Management Practices (BMPs) will provide additional assurance that the water quality of Adobe Creek is not affected by onsite construction activities.

**(3) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Development of the property as proposed would not result in filling (direct impacts) to any area that would be subject to the Clean Water Act jurisdiction of the U.S. Army Corps of Engineers, the state CWA 401 and/or Porter-Cologne Act jurisdictions of the RWQCB, or Section 1602 Fish and Game Code jurisdiction of CDFW. No permits from the USACE, RWQCB, or CDFW would be required. The potential for indirect impacts to the riparian habitat of Adobe Creek is discussed in response to Item #2 above.

**(4) Would the project 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?**

The project site is an open field vegetated with weedy species in an urban setting. Although some bird species adapted for open fields and disturbed areas were observed on the site, and other wildlife adapted to urban environments are expected, the project site itself provides little habitat for wildlife. Nevertheless, nesting by various bird species adapted to the onsite conditions is possible within the onsite habitat. The adjacent riparian corridor of Adobe Creek may provide substrate for nesting birds or cavities that could support nesting birds or roosting bats. Implementation of a required buffer zone along the edge of riparian habitat of Adobe Creek would ensure that indirect impacts to nesting birds, roosting bats, or other wildlife



species within the Adobe Creek riparian corridor do not occur. The City's required 50-foot setback from Adobe Creek would ensure that construction of the proposed project would not result in substantial change in animal populations at the site.

***Nesting Birds.*** Nesting bird species protected by the federal Migratory Bird Treaty Act or California Fish and Game Code could be impacted during project construction. Work related to construction involving the removal of vegetation during the February 1 to August 31 breeding season of birds could result in mortality of nesting avian species if they are present. Many species of raptors (birds of prey) are sensitive to human incursion and construction activities, and it is necessary to ensure that nesting raptor species are not present in the vicinity of construction sites.

Removal of vegetation from within the project footprint during the February 1 to August 31 bird nesting season could disturb nesting sites. If active nests were present within the vegetation comprising the riparian corridor of Adobe Creek during construction activities at the site, indirect impacts could occur to nesting bird species protected by the Migratory Bird Treaty Act or the California Fish and Game Code as a result of construction activity on portions of the project adjacent to these areas.

**Impact #1:** The removal of vegetation during the February 1 to August 31 breeding season could result in mortality of nesting avian species if they are present.

**Mitigation Measure #1:** If construction is to be conducted during the bird nesting season (February 1 to August 31), a qualified biologist should conduct a pre-construction breeding bird survey in areas of suitable habitat within 7 days prior to the onset of construction activity. Nesting bird surveys should cover the project footprint and adjacent riparian areas within Adobe Creek. If bird nests are found, appropriate buffer zones should be established around all active nests to protect nesting adults and their young from direct or indirect impacts related to project construction disturbance. Size of buffer zones should be determined per recommendations of the qualified biologist based on site conditions and species involved. Buffer zones should be maintained until it can be documented that either the nest has failed or the young have fledged.

***Water Quality.*** Construction impacts to water quality and associated aquatic wildlife in Adobe Creek and adjacent riparian habitat would not be significant. The City's required 50-foot setback from Adobe Creek would ensure that construction of the proposed project would not result in substantial change to the aquatic habitat of the creek or adjacent riparian habitat. Implementation of a City required Stormwater Pollution Prevention Plan (SWPPP), with identification of proper construction techniques and Best Management Practices (BMPs), in particular, silt fence and straw wattles installed along portions of the Project Site will prevent sediment transport offsite. In addition, erosion control materials containing plastic monofilament netting (erosion control matting), or similar material containing netting, will not be used within the project area due to documented evidence of amphibians, reptiles, birds, and

small animals becoming entangled or trapped in such material. Only natural fiber materials will be used.

Grading, excavation, placement of fill material and other ground-disturbing activities associated with construction activities within the Project Site through the implementation of BMPs will not promote erosion that would allow elevated levels of sediment to wash into aquatic areas downstream, resulting in potential impacts to fish and wildlife resources. Vegetation will only be cleared from the permitted construction footprint. Areas cleared of vegetation, pavement, or other substrates should be stabilized as quickly as possible to prevent erosion and runoff. These erosion control procedures will ensure that indirect impacts to resident animal populations within Adobe Creek and adjacent riparian habitat would not result from the proposed project as there would be no elevated turbidity levels from increased sedimentation or increases in other contaminants in stormwater runoff.

**(5) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

The project would not conflict with any local policies related to protection of natural resources. Existing landscaping trees are present on the Project Site which would be replaced as required by the City. As stated above, the proposed project construction would not conflict with the City's required 50-foot top of bank setback from Adobe Creek along the north and northeastern edge of the Project Site which is dominated by non-native grasses. All work would take place consistent with requirements of the General Plan and Zoning Ordinance of the City of Petaluma.

**(6) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan applicable to the Project Site.

## 6.0 REFERENCES

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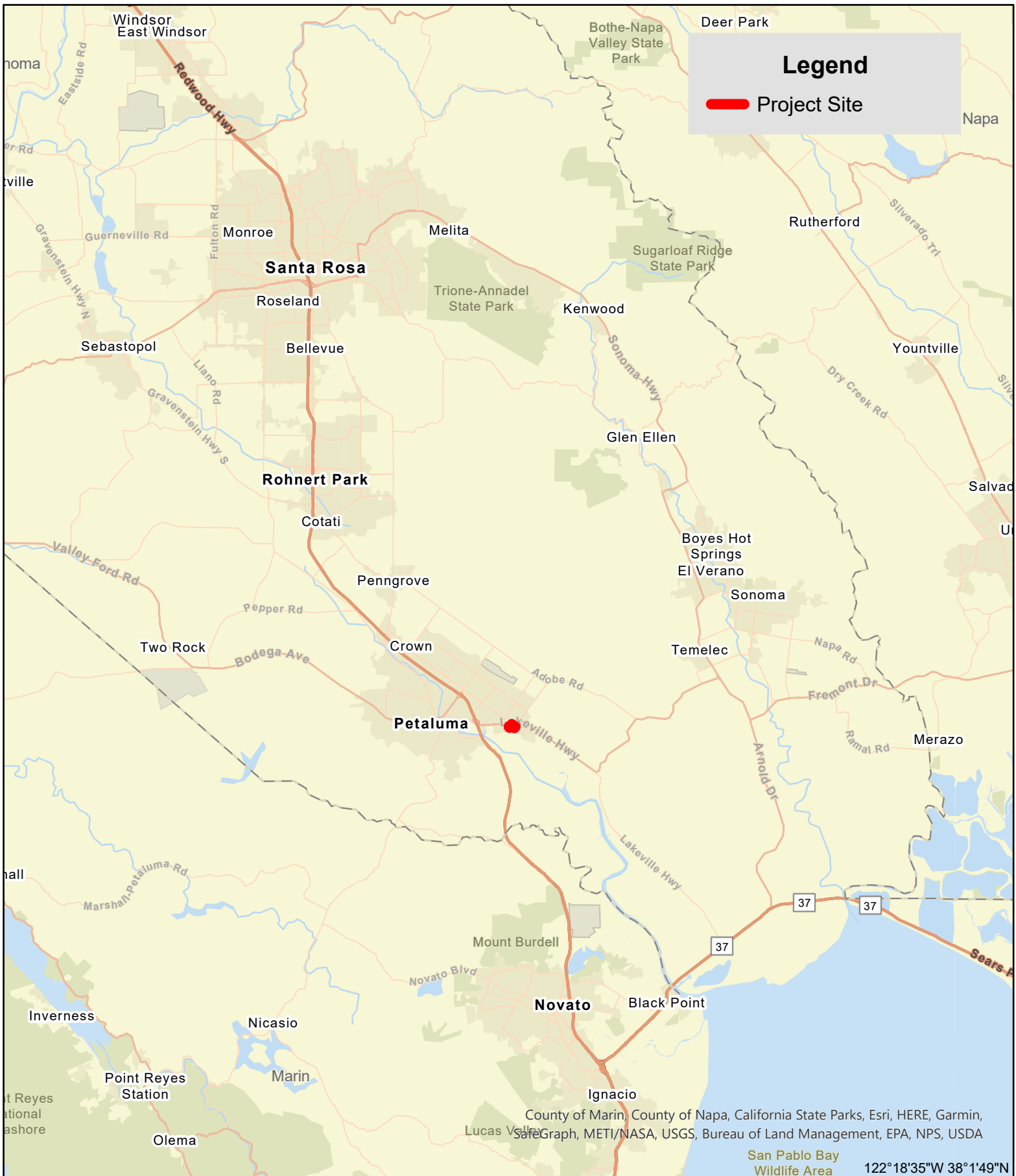
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## **ATTACHMENT 1.**

### **Figures**

- Figure 1. Project Site Location Map
- Figure 2. USGS Topographic Map of the Project Site
- Figure 3. Aerial Photo of the Project Site
- Figure 4. 50 Foot Setback from Adobe Creek Top of Bank



**Figure 1. Project Site Location Map**  
 Labcon – Fisher Drive Petaluma Development Project  
 Petaluma, County of Sonoma, California



Scale: 1:245,760  
 1 inch equals 4 miles

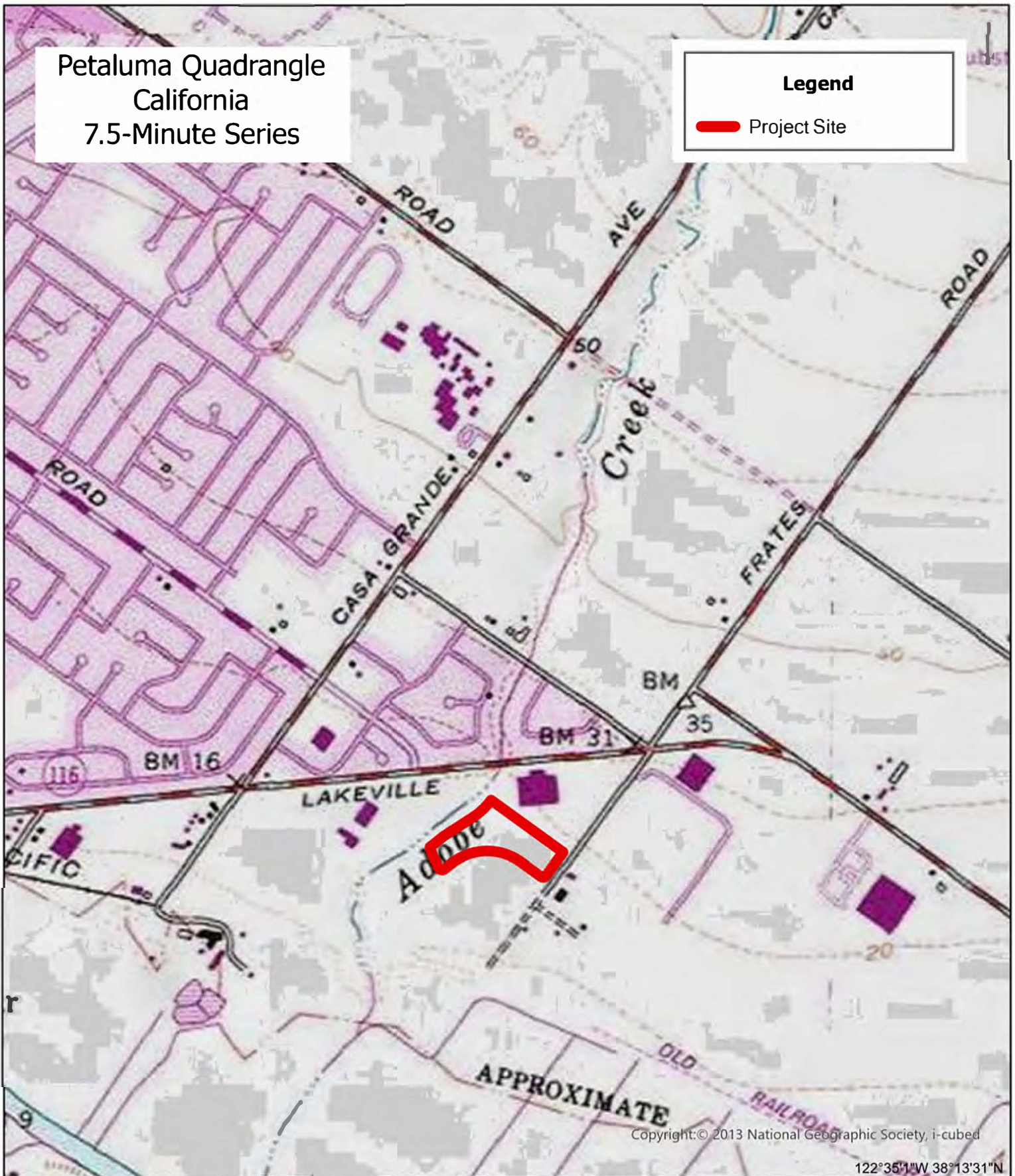
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 PCS: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US  
 GCS: GCS NAD 1983 2011  
 Datum: NAD 1983 2011  
 Projection: Lambert Conformal Conic



Petaluma Quadrangle  
California  
7.5-Minute Series

**Legend**

 Project Site



**Figure 2. USGS Topographic Map of the Project Site**

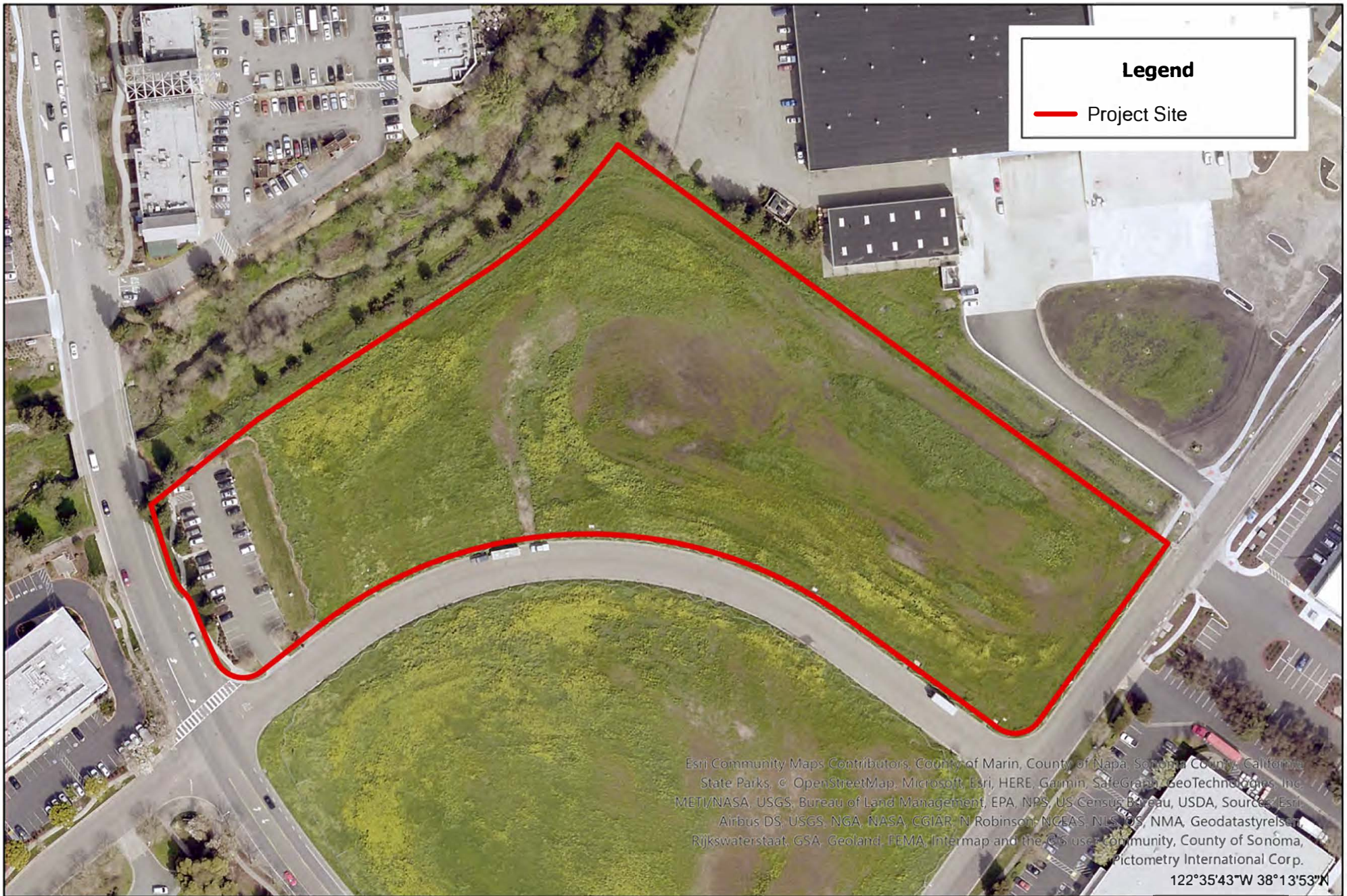
Labcon – Fisher Drive Petaluma Development Project  
Petaluma, County of Sonoma, California

Spatial Reference  
Name: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US  
PCS: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US  
GCS: GCS NAD 1983 2011  
Datum: NAD 1983 2011  
Projection: Lambert Conformal Conic



**Huffman-Broadway Group, Inc.**  
ENVIRONMENTAL REGULATORY CONSULTANTS





**Legend**

— Project Site

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 122°35'43"W 38°13'53"N



**Figure 3. Aerial Photo of the Project Site**  
 Labcon – Fisher Drive Petaluma Development Project  
 Petaluma, County of Sonoma, California

Spatial Reference  
 Name: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US  
 PCS: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US  
 GCS: GCS NAD 1983 2011  
 Datum: NAD 1983 2011  
 Projection: Lambert Conformal Conic





**Figure 4. 50 Foot Setback from Adobe Creek Top of Bank**  
 Labcon – Fisher Drive Petaluma Development Project Petaluma,  
 County of Sonoma, California

## **ATTACHMENT 2.**

### **TABLES**

- Table 1. Special Status Plants with Potential to Occur in the Vicinity of the Project Site, Sonoma County, California
- Table 2. Special Status Animal Species that Have Been Reported in the Vicinity of the Project Site, Sonoma County, California



**Table 1. Special Status Plants Known to Occur in the Vicinity of the Project Site, Sonoma County, California**

SPECIES	STATUS <sup>2</sup> FED/STATE/CNPS <sup>3</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
<b>PLANTS</b>			
Franciscan onion ( <i>Allium peninsulare franciscanum</i> )	-/-/1B.2	Found in cismontane woodland and valley and foothill grassland in clay soils and serpentine on dry hillsides. 100-300m.	Not present. Suitable habitat is not found at the site.
Napa false indigo ( <i>Amorpha californica</i> var. <i>napensis</i> )	--/-/1B.2	Broadleafed upland forest, chaparral, cismontane woodland. Openings in forest or woodland or in chaparral. 150-2000m.	Not present. Suitable habitat is not found at the site.
Alkali milk-vetch ( <i>Astragalus tener</i> var. <i>tener</i> )	--/-/1B.2	Inhabits low ground, alkali flats and flooded land in valley and foothill grasslands or in playas or vernal pools. 1-170m.	Not present. Suitable habitat is not found at the site.
Big-scale (California) balsamroot ( <i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> )	--/-/1B.2	Chaparral, cismontane woodland, valley and foothill grassland, sometimes on serpentine. 90-1555m.	Not present. Suitable habitat is not found at the site.
Sonoma sunshine ( <i>Blennosperma bakeri</i> )	FE/CE/1B.1	Vernal pools and swales in valley and foothill grassland. 10-100m.	Not present. Suitable habitat is not found at the site.
Narrow-anthered California brodiaea ( <i>Brodiaea californica</i> var. <i>leptandra</i> )	--/-/1B.2	Broadleafed upland forest, chaparral, lower montane coniferous forest. 110-915m.	Not present. Suitable habitat is not found at the site.
Mason's ceanothus ( <i>Ceanothus masonii</i> )	--/Rare/1B.2	Chaparral, Ultramafic	Not present. Suitable habitat is not found at the site.
Pappose tarplant ( <i>Centromadia parryi</i> ssp. <i>parryi</i> )	--/-/1B.2	Found in mesic and often alkaline site in coastal prairie, meadows and seeps, coastal salt marsh and valley and foothill grasslands. 2-420m	Not present. Suitable habitat is not found at the site.
Point Reyes salty bird's-beak ( <i>Chloropyron maritimum</i> ssp. <i>Palustre</i> )	--/-/1B.2	Marsh & swamp, Salt marsh, Wetland	Not present. Suitable habitat is not found at the site.

SPECIES	STATUS <sup>2</sup> FED/STATE/CNPS <sup>3</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
Soft salty bird's-beak ( <i>Chloropyron molle ssp. molle</i> )	FE/Rare/1B.2	Found in Coastal salt marsh with <i>Distichlis</i> , <i>Salicornia</i> , <i>Frankenia</i> , etc. 0-3m.	Not present. Suitable habitat is not present at the site.
Sonoma spineflower ( <i>Chorizanthe valida</i> )	FE/CE/1B.1	On sandy soil in Coastal prairie. 10-50m.	Not present. Suitable habitat is not found at the site.
Baker's larkspur ( <i>Delphinium bakeri</i> )	FE/CE/1B.1	Broadleaved upland forest, Coastal scrub, Valley & foothill grassland.	Not present. Suitable habitat is not found at the site.
Golden larkspur ( <i>Delphinium luteum</i> )	FE/Rare/1B.1	On north-facing rocky slopes in chaparral, Coastal prairie, and Coastal scrub. 0-100m.	Not present. Suitable habitat is not found at the site.
Dwarf downingia ( <i>Downingia pusilla</i> )	--/--/2B.2	Inhabits vernal pools and vernal lake margins. 1-445m.	Not present. Suitable habitat is not found at the site.
Tiburon buckwheat ( <i>Eriogonum luteolum var. caninum</i> )	--/--/1B.2	Chaparral, Cismontane woodland, Coastal prairie, Ultramafic, Valley & foothill grassland.	Not present. Suitable habitat is not found at the site
Fragrant fritillary ( <i>Fritillaria liliacea</i> )	--/--/1B.2	Coastal scrub, valley and foothill grassland, coastal prairie. Often on serpentine; various soils reported though usually clay, in grassland. 3-410m.	Not present. Suitable habitat is not found at the site.
Congested-headed hayfield tarplant ( <i>Hemizonia congesta ssp. congesta</i> )	--/--/1B.2	Found in valley and foothill grassland, grassy valleys and hills, often in fallow fields and sometime along roadsides. 20-560 M.	Not present. Suitable habitat is not found at the site.
Marin western flax ( <i>Hesperolinon congestum</i> )	FT/CT/1B.1	Chaparral, Ultramafic, Valley & foothill grassland.	Not present. Suitable habitat is not found at the site
Contra Costa goldfields ( <i>Lasthenia conjugens</i> )	FE/--/1B.1	Vernal pools, swales, low depressions, in open grassy areas. 1-445m. Extirpated from most of its range. Most remaining occurrences restricted to the Fairfield region.	Not present. Suitable habitat is not present at the site.
Legenere ( <i>Legenere limosa</i> )	--/--/1B.1	Inhabits the beds of vernal pools. 1-880m.	Not present. Suitable habitat is not found at the site.

SPECIES	STATUS <sup>2</sup> FED/STATE/CNPS <sup>3</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
Jepson's leptosiphon ( <i>Leptosiphon jepsonii</i> )	--/--/1B.2	Found on volcanics or the periphery of serpentine substrates in chaparral, cismontane woodland, and open to partially shaded grassy slopes. 55-855 m.	Not present. Suitable habitat is not found at the site.
Pitkin Marsh lily ( <i>Lilium pardalinum ssp. pitkinense</i> )	FE/CE/1B.1	Saturated, sandy soils with grasses and shrubs in Cismontane woodland, meadows and seeps, and freshwater marsh. 35-65m.	Not present. Suitable habitat is not present at the site.
Sebastopol meadowfoam ( <i>Limnanthes vincularis</i> )	FE/CE/1B.1	Grows in poorly drained clay and sandy loam soils in swales, wet meadows, and marshy areas. Occurs in mesic meadows and vernal pools in valley and foothill grasslands. 15-305m.	Not present. Suitable habitat is not found at the site.
Marsh microseris ( <i>Microseris paludosa</i> )	-/--/1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 5-300m.	Not present. Suitable habitat is not found at the site.
Baker's navarretia ( <i>Navarretia leucocephala ssp. bakeri</i> )	--/--/1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest. Vernal pools and swales; adobe or alkaline soils at 5-1740m.	Not present. Suitable habitat is not found at the site.
Petaluma popcornflower ( <i>Plagiobothrys mollis var. vestitus</i> )	--/--/1A	Found in Valley and foothill grassland, marshes and swamps, wet sites in grassland, coastal marsh margins. 10-50 M.	Not present. Suitable habitat is not found at the site.
North Coast semaphore grass ( <i>Pleuropogon hooverianus</i> )	--/CT/1B.1	Broadleafed upland forest, meadows and seeps, north coast coniferous forest. Wet grassy, usually shady areas, sometimes freshwater marsh; associated with forest environments. 10-1150 m.	Not present. Suitable habitat is not found at the site.
Marin knotweed ( <i>Polygonum marinense</i> )	--/--/3.1	Brackish marsh, Marsh & swamp, Salt marsh, Wetland.	Not present. Suitable habitat is not found at the site
Cunningham Marsh cinquefoil ( <i>Potentilla uliginosa</i> )	--/--/1A	Freshwater marshes and swamps. Found in permanent oligotrophic wetlands. 30-40m.	Not present. Suitable habitat is not found at the site.

SPECIES	STATUS <sup>2</sup> FED/STATE/CNPS <sup>3</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
White beaked-rush ( <i>Rhynchospora alba</i> )	--/--/2B.2	Found in bogs and fens, meadows and seeps, marshes and swamps. Particularly freshwater marshes and sphagnum bogs. 80-1875m.	Not present. Suitable habitat is not found at the site.
California beaked-rush ( <i>Rhynchospora californica</i> )	--/--/1B.1	Freshwater seeps and open marshy areas in bogs, fens, marshes and swamps and lower montane coniferous forest. 45-1000m.	Not present. Suitable habitat is not found at the site.
Brownish beaked-rush ( <i>Rhynchospora capitellata</i> )	--/--/2B.2	Mesic sites in lower montane coniferous forest, meadows and seeps, marshes and swamps, upper montane coniferous forest. 45-2000m.	Not present. Suitable habitat is not found at the site.
Round-headed beaked-rush ( <i>Rhynchospora globularis</i> )	--/--/2B.1	Freshwater marshes and swamps. 45-60m.	Not present. Suitable habitat is not found at the site.
Point Reyes checkerbloom ( <i>Sidalcea calycosa</i> ssp. <i>rhizomata</i> )	--/--/ 1B.2	Freshwater marshes and swamps near the coast. 5-75m.	Not present. Suitable habitat is not found at the site.
Mount Burdell jewelflower ( <i>Streptanthus anomalus</i> )	--/--/1B.1	Cismontane woodland, Ultramafic.	Not present. Suitable habitat is not found at the site
Two-fork clover ( <i>Trifolium amoenum</i> )	FE/--/1B.1	Valley and foothill grassland, coastal bluff scrub, sometimes on serpentine soil. 5-560m.	Not present. Suitable habitat is not found at the site.
Santa Cruz clover ( <i>Trifolium buckwestiorum</i> )	--/--/1B.1	Found in moist grassland and gravelly margins in Coastal Prairie, broadleaved upland forest, and cismontane woodland. 30-805.m.	Not present. Suitable habitat is not found at the site.
Saline clover ( <i>Trifolium depauperatum</i> var. <i>hydrophilum</i> )	--/--/1B.2	Marshes and swamps, mesic alkaline sites, vernal pools in valley and foothill grassland. 0-300m.	Not present. Suitable habitat is not found at the site.
Pacific Grove clover ( <i>Trifolium polyodon</i> )	--/CR/1B.1	Closed-cone coniferous forest, Coastal prairie, Meadow & seep, Valley & foothill grassland, Wetland.	Not present. Suitable habitat is not found at the site
Oval-leaved viburnum ( <i>Viburnum ellipticum</i> )	--/--/2B.3	Chaparral, cismontane woodland and lower montane coniferous forest. 215-1400m.	Not present. Suitable habitat is not found at the site.

1. Source: California Natural Diversity Data Base, Natural Heritage Division, California Department of Fish and Wildlife for the Petaluma River 7.5-minute Quadrangle Map and surrounding areas, information dated April 2022.

2. Status Codes:

FE	Federal-listed Endangered
FT	Federal-listed Threatened
FPE	Federal Proposed Endangered
FPT	Federal Proposed Threatened
CE	California State-listed Endangered
CT	California State-listed Threatened
CR	California Rare
FP	California Fully Protected
CSC	California Species of Special Concern

California Rare Plant Rank 1A:	Plants presumed extirpated in California and either rare or extinct elsewhere.
California Rare Plant Rank 1B:	Plants rare, threatened, or endangered in California and elsewhere.
California Rare Plant Rank 2A:	Plants presumed extirpated in California, but more common elsewhere.
California Rare Plant Rank 2B:	Plants rare, threatened, or endangered in California, but more numerous elsewhere.
California Rare Plant Rank 3:	Plants about which more information is needed – a review list.
California Rare Plant Rank 4:	Plants of limited distribution – a watch list.

#### CNPS Threat Ranks

0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

0.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)



**Table 2. Special Status Animal Species that have been Reported in the Vicinity of the Project Site, Sonoma County, California**

SPECIES	STATUS <sup>2</sup> FED/STATE/CNPS <sup>3</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
<b>ANIMALS</b>			
<b>Invertebrates</b>			
Western bumble bee <i>(Bombus occidentalis)</i>	--/--	This species was once common and widespread, but the species has declined precipitously from Central California to Southern British Columbia, perhaps from disease.	This widespread and once common species could occur almost anywhere in the general area of the site and is included in the CNDDDB due to a general decline in bee populations in recent years.
Marin blind harvestman <i>(Calicina diminua)</i>	--/--	Known only from the type locality on Mount Burdell. Serpentine endemic.	Not present. Restricted range not likely to include the project site.
Ubick's Gnaphosid spider <i>(Talanites ubicki)</i>	--/--	Known only from the type locality on Mount Burdell. Serpentine endemic.	Not present. Suitable habitat is not found at the site.
California brackishwater snail or mimic tryonia <i>(Tryonia imitator)</i>	--/--	Permanently submerged areas of coastal lagoons, estuaries and salt marshes, from Sonoma County to San Diego County.	Not present. Suitable habitat is not found at the site.
<b>Fish</b>			
Coho salmon – central California ESU <i>(Oncorhynchus kisutch)</i>	FE/CE	Requires beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficient dissolved oxygen.	Not present. Suitable habitat is not found at the site.
Steelhead – Central CA Coast ESU <i>(Oncorhynchus mykiss)</i>	FT/CSC	Well-oxygenated streams with riffles; loose, silt-free gravel substrate.	Not present. Suitable habitat is not found at the site.

SPECIES	STATUS <sup>2</sup> FED/STATE/CNPS <sup>3</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
<b>Amphibians</b>			
Red-bellied newt <i>(Taricha rivularis)</i>	--/CSC	Found in coastal drainages from Humboldt County south to Sonoma County and inland to Lake County. Lives in terrestrial habitats. Juveniles are generally found underground; adults are active at the surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	Not present. Suitable habitat is not present at the site.
California tiger salamander <i>(Ambystoma californiense)</i>	FE/CT, CSC	Found in annual grasslands and grassy understory of valley-foothill hardwood habitats in central and northern California. Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water source for breeding.	Not present. Suitable habitat is not found at the site.
Foothill yellow-legged frog <i>(Rana boylei)</i>	--/CSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying; larvae need at least 15 weeks to attain metamorphosis.	Not present. Suitable habitat is not found at the site.
California red-legged frog <i>(Rana draytonii)</i>	FT/CSC	Mostly found in lowlands and foothills in/near permanent sources of deep water but will disperse far during and after rain. Prefers shorelines with extensive vegetation. Requires 11-20 weeks of permanent water for larval development and requires access to aestivation habitat.	Not present. Suitable habitat is not found at the site.

SPECIES	STATUS <sup>2</sup> FED/STATE/CNPS <sup>3</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
<b>Reptiles</b>			
Western pond turtle ( <i>Emys marmorata</i> )	--/CSC	Aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs basking sites and suitable upland habitat for egg-laying (sandy banks or grassy open fields).	Not present. Suitable habitat is not found at the site.
<b>Birds</b>			
Golden Eagle ( <i>Aquila chrysaetos</i> ) [nesting and wintering]	BCC/FP, WL	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	Not present. Suitable habitat is not found at the site.
Northern harrier ( <i>Circus hudsonius</i> ) [Nesting]	-/CSC	Coastal salt marsh and freshwater marsh; nests and forages in grasslands; nests on ground in shrubby vegetation, usually at marsh edge.	Not present. Suitable nesting habitat is not found at the site. Species likely forages on or near the site, especially in winter.
White-tailed kite ( <i>Elanus caeruleus</i> ) [nesting]	-/CFP	Open grassland and agricultural areas throughout Central California.	Not present. Suitable nesting habitat is not found at the site. Species likely forages on or near the site, specially in winter.
Cooper's hawk ( <i>Accipiter cooperii</i> ) [nesting]	-/WL	Nests primarily in deciduous riparian forests; forages in open woodlands.	Not present. Suitable nesting habitat is not found at the site. Species likely forages on or near the site, especially in winter.
Sharp-shinned hawk ( <i>Accipiter striatus</i> ) [nesting]	--/WL	Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers, but not restricted to, riparian habitats. North facing slopes, with plucking perches are critical requirements. All habitats except alpine, open prairie, and bare desert used in winter.	Not present. Suitable nesting habitat is not found on site. May forage during the winter.

SPECIES	STATUS <sup>2</sup> FED/STATE/CNPS <sup>3</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
Swainson's hawk (nesting) ( <i>Buteo swainsoni</i> )	BCC/CT	Nests in trees and riparian stands; summer migrant to Central Valley. Suitable foraging areas include grasslands, pastures, alfalfa and other hay crops, and certain grain and row croplands.	Not present. Suitable nesting habitat is not found on site.
American peregrine falcon ( <i>Falco peregrinus</i> )	BCC/FP	Nests in woodland, forest and coastal habitats, on cliffs or banks, and usually near wetlands, lakes, rivers, sometimes on human-made structure. In non-breeding seasons found in riparian areas and coastal and inland wetlands.	Not present. May occur in the area but suitable nesting habitat is not found at the site.
Merlin ( <i>Falco columbarius</i> ) [wintering]	-/WL	Breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	Not present. Suitable habitat is not found at the site.
Ridgway's (California clapper) rail ( <i>Rallus obsoletus</i> )	FE/CE,FP	Found in saltwater marshes traversed by tidal sloughs in the vicinity of San Francisco Bay; associated with abundant growths of pickleweed; feeds on mollusks obtained from mud bottomed sloughs.	Not present. Suitable habitat is not present at the site.
California black rail ( <i>Laterallus jamaicensis coturniculus</i> )	BCC/CT,FP	Mainly inhabits salt-marshes bordering larger bays. Occurs in tidal salt marsh with dense growths of pickleweed; also occurs in freshwater and brackish marshes.	Not present. Suitable habitat is not present at the site.
Burrowing owl ( <i>Athene cunicularia</i> )	BCC/CSC	Found in open dry annual or perennial grasslands, deserts and scrublands characterized by low growing vegetation. This species is a subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	Not present. Suitable habitat is not found at the site.
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	BCC/CSC	Habitat includes open areas such as desert, grasslands and savannah. Nests in thickly foliated trees or tall shrubs. Forages in open habitats, which contain trees, fence posts, utility poles, and other perches.	Not present. Suitable habitat is not found at the site.

SPECIES	STATUS <sup>2</sup> FED/STATE/CNPS <sup>3</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
Western yellow-billed cuckoo ( <i>Coccyzus americanus occidentalis</i> )	FC, BCC/CE	Nests in riparian forests along the broad, lower flood-bottoms of larger river systems. Requires willows, cottonwoods with lower story of blackberry, nettles or wild grape.	Not present. Suitable habitat is not present at the site.
California horned lark ( <i>Eremophila alpestris actia</i> )	--/WL	Resident in a variety of open habitats, including grasslands, less common in mountain regions.	Not present. Suitable habitat is not found at the site.
Grasshopper sparrow ( <i>Ammodramus savannarum</i> )	BCC/CSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs.	Not present. Suitable habitat is not found at the site.
San Pablo song sparrow ( <i>Melospiza melodia samuelis</i> )	BCC/CSC	Tidal, brackish or salt marshes, San Pablo Bay.	Not present. Suitable habitat is not found at the site.
Saltmarsh common yellowthroat ( <i>Geothlypis trichas sinuosa</i> )	BCC/CSC	Requires thick continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	Not present. Suitable habitat is not present at the site.
Bank swallow ( <i>Riparia riparia</i> ) (nesting)	--/CT	A migrant found primarily in riparian and other lowland habitats in California west of the deserts. In summer, restricted to riparian areas with vertical cliffs and banks with fine-textured or sandy soil, into which it digs its nesting holes.	Not present. Suitable habitat is not present at the site.
Yellow warbler ( <i>Dendroica petechia</i> ) [nesting]	BCC/CSC	Breeds in deciduous riparian woodlands, widespread during fall migration.	Not present. Suitable nesting habitat is not found at the site. May occur as a fall migrant.
Tri-colored blackbird ( <i>Agelaius tricolor</i> ) [Nesting colony]	BCC/CT,CSC	Breeds near freshwater, usually in tall emergent vegetation. Requires open water with protected nesting substrate. Colonies prefer heavy growth of cattails and tules. Uses grasslands and agricultural lands for foraging.	Not present. Suitable habitat is not found at the site. May forage on the site in winter.

SPECIES	STATUS <sup>2</sup> FED/STATE/CNPS <sup>3</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
<b>Mammals</b>			
Salt Marsh harvest mouse ( <i>Reithrodontomys raviventris</i> )	FE/CE,FP	Inhabits saline emergent wetlands in the San Francisco Bay and its tributaries. Pickleweed is the primary habitat.	Not present. Suitable habitat is not present at the site.
American badger ( <i>Taxidea taxus</i> )	-/CSC	Drier open stages of most shrub, forest, and herbaceous habitats; needs sufficient food, friable soils and open, uncultivated ground.	Not present. Suitable habitat is not found at the site.
Pallid bat <i>Antrozous pallidus</i>	-/CSC	Roosts primarily in oak woodland and ponderosa pine habitats; forages in open areas.	Not present. Suitable habitat is not found at the site.
Townsend's big-eared bat ( <i>Corynorhinus townsendii</i> )	--/CCT,CSC	Found in desert scrub and coniferous forests. Roost in caves or abandoned mines and occasionally are found to roost in buildings.	Not present. Suitable habitat is not found at the site.

1. Source: California Natural Diversity Data Base, Natural Heritage Division, California Department of Fish and Wildlife for the Petaluma River 7.5-Minute Quadrangle Map and surrounding areas, information dated April 2022.
2. Status Codes:
  - FE Federal-listed Endangered
  - FT Federal-listed Threatened
  - FPE Federally Proposed Endangered
  - FPT Federally Proposed Threatened
  - FC Federal Candidate
  - BCC USFWS Bird Species of Conservation Concern
  - CE California State-listed Endangered
  - CCE Candidate for CA State-listed Endangered
  - CT California State-listed Threatened
  - CR California Rare
  - FP California Fully Protected
  - CSC CDFW Species of Special Concern
  - WL CDFW Watch List Species