CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT – PLANNING DIVISION
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATED NEGATIVE DECLARATION

Project Title/File Number:	NIPA PCL 50 – Roseville 80 Major Project Permit / File Number PL19-0363
Project Location:	7901 Foothills Boulevard, Roseville, Placer County, CA APNs 017-232-031, 017-232-028, 017-232-030, 017-232-029
Project Applicant:	Sheetal Bhatt, Kimley Horn; (916) 859-3609; 555 Capitol Mall, Suite 300, Sacramento, CA 95814
Property Owner:	Roseville 80 Land, LLC; Roseville 80 Bldg 2, LLC; and Southall Group Holdings, LLC
Lead Agency Contact Person:	Charity Gold, Associate Planner - City of Roseville; (916) 774-5247
Date:	August 20, 2020

Project Description: The project consists of seven industrial buildings on an approximately 80-acre site. The industrial buildings include three that are constructed or are under construction and four proposed buildings that have not yet been permitted within a master planned area. The master plan area will be constructed in phases. Site improvements include associated parking, internal drive aisles, detention basins, and landscaping. The project entitlements include a Major Project Permit Stage 1 that will include Buildings 1-7 and a Major Project Permit Stage 2 that will include Buildings 4-7.

DECLARATION

The Planning Manager has determined that the above project will not have significant effects on the environment and therefore does not require preparation of an Environmental Impact Report. The determination is based on the attached initial study and the following findings:

A. The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, reduce the number or restrict the range of rare or endangered plants or animals or eliminate important examples of the major periods of California history or prehistory.

B. The project will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.

C. The project will not have impacts, which are individually limited, but cumulatively considerable.

D. The project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

E. No substantial evidence exists that the project may have a significant effect on the environment.

F. The project incorporates all applicable mitigation measures identified in the attached initial study.

G. This Mitigated Negative Declaration reflects the independent judgment of the lead agency.

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT–PLANNING DIVISION

311 Vernon St, Roseville, CA 95678 (916) 774-5276

INITIAL STUDY & ENVIRONMENTAL CHECKLIST

Project Title/File Number:	NIPA PCL 50 – Roseville 80 Major Project Permit / File Number PL19-0363
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This initial study has been prepared to identify and assess the anticipated environmental impacts of the above described project application. The document relies on site-specific studies prepared to address in detail the effects or impacts associated with the project. Where documents were submitted by consultants working for the applicant, City staff reviewed such documents in order to determine whether, based on their own professional judgment and expertise, staff found such documents to be credible and persuasive. Staff has only relied on documents that reflect their independent judgment, and has not accepted at face value representations made by consultants for the applicant.

This document has been prepared to satisfy the California Environmental Quality Act (CEQA), (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects.

The initial study is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the lead agency is required to prepare an EIR. If the agency finds no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, a negative declaration shall be prepared. If in the course of analysis, the agency recognizes that the project may have a significant impact on the environment, but that by incorporating specific mitigation measures to which the applicant agrees, the impact will be reduced to a less than significant effect, a mitigated negative declaration shall be prepared.

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PROJECT DESCRIPTION

Project Location

Figure 1: Project Location

The project is located at 7601 Foothills Boulevard within the City's North Industrial Planning Area (NIPA) (Figure 1). The site is located adjacent to Foothills Boulevard to the west, the Southern Pacific Railroad to the feast, and light industrial uses to the north and south (FedEx and TSI Simiconductiors respectivly) as detailed in Table 1.

Background

The site has Light Industrial General Plan land use (LI) and zoning (M1) designations. On April 25, 1996, the Planning Commission approved a Major Project Permit (MPP) to allow expansion of the existing NEC semiconductor facility to the south of the project site and certified an Environmental Impact Report (EIR) for the project (NEC EIR, State Clearinghouse Number #1995112047). Construction of the expansion began, however, the expansion was not completed and the MPP expired. On April 20, 2017, the Design Committee approved a 316,100 square foot warehouse/distribution building, which is currently constructed. On March 15, 2018, the Design Committee approved a Design Review Permit for two industrial warehouse buildings totaling 238,665 square feet (Building 2 and Building 3). The architecture of Building 2 was modified through a Design Review Permit Modification that was approved on June 4, 2019, and Building 2 has since been constructed. On November 19, 2019, staff approved a modification to the architecture and site design for Building 3, and Building 3 is now under construction. Additionally, a parcel map was recorded in late 2019, which divided the site into four new lots. The boundaries of these lots have since been modified to the current configuration.

Table 1: Surrounding Land Uses

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	M1	LI	Industrial/Office
North	M1	LI	FedEx
South	M1	LI	TSI Semiconductors
East	M2 and M1	IND and LI	Southern Pacific Railroad and Industrial Boulevard
West	R3/SA-NW, M1/SA, M1/SA. and PR	HDR-13.4, LI, and PR	Foothills Boulevard

Environmental Setting

The southern portion of the project site, excluding the area containing Buildings 5 and 7 (Figure 2), has been heavily graded and is currently developed with three industrial buildings (one of which is under construction).

This portion of the site has been heavily disturbed in preparation for development of the NEC project and Buildings 1, 2, and 3. Vegetation on this portion consists of urban landscaping around the perimeter and non-native annual grasses within the interior undeveloped portions of the site. The northern portion of the site was rough graded as part of the NEC facility expansion project, but has been largely undisturbed since the early 2000s. This portion of the site has an undulating topography with a stock pile of soil in the northwestern portion of the site. An unnamed intermittent drainage enters the property from its northeastern side and traverses the site in a southwesterly direction toward a culvert under Foothills Boulevard. Four isolated wetlands are located on the northern side of the drainage feature. No native trees are located on the subject property.

Proposed Project

The proposed project includes a Major Project Permit (MPP) for review and approval of the site design and architecture of all of the existing and proposed buildings on the project site (Buildings 1-7). The total square footage of the existing and proposed buildings is approximately 1,080,454 square feet (Table 2). The purpose of the MPP process is to streamline review of large development projects that could be constructed over a period of several years. Although Buildings 1-3 are presently constructed or are under construction, and the CEQA analyses for these building have been completed, these buildings are being included in the MPP Stage 1 entitlement for consistency with the City's Zoning Ordinance, which requires a MPP for industrial developments in excess of 500,000 square feet.

The project includes three stages for development of the undeveloped portion of the MPP area (Buildings 4-7). These three stages are illustrated in Figures 3 through 5. Each of these stages illustrates phased development of the buildings within the MPP area. These buildings are presented as Phases 1 through 7 within each of the proposed stages of the MPP. The first stage includes partial construction of a parking lot with complete avoidance of the onsite wetland features. The second stage includes completion of the parking lot once all regulatory permits have been acquired for impacts to the wetland features. The third and final stage includes full buildout of the plan area with construction of a 196,900 square-foot industrial building replacing the parking lot.

Table 2: Existing and Proposed Buildings

Building Pad Number	**Building Square Footage**	**CEQA Document**
Building 1	401,175	Addendum to the NEC EIR
Building 2	89,000	Addendum to the NEC EIR
Building 3	144,760	Addendum to the NEC EIR
Building 4	34,480	NEC EIR and Current Evaluation
Building 5 (Phase 1)	107,867	Current Evaluation
Building 5 (Phase 2 and 3)	172,348	Current Evaluation
Building 6 (No building in Phase 1)	41,791	NEC EIR and Current Evaluation
Building 7 (No building in Phase 1 and 2)	196,900	Current Evaluation
Maximum Square Footage at Buildout		**1,080,454**

The NEC EIR project area included the properties that currently contain Buildings 1-3 and the area where Buildings 4 and 6 are proposed. The NEC project and EIR explicitly excluded the property containing proposed Buildings 5, and 7. Although Buildings 1-3 are included in the entitlement, they are not considered part of this project for the purposes of this analysis because construction level entitlements and corresponding CEQA analyses have already been approved for these buildings (see detail in Figure 2). The projects and their CEQA documentation are listed below and incorporated here by reference. The following ~~project description and~~ analyses focus on the portion of the project containing Buildings 4-7.

- On April 20, 2017, the Design Committee approved a Design Review Permit and Administrative Permit and considered an Addendum to the NEC EIR for Building 1 (PL17-0038).

- On March 15, 2018, the Design Committee approved a Design Review Permit, Parcel Map, and Administrative Permit and considered an Addendum to the NEC EIR for Building 2 and Building 3 (PL17-0295).

- On June 4, 2019, the Planning Manager approved a Design Review Permit Modification and Exemption pursuant to Section 15301 for Building 2 (PL19-0055).

- On November 18, 2019, the Planning Manager approved a Design Review Permit Modification and considered an Addendum to the NEC EIR for Building 3 (PL19-0220).

Figure 2: Development History

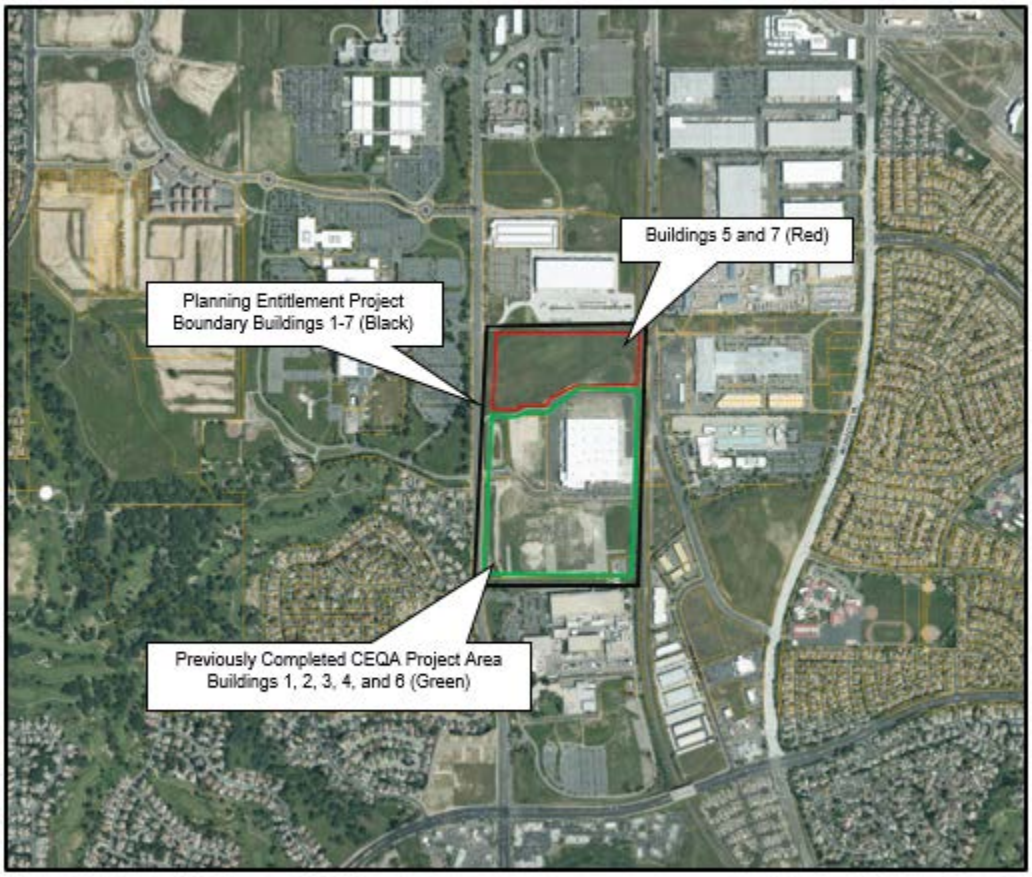


Figure 3: MPP Initial Stage

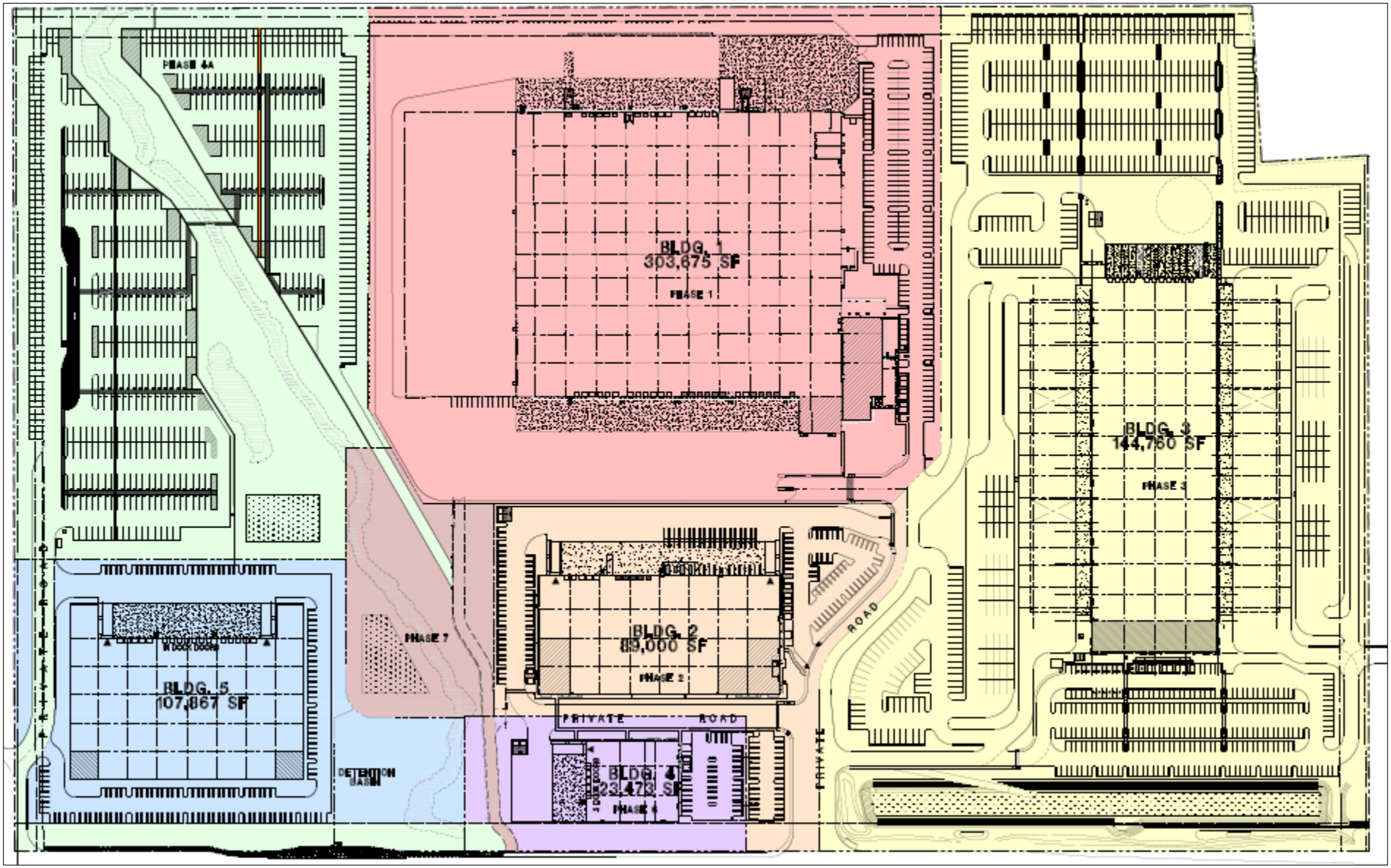


Figure 4: MPP Second Stage

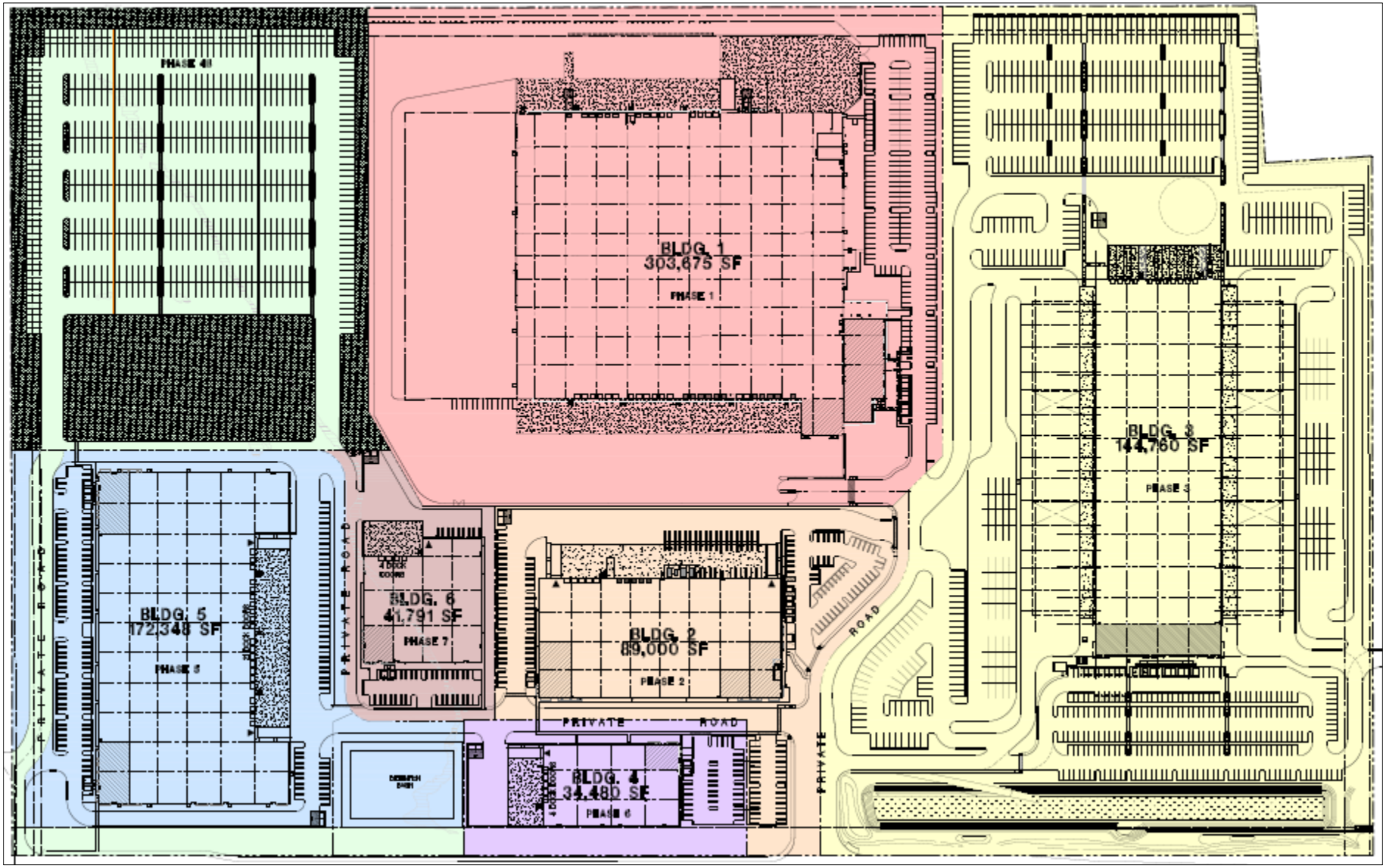
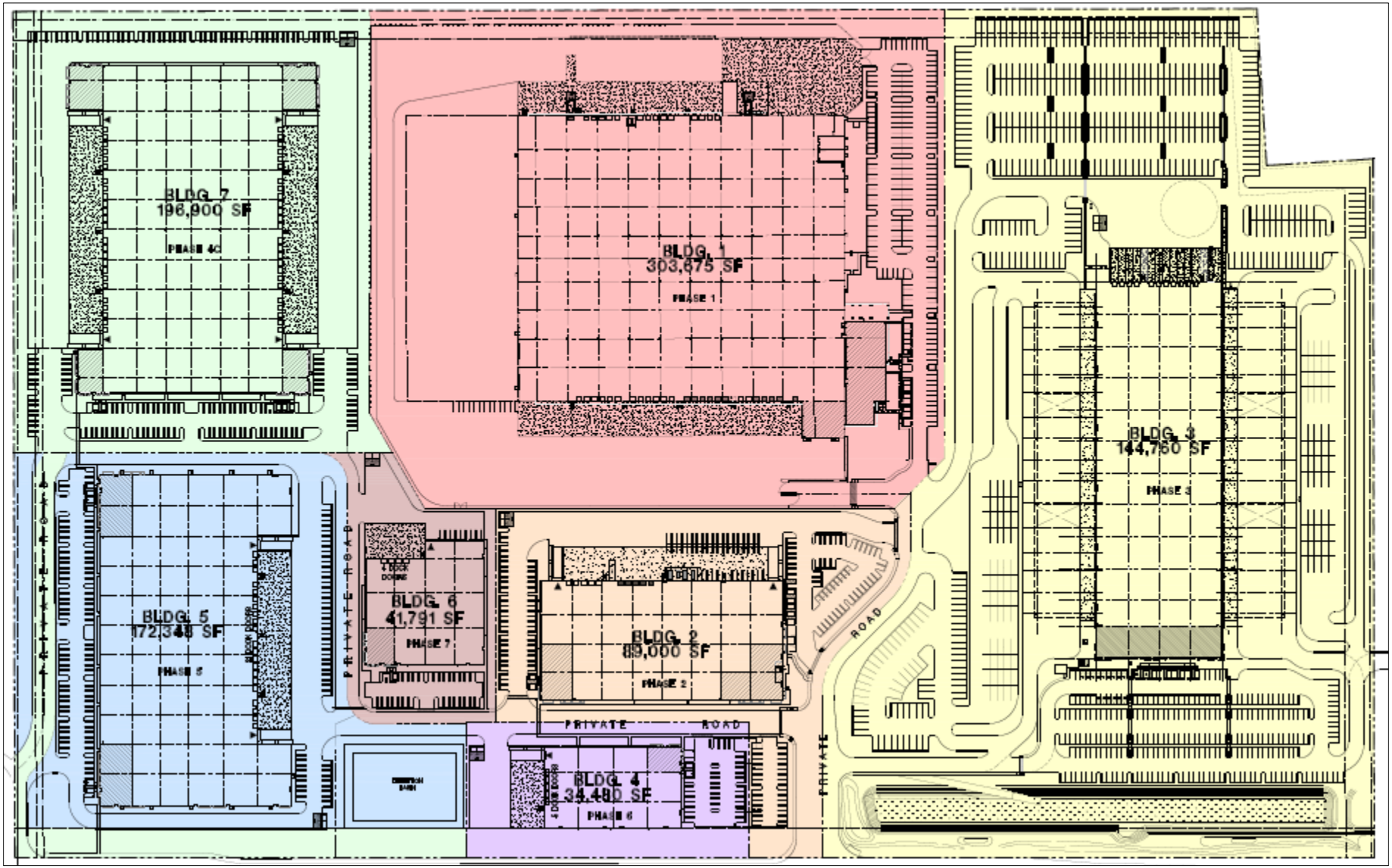


Figure 5: MPP Third Stage



CITY OF ROSEVILLE MITIGATION ORDINANCES, GUIDELINES, AND STANDARDS

For projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified, CEQA Guidelines section 15183(f) allows a lead agency to rely on previously adopted development policies or standards as mitigation for the environmental effects, when the standards have been adopted by the City, with findings based on substantial evidence, that the policies or standards will substantially mitigate environmental effects, unless substantial new information shows otherwise (CEQA Guidelines §15183(f)). The City of Roseville adopted CEQA Implementing Procedures (Implementing Procedures) which are consistent with this CEQA Guidelines section. The current version of the Implementing Procedures were adopted in April 2008, along with Findings of Fact, as Resolution 08-172. The below regulations and ordinances were found to provide uniform mitigating policies and standards, and are applicable to development projects. The City's Mitigating Policies and Standards are referenced, where applicable, in the Initial Study Checklist.

- City of Roseville 2035 General Plan (Amended August 2020)
- City of Roseville Zoning Ordinance (RMC Title 19)
- City of Roseville Design and Construction Standards (Resolution 16-75)
- Subdivision Ordinance (RMC Title 18)
- Noise Regulation (RMC Ch.9.24)
- Flood Damage Prevention Ordinance (RMC Ch.9.80)
- Drainage Fees (Dry Creek [RMC Ch.4.49] and Pleasant Grove Creek [RMC Ch.4.48])
- West Placer Stormwater Quality Design Manual (Resolution 16-152)
- Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20)
- Traffic Mitigation Fee (RMC Ch.4.44)
- Highway 65 Joint Powers Authority Improvement Fee (Resolution 2008-02)
- South Placer Regional Transportation Authority Transportation and Air Quality Mitigation Fee (Resolution 09-05)
- Tree Preservation Ordinance (RMC Ch.19.66)
- Community Design Guidelines (Resolution 95-347)
- North Industrial Design Guidelines

OTHER ENVIRONMENTAL DOCUMENTS RELIED UPON

- City of Roseville 3035 General Plan Update Environmental Impact Report
- NEC EIR
- Addendum to the NEC EIR

Pursuant to CEQA Guidelines Section 15183, any project which is consistent with the development densities established by zoning, a Community Plan, or a General Plan for which an EIR was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The City's 2035 General Plan Update EIR updated Citywide analyses of traffic, air quality, greenhouse gas emissions, water supply, water treatment, wastewater treatment, and waste disposal. The proposed project is consistent with the adopted land use designations examined within the environmental documents listed above, and thus this Initial Study focuses on effects particular to the specific project site, impacts which were not analyzed within the EIR, and impacts which may require revisiting due to substantial new information. When applicable, the topical sections within the Initial Study summarize the findings within the environmental documents listed above. The analysis, supporting technical materials, and findings of the environmental document are incorporated by reference, and are available for review at the Civic Center, 311 Vernon Street, Roseville, CA.

EXPLANATION OF INITIAL STUDY CHECKLIST

The California Environmental Quality Act (CEQA) Guidelines recommend that lead agencies use an Initial Study Checklist to determine potential impacts of the proposed project on the physical environment. The Initial Study Checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by this project. This section of the Initial Study incorporates a portion of Appendix G Environmental Checklist Form, contained in the CEQA Guidelines. Within each topical section (e.g. Air Quality) a description of the setting is provided, followed by the checklist responses, thresholds used, and finally a discussion of each checklist answer.

There are four (4) possible answers to the Environmental Impacts Checklist on the following pages. Each possible answer is explained below:

1) A "Potentially Significant Impact" is appropriate if there is enough relevant information and reasonable inferences from the information that a fair argument based on substantial evidence can be made to support a conclusion that a substantial, or potentially substantial, adverse change may occur to any of the physical conditions within the area affected by the project. When one or more "Potentially significant Impact" entries are made, an EIR is required.

2) A "Less Than Significant With Mitigation" answer is appropriate when the lead agency incorporates mitigation measures to reduce an impact from "Potentially Significant" to "Less than Significant." For example, floodwater impacts could be reduced from a potentially-significant level to a less-than-significant level by relocating a building to an area outside of the floodway. The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level. Mitigation measures are identified as MM followed by a number.

3) A "Less Than significant Impact" answer is appropriate if there is evidence that one or more environmental impacts may occur, but the impacts are determined to be less than significant, or the application of development policies and standards to the project will reduce the impact(s) to a less-than-significant level. For instance, the application of the City's Improvement Standards reduces potential erosion impacts to a less-than-significant level.

4) A "No Impact" answer is appropriate where it can be demonstrated that the impact does not have the potential to adversely affect the environment. For instance, a project in the center of an urbanized area with no agricultural lands on or adjacent to the project area clearly would not have an adverse effect on agricultural resources or operations. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources cited in the Initial Study. Where a "No Impact" answer is adequately supported by the information sources cited in the Initial Study, further narrative explanation is not required. A "No Impact" answer is explained when it is based on project-specific factors as well as generous standards.

All answers must take account of the whole action involved, including off- and on-site, indirect, direct, construction, and operation impacts, except as provided for under State CEQA Guidelines.

INITIAL STUDY CHECKLIST

I. Aesthetics

The project is located in an industrial area in the northwestern portion the City of Roseville. The site is surrounded by existing industrial uses including FedEx, McKesson, and Restaurant Depot. The Southern Pacific Railroad runs along the project's eastern boundary and Foothills Boulevard along the project's western boundary. The

majority of the area surrounding the site has been developed. No scenic vistas or scenic resources are located on or within the vicinity of the project site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				X
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	

Thresholds of Significance and Regulatory Setting:

The significance of an environmental impact cannot always be determined through the use of a specific, quantifiable threshold. CEQA Guidelines Section 15064(b) affirms this by the statement "an ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting." This is particularly true of aesthetic impacts. As an example, a proposed parking lot in a dense urban center would have markedly different visual effects than a parking lot in an open space area. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–d of the checklist below. The Findings of the Implementing Procedures indicate that compliance with the Zoning Ordinance (e.g. building height, setbacks, etc), Subdivision Ordinance (RMC Ch. 18), Community Design Guidelines (Resolution 95-347), and applicable Specific Plan Policies and/or Specific Plan Design Guidelines will prevent significant impacts in urban settings as it relates to items a, b, and c, below.

Discussion of Checklist Answers:

a–b) There are no designated or eligible scenic vistas or scenic highways within or adjacent to the City of Roseville.

c) The project site is in an urban setting, and as a result lacks any prominent or high-quality natural features which could be negatively impacted by development. The City of Roseville has adopted Community Design Guidelines (CDG) for the purpose of creating building and community designs which are a visual asset to the community. The CDG includes guidelines for building design, site design and landscape design, which will result in a project that enhances the existing urban visual environment. Accordingly, the aesthetic impacts of the project are less than significant.

d) The project involves nighttime lighting to provide for the security and safety of project users. However, the project is already located within an urbanized setting with many existing lighting sources. Lighting is conditioned to comply with City standards (i.e. CDG) to limit the height of light standards and to require cut-off lenses and glare shields to minimize light and glare impacts. The project will not create a new source of substantial light. None of the project elements are highly reflective, and thus the project will not contribute to an increased source of glare.

II. Agricultural & Forestry Resources

The State Department of Conservation oversees the Farmland Mapping and Monitoring Program, which was established to document the location, quality, and quantity of agricultural lands, and the conversion of those lands over time. The primary land use classifications on the maps generated through this program are: Urban and Built Up Land, Grazing Land, Farmland of Local Importance, Unique Farmland, Farmland of Statewide Importance, and Prime Farmland. According to the current California Department of Conservation Placer County Important Farmland Map (2012), the majority of the City of Roseville is designated as Urban and Built Up Land and most of the open space areas of the City are designated as Grazing Land. There are a few areas designated as Farmland of Local Importance and two small areas designated as Unique Farmland located on the western side of the City along Baseline Road. The current Williamson Act Contract map (2013/2014) produced by the Department of Conservation shows that there are no Williamson Act contracts within the City, and only one (on PFE Road) that is adjacent to the City. None of the land within the City is considered forest land by the Board of Forestry and Fire Protection.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Thresholds of Significance and Regulatory Setting:

Unique Farmland, Farmland of Statewide Importance, and Prime Farmland are called out as protected farmland categories within CEQA Guidelines Appendix G. Neither the City nor the State has adopted quantified significance thresholds related to impacts to protected farmland categories or to agricultural and forestry resources. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–e of the checklist above.

Discussion of Checklist Answers:

a–e) The project site is not used for agricultural purposes, does not include agricultural zoning, is not within or adjacent to one of the areas of the City designated as a protected farmland category on the Placer County Important Farmland map, is not within or adjacent to land within a Williamson Act Contract, and is not considered forest land. Given the foregoing, the proposed project will have no impact on agricultural resources.

III. Air Quality

The City of Roseville, along with the south Placer County area, is located in the Sacramento Valley Air Basin (SVAB). The SVAB is within the Sacramento Federal Ozone Non-Attainment Area. Under the Clean Air Act, Placer County has been designated a "serious non-attainment" area for the federal 8-hour ozone standard, “non-attainment” for the state ozone standard, and a "non-attainment" area for the federal and state PM_{10} standard (particulate matter less than 10 microns in diameter). Within Placer County, the Placer County Air Pollution Control District (PCAPCD) is responsible for ensuring that emission standards are not violated. Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Thresholds of Significance and Regulatory Setting:

In responding to checklist items a–c, project-related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation. To assist in making this determination, the PCAPCD adopted thresholds of significance, which were developed by considering both the health-based ambient air quality standards and the attainment strategies outlined in the State Implementation Plan. The PCAPCD-recommended significance threshold for reactive organic gases (ROG) and nitrogen oxides (NO_x) is 82 pounds daily during construction and 55 pounds daily during operation, and for particulate matter (PM) is 82 pounds per day during both construction and operation. For all other constituents, significance is determined based on the concentration-based limits in the Federal and State Ambient Air Quality Standards. Toxic Air Contaminants (TAC) are also of public health concern, but no thresholds or standards are provided because they are considered to have no safe level of exposure. Analysis of TAC is based on the *Air Quality and Land Use Handbook – A Community Health Perspective (*April 2005, California Air Resources Board), which lists TAC sources and recommended buffer distances from sensitive uses. For checklist item c, the PCAPCD's *CEQA Air Quality Handbook* (*Handbook*) recommends that the same thresholds used for the project analysis be used for the cumulative impact analysis.

With regard to checklist item d, there are no quantified significance thresholds for exposure to objectionable odors or other emissions. Significance is determined after taking into account multiple factors, including screening distances from odor sources (as found in the PCAPCD CEQA Handbook), the direction and frequency of prevailing winds, the time of day when emissions are detectable/present, and the nature and intensity of the emission source.

a–c) Analyses are not included for sulfur dioxide, lead, and other constituents because there are no mass emission thresholds; these are concentration-based limits in the Federal and State Ambient Air Quality Standards which require substantial, point-source emissions (e.g. refineries, concrete plants, etc) before exceedance will occur, and the SVAB is in attainment for these constituents. Likewise, carbon monoxide is not analyzed because the SVAB is in attainment for this constituent, and it requires high localized concentrations (called carbon monoxide "hot spots") before the ambient air quality standard would be exceeded. "Hot spots"

are typically associated with heavy traffic congestion occurring at high-volume roadway intersections. The Amoruso Ranch EIR analysis of Citywide traffic indicated that 198 out of 226 signalized intersections would operate at level of service C or better—that is, they will not experience heavy traffic congestion. It further indicated that analyses of existing CO concentrations at the most congested intersections in Roseville show that CO levels are well below federal and state ambient air quality standards. The discussions below focus on emissions of ROG, NO_x, or PM. A project-level analysis has been prepared to determine whether the project will, on a singular level, exceed the established thresholds.

CalEEMod was used to determine the project's emission contributions at buildout of Buildings 4, 5, 6, and 7 assuming an estimated full buildout of 450,000 square feet. The results are summarized in Table 3, below. As modeled, the project is consistent with PCAPD operational standards and construction standards for NO_x and PM_{10}, and operational standards for ROG. The project exceeds construction emission standards for ROG by 42.97 lbs/day.

Table 3
Total Project Emissions

Pollutant	Projected Operational Emissions (lbs/day)	Projected Construction Emissions (lbs/day)	PCAPCD Significance Threshold (lbs/day) Operational/Construction	Threshold Exceeded Yes/No
ROG	17.56	124.97	55/82	Construction Threshold Exceeded
NO_X	38.87	46.44	55/82	No
PM_{10}	19.93	20.26	82/82	No
Source: CalEEMod, June 2020 (see Attachment 1).				

Construction Emissions

Construction emissions from buildout of the City's General Plan were analyzed as part of the City's General Plan Update EIR. Because the General Plan is a long-term document with construction-related emissions generated based on market conditions throughout the General Plan's buildout horizon, development of 10 percent of the planning area per year was assumed to estimate the construction emissions that would occur as a result of buildout of the General Plan Update.

The GPU EIR determined that construction activities would generate emissions of criteria pollutants, precursors, and TACs (i.e., DPM) from a variety of sources, including off-road construction equipment, on-road vehicles, earthmoving activities, off-gas from paving activities and application of architectural coatings that would exceed PCAPCD significance thresholds. Therefore, impacts to Air Quality from construction emissions were Significant and Unavoidable. Although impacts from construction emissions were considered significant, existing laws and regulations, including PCAPCD rules and regulations, combined with General Plan policies, would reduce these impacts, though not to less-than-significant levels.

The project is consistent with the assumptions of the GPU EIR and will not in itself result in significant impacts beyond those identified in the GPU EIR. Furthermore, the project is subject to PCAPCD Rule 228, which requires dust control measures such as PCAPCD's standard Dust Control Requirements to minimize fugitive dust emissions, PCAPCD Rules 202 and 205 to reduce exhaust-related emissions from construction equipment, and PCAPCD Rules 217 and 218 to reduce VOC emissions associated with paving and architectural coating activities. These requirements will reduce the project's construction related emissions. Although the project will result in short-term construction emissions in excess of PCAPD standards, the project is consistent with the assumptions in the GPU EIR and no additional impacts that were not previously disclosed are anticipated.

Operational Emissions

Operational area, energy, and mobile emissions generated by buildout of the City's General Plan were estimated as part of the Air Quality analysis in the GPU EIR using the CalEEMod model and assuming full buildout of land uses in the General Plan with a cumulative horizon year of 2035. For mobile emissions sources, annual vehicle miles traveled (VMT) data from the traffic analysis prepared for the General Plan Update were used. The GPU EIR determined that full buildout of the proposed General Plan Update would generate long-term operational emissions of ROG, NO_X and PM_{10} that would substantially exceed PCAPCD recommended thresholds of significance and that impacts related to operational emissions were Significant and Unavoidable.

The GPU EIR concluded that existing PCAPCD rules and regulations related to emission sources, including vehicle emissions, combined with General Plan policies that promote energy efficient building design and transportation systems as well as a reduction of VMT would reduce long-term operational emissions, but not to a less-than-significant level and impacts were considered significant. Mitigation requiring participation in PCAPCD's Off-site Mitigation Program for projects with operational emissions in excess of the PCAPD thresholds was adopted. However, due to uncertainty in the feasibility of these measures impacts were determined to be significant and unavoidable.

The project is consistent with the assumptions of the GPU EIR and will not in itself result in significant impacts beyond those identified in the GPU EIR. The proposed project would not exceed the applicable thresholds of significance for air pollutant emissions during operation. Therefore, the project would not conflict with or obstruct implementation of the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (which is the SIP) or contribute substantially to the PCAPCD's nonattainment status for ozone. In addition, because the proposed project would not produce substantial emissions of criteria air pollutants, CO, or TACs, adjacent residents would not be exposed to significant levels of pollutant concentrations during construction or operation. Therefore, implementation of the proposed project would result in less than significant impacts, and consistent with the analysis methodology outlined in the Significance Thresholds and Regulatory Setting section, cumulative impacts are less than significant.

With regard to TAC, there are hundreds of constituents which are considered toxic, but they are typically generated by stationary sources like gas stations, facilities using solvents, and heavy industrial operations. The proposed project is not a TAC-generating use, nor is it within the specified buffer area of a TAC-generating use, as established in the *Air Quality and Land Use Handbook – A Community Health Perspective*. Impacts due to substantial pollutant concentrations are less than significant.

d) Diesel fumes from construction equipment and delivery trucks are often found to be objectionable; however, construction is temporary and diesel emissions are minimal and regulated. Typical urban projects such as residences and retail businesses generally do not result in substantial objectionable odors when operated in compliance with City Ordinances (e.g. proper trash disposal and storage). The Project is a typical urban development that lacks any characteristics that would cause the generation of substantial unpleasant odors. Thus, construction and operation of the proposed project would not result in the creation of objectionable odors affecting a substantial number of people. A review of the project surroundings indicates that there are no substantial odor-generating uses near the project site; the project location meets the recommended screening distances from odor-generators provided by the PCAPCD. Impacts related to odors are less than significant.

IV. Biological Resources

The subject property was rough graded as part of the NEC facility expansion project, but has been largely undisturbed since the early 2000s. The site has an undulating topography with a stock pile of soil in the northwestern portion of the site. An unnamed intermittent drainage enters the property from the northeastern side and traverses the site in a southwesterly direction toward a culvert under Foothills Boulevard. Four isolated

wetlands are located on the northern side of the drainage feature. No native trees are located on the subject property.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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 Fish and Game or U.S. Fish and Wildlife Service?		X		
b) 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 U.S. Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
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?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?				X

Thresholds of Significance and Regulatory Setting:

There is no ironclad definition of significance as it relates to biological resources. Thus, the significance of impacts to biological resources is defined by the use of expert judgment supported by facts, and relies on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to biological resources (as cited and described in the Discussion of Checklist Answers section). Thresholds for assessing the significance of environmental impacts are based on the CEQA Guidelines checklist items a–f, above. Consistent with CEQA Guidelines Section 15065, a project may have a significant effect on the environment if:

> The project has the potential to substantially degrade the quality of the environment*;* substantially reduce the habitat of a fish or wildlife species*;* cause a fish or wildlife population to drop below self-sustaining levels*;* threaten to eliminate a plant or animal community; [or] substantially reduce the number or restrict the range of an endangered, rare or threatened species . . .

Various agencies regulate impacts to the habitats and animals addressed by the CEQA Guidelines checklist. These include the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration–Fisheries, United States Army Corps of Engineers, Central Valley Regional Water Quality Control Board, and California Department of Fish and Wildlife. The primary regulations affecting biological resources are described in the sections below.

Checklist item a addresses impacts to special status species. A "special status" species is one which has been identified as having relative scarcity and/or declining populations. Special status species include those formally listed as threatened or endangered, those proposed for formal listing, candidates for federal listing, and those classified as species of special concern. Also included are those species considered to be "fully protected" by the California Department of Fish and Wildlife (California Fish and Wildlife), those granted "special animal" status for tracking and monitoring purposes, and those plant species considered to be rare, threatened, or endangered in California by the California Native Plant Society (CNPS). The primary regulatory protections for special status species are within the Federal Endangered Species Act, California Endangered Species Act, California Fish and Game Code, and the Federal Migratory Bird Treaty Act.

Checklist item b addresses all "sensitive natural communities" and riparian (creekside) habitat that may be affected by local, state, or federal regulations/policies while checklist item c focuses specifically on one type of such a community: protected wetlands. Focusing first on wetlands, the 1987 Army Corps Wetlands Delineation Manual is used to determine whether an area meets the technical criteria for a wetland. A delineation verification by the Army Corps verifies the size and condition of the wetlands and other waters in question, and determines

the extent of government jurisdiction as it relates to Section 404 of the Federal Clean Water Act and Section 401 of the State Clean Water Act.

The Clean Water Act protects all "navigable waters", which are defined as traditional navigable waters that are or were used for commerce, or may be used for interstate commerce; tributaries of covered waters; and wetlands adjacent to covered waters, including tributaries. Non-navigable waters are called isolated wetlands, and are not subject to either the Federal or State Clean Water Act. Thus, isolated wetlands are not subject to federal wetland protection regulations. However, in addition to the Clean Water Act, the State also has jurisdiction over impacts to surface waters through the Porter-Cologne Water Quality Control Act (Porter-Cologne), which does not require that waters be "navigable". For this reason, isolated wetlands are regulated by the State of California pursuant to Porter-Cologne. The City of Roseville General Plan also provides protection for wetlands, including isolated wetlands, pursuant to the General Plan Open Space and Conservation Element. Federal, State and City regulations/policies all seek to achieve no net loss of wetland acreage, values, or function.

Aside from wetlands, checklist item b also addresses other "sensitive natural communities" and riparian habitat, which includes any habitats protected by local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The City of Roseville General Plan Open Space and Conservation Element includes policies for the protection of riparian areas and floodplain areas; these are Vegetation and Wildlife section Policies 2 and 3. Policy 4 also directs preservation of additional area around stream corridors and floodplain if there is sensitive woodland, grassland, or other habitat which could be made part of a contiguous open space area. Other than wetlands, which were already discussed, US Fish and Wildlife and California Department of Fish and Wildlife habitat protections generally result from species protections, and are thus addressed via checklist item a.

For checklist item d, there are no regulations specific to the protection of migratory corridors. This item is addressed by an analysis of the habitats present in the vicinity and analyzing the probable effects on access to those habitats which will result from a project.

The City of Roseville Tree Preservation ordinance (RMC Ch.19.66) requires protection of native oak trees, and compensation for oak tree removal. The Findings of the Implementing Procedures indicate that compliance with the City of Roseville Tree Preservation ordinance (RMC Ch.19.66) will prevent significant impacts related to loss of native oak trees, referenced by item e, above.

Regarding checklist item f, there are no adopted Habitat Conservation Plans within the City of Roseville.

Discussion of Checklist Answers:

a & b) A Biological Resources Assessment was prepared for the project by Barnett Environmental (Attachment 2). The report included an evaluation of the Special Status Species with the potential to occur on the project site and determined that there are five special status plant species and nine special status animal species with the potential to occur on the site. Onsite grasslands and wetlands provide potential habitat for big-scale balsmroot, dwarf downingia, red bluff dwarf rush, legenera, vernal pool fairy shrimp, conservancy fairy shrimp, vernal pool tadpole shrimp, western spadefoot toad, western burrowing owl, Swainson's hawk, and white-tailed kite. The site does not contain habitat for hispid salty bird's-beak, valley elderberry longhorn beetle, tricolored blackbird, and western burrowing owl. The species and onsite habitat are described in Table 4 and potential impacts to these species are discussed below.

Table 4: Special Status Species Summary

Special-Status Species	Regulatory Status	Habitat Potential
Big-scale balsmroot *Balsmorhiza macrolepis var. macrolepis*	1B	The grassland on the site provide suitable habitat for this species, though none were observed during field surveys. There is one CNDDB occurrence (1958) along the railroad tracks east of the project site.
Hispid salty bird's-beak *Chloropyron molle ssp. Hispidum*	1B	The site lacks suitable habitat for this species and none were observed during field surveys. There is one CNDDB occurrence (1997) within three miles of the Project Site.
Dwarf downingia *Downingia Pusila*	CNPS 2B	The grassland and wetlands on the site provide suitable habitat for this species, though none were observed during field surveys. There is one CNDDB (1985) occurrence within one mile of the Project Site.
Red bluff dwarf rush *Juncus leiospermus var. leiospermus*	CNPS 1B	The grasslands and wetlands on the site provide suitable habitat for this species, though none were observed during field surveys. There is one CNDDB (1997) occurrence within one miles of the Project Site.
Legenera *Legenere limosa*	CNPS 1B	The grasslands and wetlands on the site provide suitable habitat for this species, though none were observed during field surveys. There is one CNDDB (1997) occurrence within two miles of the Project Site.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	Federal Threatened	The site lacks suitable habitat for this species and no elderberry shrubs were observed during field surveys.
Vernal pool fairy shrimp *Branchinecta lynchi*	Federal Endangered	The wetlands on the site provide suitable habitat for this species, though none were found during the 2016/2017 wet-season field sampling. There is one CNDDB (1995) occurrence in the northwest portion of the study area.
Conservancy fairy shrimp *Branchinecta conservatio*	Federal Endangered	The wetlands on the site provide suitable habitat for this species, though none were found during the 2016/2017 wet-season field sampling. There are no recorded CNDDB in the vicinity of the project site.
Vernal pool tadpole shrimp *Lepidurus packardi*	Federal Endangered	The wetlands on the site provide suitable habitat for this species, though none were found during the 2016/2017 wet-season field sampling and the onsite wetlands are not deep. There is one CNDDB (1995) occurrence within one mile of the project site.
Western spadefoot toad *Spea hammondii*	California Species of Concern	The grasslands on the site provide suitable habitat for this species, though none were observed during the species' breeding season field survey. There is one CNDDB occurrence (1991) within two miles of the Project Site.
Tricolored blackbird *Agelaius tricolor*	California Endangered	The project site lacks suitable nesting habitat and none were observed during field surveys. There are no CNDDB occurrences within the project vicinity.
Western burrowing owl *Athene cunicularia*	California Species of Concern	The project site lacks suitable nesting habitat and none were observed during field surveys. There are no CNDDB occurrences within the project vicinity.

Special-Status Species	Regulatory Status	Habitat Potential
Swainson's hawk *Buteo swainsoni*	California Threatened	The grasslands on the site provide suitable foraging habitat for this species, but there are no suitable nesting trees on the site. No Swainson's hawks were observed during field surveys. There are two recorded CNDDB occurrences within two miles of the project site.
White-tailed kite *Elanus leucurus*	California Fully Protected	The grasslands on the site provide suitable foraging habitat for this species, but there are no suitable nesting trees on the site. This species was not observed during field surveys. There is one recorded CNDDB occurrence within one mile of the project site.

The first stage of the MPP includes partial construction of the parking lot in the north eastern portion of the plan area. This stage includes avoidance of all of the wetland features on the site (Figure 6). Avoidance measures have been included in order to ensure that these wetland features are not degraded during construction activities. These measures are included as Mitigation Measure BIO 1, described in "item c" below. While the wetland features will be avoided during this phase, the grasslands on the site will be highly disturbed. Pre-construction surveys for species that are associated with grassland habitats (western spadefoot toad, legenera, red bluff dwarf rush, dwarf downingia, and big-scale balsmroot) are required prior to approval of grading or improvement plans for this stage. Mitigation Measure BIO 2 is included in order to ensure that special status plant species are not affected during ground disturbing activities associated with development consistent with the first stage of the MPP. Additionally, construction activities have the potential to disrupt nesting on and off site nesting birds. A preconstruction nesting survey is required within 15 day of ground disturbing activities (Mitigation Measure BIO 3). Compliance with these measures will ensure that impacts to special status species are less than significant.

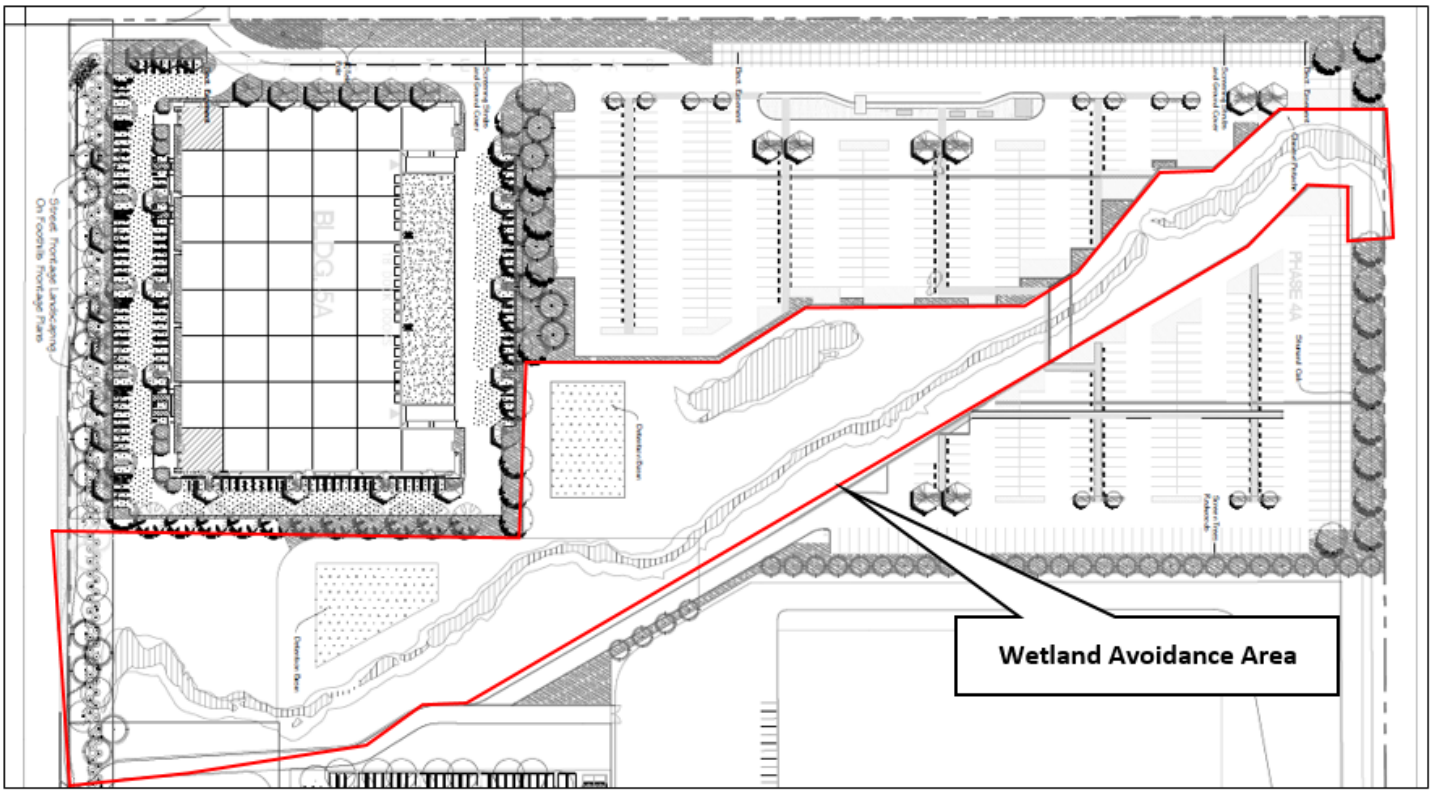
The second stage of the MPP includes buildout of the parking lot as well as the remaining building pads. This stage will result in the loss of 0.39 acres of wetland habitat (discussed in "item c" below). Protocol level surveys for listed invertebrate species are required prior to direct impacts to these wetland features. Mitigation Measure BIO 4 is included to ensure that no listed invertebrate species are impacted. Additionally, documentation of compliance with Mitigation Measures BIO 1 through BIO 3 is required for this stage of the MPP prior to grading plan or improvement plan approval.

c) A wetland delineation was prepared for the project by Barnett Environmental (Attachment 2). The delineation documented an intermittent tributary of Pleasant Grove Creek that traverses the property in a southwesterly direction, an upland swale, and several shallow depressions. These features are shown in Figure 7 and detailed in Table 5.

Table 5: Onsite Wetland Features

Wetland Feature	Area (acres)
Wetland Swale	0.28
Seasonal Wetland	0.11
Total	**0.39**

Figure 6: Proposed Wetland Avoidance

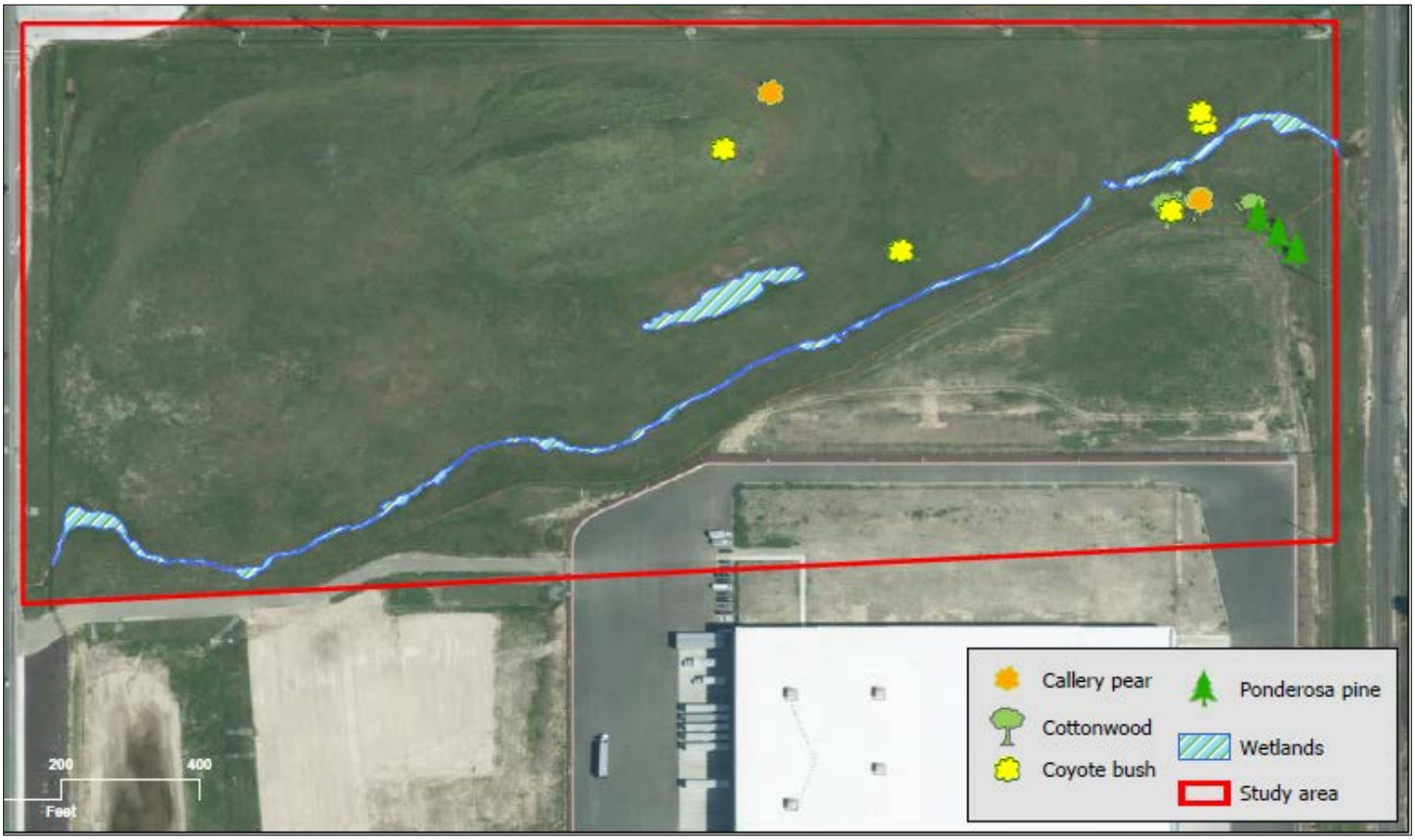


In the first stage of the MPP the parking lot on will be partially constructed and all onsite wetland features will be avoided. In order to ensure that these features are not impacted during construction best management practices will be implemented as described in Mitigation Measure BIO 1. This mitigation measure includes construction and grading setbacks as well as monitoring by a qualified biologist. The requirements of Mitigation Measure BIO 1 will ensure that there are no direct impacts to any onsite wetland features.

In the second stage of the MPP the parking lot will be completed and all onsite wetland features will be filled resulting in the loss of 0.39 acres of direct impact to wetland features. Pursuant to Section 404 of the United States Clean Water Act the excavation or placement of fill within jurisdictional wetlands is prohibited except by permit from the United States Army Corps of Engineers. The Section 404 permit process includes provisions that require mitigation to compensate for the loss of jurisdictional waters. Mitigation Measure BIO 4 requires compliance with the Clean Water Act before grading or improvement plan approval. Implementation of Mitigation Measures BIO 1 and BIO 4 will ensure that impacts are less than significant.

d) The City includes an interconnected network of open space corridors and preserves located throughout the City, to ensure that the movement of wildlife is not substantially impeded as the City develops. The development of the project site will not negatively impact these existing and planned open space corridors, nor is the project site located in an area that has been designated by the City, United States Fish and Wildlife, or California Department of Fish and Wildlife as vital or important for the movement of wildlife or the use of native wildlife nursery sites.

Figure 7: Onsite Wetlands



e) There are no protected trees on the site and the project will not conflict with City policies protecting biological resources.

f) There are no Habitat Conservation Plans; Natural Community Conservation Plans; or other approved local, regional, or state habitat conservation plans that apply to the project site.

Mitigation Measure BIO-1 Wetland Avoidance Measures: In order to avoid direct impacts to the seasonal wetland and wetland swale these features shall be completely avoided and the measures below shall be implemented and included on grading and improvement plans. No grading or earth moving activities shall occur within the setbacks identified below until all regulatory permits have been acquired as detailed in Mitigation Measure BIO 5.

- Setbacks of at least 10 feet from the wetlands will be set to demarcate where no development will occur.
- No grading, site construction, or other disturbance within 10 feet of any aquatic feature will occur at any time. Disturbance within, but more than 10 feet from, the above-mentioned setbacks will not occur until silt fencing, fiber rolls, or other similar BMP is installed at least 10 feet away and along the perimeter of the encroached feature.
- Graded areas will be covered with straw, mats, natural wood chips with no artificial dyes or preservatives, or other erosion control measure within 72 hours.
- No nutrients, pesticides, fuel, or other potential pollutants will be used within 50 feet of any aquatic resource.
- No machinery will operate closer than 15 feet from an aquatic resource. Required grading between 10 and 15 feet from the resource will be conducted using only hand tools.

- Machinery operating between 15 and 25 feet from an intermittent drainage, or between 25 and 50 feet from a perennial drainage, will be checked daily for fuel or oil discharge and moved outside these setbacks if discharge is found.
- No grading will occur within aquatic resources setbacks for after 14 days following a storm event or 14 days before the next anticipated storm event.
- During construction, the construction crew shall conduct daily clean-ups efforts to rid the area of trash and debris.
- A qualified biologist will monitor all construction to ensure that no resource violations related to the U.S. Clean Water Act (CWA), the California Porter Cologne Act (PCA), or California Fish and Game Code (FGC) occur.

Mitigation Measure BIO-2 Pre-Construction Survey for Special Status Plant Species: Prior to grading or improvement plan approval a qualified botanist shall conduct a botanical survey for Special Status Plant Species within habitats on the site that may include special status plant species with the potential to occur on the site.

It should be noted that weather conditions during any given survey year may require surveys to be conducted earlier or later in the typical blooming period in order to conduct the survey during the appropriate weather conditions for the survey year. This timing may result in the need to conduct more than one round of plant surveys to adequately survey for all potentially occurring special-status plant species. The results of these surveys should be documented in a letter report to the City of Roseville.

If no special-status plants are observed during the recommended botanical surveys, no additional measures are recommended. If any of the non-listed special-status plants are identified within areas of potential construction disturbance, the plants and/or the seedbank should be transplanted to suitable habitat near the project site since the entire site is slated for development. A qualified biologist should prepare an avoidance and mitigation plan detailing protection and avoidance measures, transplanting procedures, success criteria, and long-term monitoring protocols. In addition, a pre-construction worker awareness training should be conducted alerting workers to the presence of and protections for special-status plants in the vicinity of the work area.

If any State-listed plants occur within the project footprint, an Incidental Take Permit (ITP) would be required from the CDFW if total avoidance is not achievable.

Mitigation Measure BIO-3 Pre-construction Nesting Survey: Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code, have the potential to nest within the trees on and adjacent to the site. Ground-disturbing activities and/or vegetation clearing operations, including pruning or removal of trees and shrubs, shall be completed between September 1 to February 14, if feasible. If ground-disturbing activities and/or vegetation removal begins during the nesting season (February 15 to August 31), the developer shall have a qualified biologist conduct a pre-construction survey for active nests within 300 feet of the Project Site. The pre-construction survey will be conducted within 14 days prior to commencement of ground-disturbing activities and/or vegetation removal. The biologist shall provide a brief written report (including the date, time of survey, survey method, name of surveryor, and survey results) to City Planning prior to any ground-disturbing activity or vegetation removal. If the pre-construction survey shows that there is no evidence of active nests, no additional measures are required. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional pre-construction survey shall be required.

If any active nests are located within the vicinity of the proposed project the qualified biologist shall delineate an appropriate buffer zone, subject to approval of City Planning and in consultation with any other appropriate agencies, with construction tape or pin flags and maintain the buffer zone until the end of the breeding season

or the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and 250 feet for raptor nests. If active nests are found onsite, a qualified biologist shall monitor nests weekly during construction to ensure activities are not causing nesting disturbance.

Mitigation Measure BIO-4 No Net Loss of Wetlands: Prior to grading or improvement plan approval for the second stage of the MPP, which includes completion of the parking lot resulting in the loss of wetland habitat, the applicant shall obtain all applicable regulatory permits from the U.S. Army Corps of Engineers and the California Regional Water Quality Control Board.

The CWA Section 404 permit process (including Section 7 Consultation under Federal Endangered Species Act [FESA]) is the standard method for developing mitigation for projects that affect wetlands and vernal pool species such as special-status plants, vernal pool crustaceans, and Western spadefoot. Through this process, project Applicants shall be required to obtain the necessary permits and approvals to implement their Proposed Project while remaining in compliance with CWA and FESA. If a 404 permit is not obtained, the City shall not issue a grading permit for the Proposed Project. The obligation to obtain the 404 permit shall ensure no net loss to federally protected wetlands. After obtaining such a permit, however, the Applicant shall demonstrate to the City's Planning Director that they have also achieved no net loss of wetlands.

V. Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller cultural resources, such as midden deposits and bedrock mortars, have also been recorded in the City. The gold rush which began in 1848 marked another settlement period, and evidence of Roseville's ranching and mining past are still found today. Historic features include rock walls, ditches, low terraces, and other remnants of settlement and activity. A majority of documented sites within the City are located in areas designated for open space uses.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of an historic resource pursuant to in Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?			X	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts to cultural resources is based directly on the CEQA Guidelines checklist items a–e listed above. The Archaeological, Historic, and Cultural Resources section of the City of Roseville General Plan also directs the proper evaluation of and, when feasible, protection of significant resources (Policies 1 and 2). There are also various federal and State regulations regarding the treatment and protection of cultural resources, including the National Historic Preservation Act and the Antiquities Act (which regulate items of significance in history), Section 7050.5 of the California Health and Safety Code, Section 5097.9 of the California Public Resources Code (which regulates the treatment of human remains) and Section 21073 et seq. of the California Public Resources Code (regarding Tribal Cultural Resources). The CEQA Guidelines also contains specific sections, other than the checklist items, related to the treatment of effects on historic resources.
Pursuant to the CEQA Guidelines, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2 (a), (b), and (c)). A *historical resource* is a resource listed, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR) (Section 21084.1); a resource included in a local register of historical resources (Section 15064.5(a)(2)); or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5 (a)(3)). Public Resources Code Section 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR.

Discussion of Checklist Answers:

a–c) A cultural resources evaluation prepared for the site by Peak & Associates, Inc. (Determination of Eligibility and Effect for the Foothills Boulevard Mass Grading Project, January 29, 2020). The report documented the findings of the pedestrian survey, record search, and sacred lands search that was done for the site. The report states that no extant historic, archaeological, paleontological, nor human remains were identified on the site; however, standard mitigation measures were recommended to ensure cultural resources are not impacted should they be uncovered during ground disturbing activities. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. This measure will ensure that cultural resources are impacted during construction. With mitigation, impacts to cultural resources are less than significant. Because this measure was also recommended by the UAIC and the Shingle Springs Band of Miwok Indians (see the Tribal Cultural Resources discussion in this document) the measure that was recommended by the UAIC is included here.

Mitigation Measure CUL-1 Inadvertent Discoveries: The following measure is intended to address inadvertent discoveries of potential tribal cultural resources (TCR's), archaeological, or cultural resources during a project's ground disturbing activities.

> If any TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. The appropriate tribal representatives from culturally affiliated tribes shall be immediately notified.
>
> Work at the discovery location cannot resume until it is determined, in consultation with culturally affiliated tribes, that the find is not a TCR, or that the find is a TCR and all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, has been satisfied. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project redesign.
>
> The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary.

VI. Energy

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy inefficiency?			X	

Thresholds of Significance and Regulatory Setting:

Established in 2002, California's Renewable Portfolio Standard (RPS) currently requires that 33 percent of electricity retail sales by served by renewable energy resources by 2020, and 50 percent by 2030. The City published a Renewables Portfolio Standard Procurement Plan in June 2018, and continues to comply with the RPS reporting and requirements and standards. There are no numeric significance thresholds to define "wasteful, inefficient, or unnecessary" energy consumption, and therefore significance is based on CEQA Guidelines checklist items a and b, above, and by the use of expert judgment supported by facts, relying on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to energy. The analysis considers compliance with regulations and standards, project design as it relates to energy use (including transportation energy), whether the project will result in a substantial unplanned demand on the City's energy resources, and whether the project will impede the ability of the City to meet the RPS standards.

Discussion of Checklist Answers:

The project would consume energy both during project construction and during project operation. During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. However, the energy consumed during construction would be temporary, and would not represent a significant demand on available resources. There are no unusual project characteristics that would necessitate the use of construction equipment or methods that would be less energy-efficient or which would be wasteful.

The completed project would consume energy related to building operation, exterior lighting, landscape irrigation and maintenance, and vehicle trips to and from the use. In accordance with California Energy Code Title 24, the project would be required to meet the Building Energy Efficiency Standards. This includes standards for water and space heating and cooling equipment; insulation for doors, pipes, walls, and ceilings; and appliances, to name a few. The project would also be eligible for rebates and other financial incentives from both the electric and gas providers for the purchase of energy-efficient appliances and systems, which would further reduce the operational energy demand of the project. The project was distributed to both PG&E and Roseville Electric for comments, and was found to conform to the standards of both providers; energy supplies are available to serve the project.

The project is consistent with the existing land use designation, and has therefore been assumed for development with commercial uses in the citywide environmental analyses for the City's General Plan. The project is therefore consistent with the current citywide assessment of energy demand, and will not result in

substantial unplanned demands. In addition, based on the foregoing analysis, the project will not result in inefficient, wasteful, or unnecessary consumption of energy; impacts are less than significant.

VII. Geology and Soils

As described in the Safety Element of the City of Roseville General Plan, there are three inactive faults (Volcano Hill, Linda Creek, and an unnamed fault) in the vicinity, but there are no known active seismic faults within Placer County. The last seismic event recorded in the South Placer area occurred in 1908, and is estimated to have been at least a 4.0 on the Richter Scale. Due to the geographic location and soil characteristics within the City, the General Plan indicates that soil liquefaction, landslides, and subsidence are not a significant risk in the area.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Ruptures of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located in a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to geology and soils is based directly on the CEQA Guidelines checklist items a–f listed above. Regulations applicable to this topic include the Alquist-Priolo Act, which addresses earthquake safety in building permits, and the Seismic Hazards Mapping Act, which requires the state to gather and publish data on the location and risk of seismic faults. The Archaeological, Historic, and Cultural Resources section of the City of Roseville General Plan also directs the proper evaluation of and, when feasible, protection of significant archeological resources, which for this evaluation will include paleontological resources (Policies 1 and 2). Section 50987.5 of the California Public Code Section is only applicable to public land; this section prohibits the excavation, removal, destruction, or defacement/injury to any vertebrate paleontological site, including fossilized footprints or other paleontological feature.

The Findings of the Implementing Procedures indicate that compliance with the Flood Damage Prevention Ordinance (RMC Ch.9.80) and Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to checklist item b. The Ordinance and standards include permit requirements for construction and development in erosion-prone areas and ensure that grading activities will not result in significant soil erosion or loss of topsoil. The use of septic tanks or alternative waste systems is not permitted in the City of Roseville, and therefore no analysis of criterion e is necessary.

Discussion of Checklist Answers:

a) The project will not expose people or structures to potential substantial adverse effects involving seismic shaking, ground failure or landslides.

i–iii) According to United States Geological Service mapping and literature, active faults are largely considered to be those which have had movement within the last 10,000 years (within the Holocene or Historic time periods)[1] and there are no major active faults in Placer County. The California Geological Survey has

[1] United States Geological Survey, http://earthquake.usgs.gov/learn/glossary/?term=active%20fault, Accessed January 2016

prepared a map of the state which shows the earthquake shaking potential of areas throughout California based primarily on an area's distance from known active faults. The map shows that the City lies in a relatively low-intensity ground-shaking zone. Commercial, institutional, and residential buildings as well as all related infrastructure are required, in conformance with Chapter 16, *Structural Design Requirements*, Division IV, *Earthquake Design* of the California Building Code, to lessen the exposure to potentially damaging vibrations through seismic-resistant design. In compliance with the Code, all structures in the Project area would be well-built to withstand ground shaking from possible earthquakes in the region; impacts are less than significant.

iv) Landslides typically occur where soils on steep slopes become saturated or where natural or manmade conditions have taken away supporting structures and vegetation. The existing and proposed slopes of the project site are not steep enough to present a hazard during development or upon completion of the project. In addition, measures would be incorporated during construction to shore minor slopes and prevent potential earth movement. Therefore, impacts associated with landslides are less than significant.

b) Grading activities will result in the disruption, displacement, compaction and over-covering of soils associated with site preparation (grading and trenching for utilities). Grading activities for the project will be limited to the project site. Grading activities require a grading permit from the Engineering Division. The grading permit is reviewed for compliance with the City's Improvement Standards, including the provision of proper drainage, appropriate dust control, and erosion control measures. Grading and erosion control measures will be incorporated into the required grading plans and improvement plans. Therefore, the impacts associated with disruption, displacement, and compaction of soils associated with the project are less than significant.

c, d) A review of the Natural Resources Conservation Service Soil Survey for Placer County, accessed via the Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/), indicates that the soils on the site are Cometa-Fiddyment complex, with one to five percent slopes, which are not listed as geologically unstable or sensitive.

f) As discussed in the Cultural Resources section, no paleontological resources are known to exist on the project site; however, standard mitigation measures apply which are designed to reduce impacts to such resources, should any be found. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. Compliance with this measure will ensure that project-specific impacts are less than significant.

VIII. Greenhouse Gases

Greenhouse gases trap heat in the earth's atmosphere. The principal greenhouse gases (GHGs) that enter the atmosphere because of human activities are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. As explained by the United States Environmental Protection Agency[2], global average temperature has increased by more than 1.5 degrees Fahrenheit since the late 1800s, and most of the warming of the past half century has been caused by human emissions. The City has taken proactive steps to reduce

[2] http://www3.epa.gov/climatechange/science/overview.html, Accessed January 2016

greenhouse gas emissions, which include the introduction of General Plan policies to reduce emissions, changes to City operations, and climate action initiatives.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Thresholds of Significance and Regulatory Setting:

In Assembly Bill 32 (the California Global Warming Solutions Act), signed by Governor Schwarzenegger of California in September 2006, the legislature found that climate change resulting from global warming was a threat to California, and directed that "the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases . . .". The target established in AB 32 was to reduce emissions to 1990 levels by the year 2020. CARB subsequently prepared the *Climate Change Scoping Plan* (Scoping Plan) for California, which was approved in 2008. The Scoping Plan provides the outline for actions to reduce California's GHG emissions. CARB's updated August 2011 Scoping Plan calculated a reduction needed of 21.7% from future "Business As Usual" (BAU) conditions in the year 2020. The current Scoping Plan (adopted May 2014) indicates that statewide emissions of GHG in 1990 amounted to 431 million metric tons, and that the 2020 "Business As Usual" (BAU) scenario is estimated as 509[3] million metric tons, which would require a reduction of 15.3% from 2020 BAU. In addition to this, Senate Bill 32 was signed by the Governor on September 8, 2016, to establish a reduction target of 40 percent below 1990 levels by 2030. The Air Resources Board is currently updating the Scoping Plan to reflect this target.

The Placer County Air Pollution Control District (PCAPCD) recommends that thresholds of significance for GHG be related to AB 32 reduction goals, and has adopted thresholds of significance which take into account the 2030 reduction target. The thresholds include a de minimis and a bright-line maximum threshold. Any project emitting less than 1,100 metric tons of carbon dioxide equivalents per year (MT CO_2e/yr) during construction or operation results in less than significant impacts. The PCAPCD considers any project with emissions greater than the bright-line cap of 10,000 MT CO_2e/yr to have significant impacts. For projects exceeding the de minimus threshold but below the bright-line threshold, comparison to the appropriate efficiency threshold is recommended. The significance thresholds are shown in Table 1 below.

[3] Includes Pavely and Renewables Portfolio Standard reduction

Table 1: GHG Significance Thresholds

Bright-line Threshold 10,000 MT CO_2e/yr			
Residential Efficiency (MT CO_2e/capita[1])		Non-Residential Efficiency (MT CO_2e/ksf[2])	
Urban	Rural	Urban	Rural
4.5	5.5	26.5	27.3
De Minimis Threshold 1,100 MT CO_2e/yr			

1. Per Capita = per person
2. Per ksf = per 1,000 square feet of building

Discussion of Checklist Answers:

a–b) The City's GPU EIR included an analysis of GHG emissions, which would result from buildout of the City's General Plan. The EIR concluded that General Plan build out would exceed the City's threshold of 2.25 MT CO_{2e} per service population and that the affect was cumulatively considerable. Although mitigation measures were adopted as part of the General Plan those measures would not reduce impacts to less-than-significant levels and impacts were considered significant and unavoidable. The proposed project is consistent with the land use assumptions in the GPU EIR and does not require further analysis per the tiering provisions of CEQA. The project includes reasonable and feasible design measures to reduce emissions, including implementation of the latest Cal-Green and energy efficiency code requirements and will be designed to accommodate rooftop solar. The buildings will incorporate several alternative transportation measures like, bike storage and racks, electric vehicle charging provisions, and carpool & rideshare options. Additionally, a new bus stop on Foothills Boulevard will be constructed as part of the project. The project complies with General Plan policy related to GHG and the project does not result in any new GHG impacts not previously analyzed in the GPU EIR; therefore, impacts are less than significant

IX. .Hazards and Hazardous Materials

There are no known hazardous materials located on the subject property, and no indication that there is the potential for hazardous materials. EnviroStor, the California Department of Toxic Substances Control's data management system, indicated that no hazardous waste facilities or sites with known contamination are located within 1,000 feet of the subject parcel. Similarly, the GeoTracker application, which is the California State Water Resources Control Board's data management system that tracks sites which impact or have the potential to impact water quality (particularly groundwater) in California, did not indicate that there were any sites requiring cleanup within 1,000 feet of the project site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment though reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hazardous materials is based directly on the CEQA Guidelines checklist items a–g listed above. A material is defined as hazardous if it appears on a list of hazardous materials prepared by a federal, state or local regulatory agency, or if it has characteristics defined as hazardous by such an agency. The determination of significance based on the above criteria depends on the probable frequency and severity of consequences to people who might be exposed to the health hazard, and the degree to which Project design or existing regulations would reduce the frequency of or severity of exposure. As an example, products commonly used for household cleaning are classified as hazardous when transported in large quantities, but one would not conclude that the presence of small quantities of household cleaners at a home would pose a risk to a school located within ¼-mile.

Many federal and State agencies regulate hazards and hazardous substances, including the United States Environmental Protection Agency (US EPA), California Department of Toxic Substances Control (DTSC), Central Valley Regional Water Quality Control Board (Regional Water Board), and the California Occupational Safety and Health Administration (CalOSHA). The state has been granted primacy (primary responsibility for oversight) by the US EPA to administer and enforce hazardous waste management programs. State regulations also have detailed planning and management requirements to ensure that hazardous materials are handled, stored, and disposed of properly to reduce human health risks. California regulations pertaining to hazardous waste management are published in the California Code of Regulations (see 8 CCR, 22 CCR, and 23 CCR).

The project is not within an airport land use plan or within two miles of a public or private use airport. Therefore, no further discussion is provided for item e.

Discussion of Checklist Answers:

a, b) Standard construction activities would require the use of hazardous materials such as fuels, oils, lubricants, glues, paints and paint thinners, soaps, bleach, and solvents. These are common household and commercial materials routinely used by both businesses and average members of the public. The materials only pose a hazard if they are improperly used, stored, or transported either through upset conditions (e.g. a vehicle accident) or mishandling. In addition to construction use, the operational project would result in the use of common hazardous materials as well, including bleach, solvents, and herbicides. Regulations pertaining to the transport of materials are codified in 49 Code of Federal Regulations 171–180, and transport regulations are enforced and monitored by the California Department of Transportation and by the California Highway Patrol. Specifications for storage on a construction site are contained in various regulations and codes, including the California Code of Regulations, the Uniform Fire Code, and the California Health and Safety Code. These same codes require that all hazardous materials be used and stored in the manner specified on the material packaging. Existing regulations and programs are sufficient to ensure that potential impacts as a result of the use or storage of hazardous materials are reduced to less than significant levels.

c) See response to Items (a) and (b) above. While development of the site will result in the use, handling, and transport of materials deemed to be hazardous, the materials in question are commonly used in both residential and commercial applications, and include materials such as bleach and herbicides. The project will not result in the use of any acutely hazardous materials, substances, or waste.

d) The project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5[4]; therefore, no impact will occur.

e) This project is located within an area currently receiving City emergency services and development of the site has been anticipated and incorporated into emergency response plans. As such, the project will cause a less

[4] http://www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm

than significant impact to the City's Emergency Response or Management Plans. Furthermore, the project will be required to comply with all local, State and federal requirements for the handling of hazardous materials, which will ensure less-than-significant impacts. These will require the following programs:

- A Risk Management and Prevention Program (RMPP) is required of uses that handle toxic and/or hazardous materials in quantities regulated by the California Health and Safety Code and/or the City.

- Businesses that handle toxic or hazardous materials are required to complete a Hazardous Materials Management Program (HMMP) pursuant to local, State, or federal requirements.

g) The California Department of Forestry and Fire Protection (CAL FIRE) is the state agency responsible for wildland fire protection and management. As part of that task, CAL FIRE maintains maps designating Wildland Fire Hazard Severity zones. The City is not located within a Very High Fire Hazard Severity Zone, and is not in a CAL FIRE responsibility area; fire suppression is entirely within local responsibility. The project site is in an urban area, and therefore would not expose people to any risk from wildland fire. There would be no impact with regard to this criterion.

X. Hydrology and Water Quality

As described in the Open Space and Conservation Element of the City of Roseville General Plan, the City is located within the Pleasant Grove Creek Basin and the Dry Creek Basin. Pleasant Grove Creek and its tributaries drain most of the western and central areas of the City and Dry Creek and its tributaries drain the remainder of the City. Most major stream areas in the City are located within designated open space.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
i) result in substantial erosion or siltation on or off-site;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater systems or provide substantial additional sources of polluted runoff; or			X	
iv) impede or redirect flood flows?			X	
d) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	
e) In flood hazard, tsunami, or seiches zones, risk release of pollutants due to project innundation?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hydrology and water quality is based directly on the CEQA Guidelines checklist items a–e listed above. For checklist item a, c (i), d, and e, the Findings of the Implementing Procedures indicate that compliance with the City of Roseville Design/Construction Standards (Resolution 07-107), Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20), and Stormwater Quality Design Manual (Resolution 16-152) will prevent significant impacts related to water quality or erosion. The standards require preparation of an erosion and sediment control plan for construction activities and includes designs to control pollutants within post-construction urban water runoff. Likewise, it is indicated that the Drainage Fees for the Dry Creek and Pleasant Grove Watersheds (RMC Ch.4.48) and City of Roseville Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to checklist items c (ii) and c (iii). The ordinance and standards require the collection of drainage fees to fund improvements that mitigate potential flooding impacts, and require the design of a water drainage system that will adequately convey anticipated stormwater flows without increasing the rate or amount of surface runoff. These same ordinances and standards prevent impacts related to groundwater (items a and d), because developers are required to treat and detain all stormwater onsite using stormwater swales and other methods which slow flows and preserve infiltration. Finally, it is indicated that compliance with the Flood Damage Prevention Ordinance (RMC Ch. 9.80) will prevent significant impacts related to items c (iv) and e. The Ordinance includes standard requirements for all new construction, including regulation of development with the potential to impede or redirect flood flows, and

prohibits development within flood hazard areas. Impacts from tsunamis and seiches were screened out of the analysis (item e) because the project is not located near a water body or other feature that would pose a risk of such an event.

Discussion of Checklist Answers:

a,c (i),d, e) The project will involve the disturbance of on-site soils and the construction of impervious surfaces, such as asphalt paving and buildings. Disturbing the soil can allow sediment to be mobilized by rain or wind, and cause displacement into waterways. To address this and other issues, the developer is required to receive approval of a grading permit and/or improvement plants prior to the start of construction. The permit or plans are required to incorporate mitigation measures for dust and erosion control. In addition, the City has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by the Central Valley Regional Water Quality Control Board which requires the City to reduce pollutants in stormwater to the maximum extent practicable. The City does this, in part, by means of the City's 2016 Design/Construction Standards, which require preparation and implementation of a Stormwater Pollution Prevention Plan. All permanent stormwater quality control measures must be designed to comply with the City's Manual for Stormwater Quality Control Standards for New Development, the City's 2016 Design/Construction Standards, Urban Stormwater Quality Management and Discharge Control Ordinance, and Stormwater Quality Design Manual. For these reasons, impacts related to water quality are less than significant.

b, d) The project does not involve the installation of groundwater wells. The City maintains wells to supplement surface water supplies during multiple dry years, but the effect of groundwater extraction on the aquifer was addressed in the Water Supply Assessment of the Amoruso Ranch Specific Plan EIR, which included a Citywide water analysis. The proposed project is consistent with the General Plan land use designation, and is thus consistent with the citywide Water Supply Assessment. Project impacts related to groundwater extraction are less than significant. Furthermore, all permanent stormwater quality control measures must be designed to comply with the Stormwater Quality Design Manual, which requires the use of bioswales and other onsite detention and infiltration methods. These standards ensure that stormwater will continue to infiltrate into the groundwater aquifer.

c (ii and iii)) The project has been reviewed by City Engineering staff for conformance with City ordinances and standards. The project includes adequate and appropriate facilities to ensure no net increase in the amount or rate of stormwater runoff from the site, and which will adequately convey stormwater flows.

c (iv) and e) The project has been reviewed by City Engineering staff for conformance with City ordinances and standards. The project is not located within either the Federal Emergency Management Agency floodplain or the City's Regulatory Floodplain (defined as the floodplain which will result from full buildout of the City). Therefore, the project will not impede or redirect flood flows, nor will it be inundated. The proposed project is located within an area of flat topography and is not near a waterbody or other feature which could cause a seiche or tsunami. There would be no impact with regard to these criterion.

XI. Land Use and Planning

The project site is within the City's North Industrial Specific Plan area, has a land use designation of Light Industrial (LI), and a zoning designation of M1. The site is surrounded by light industrial uses to the north, east, and south and adjacent to Foothills Boulevard to the west.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation of an agency adopted for the purpose of avoiding or mitigating an environmental effect?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to land use is based directly on the CEQA Guidelines checklist items a and b listed above. Consistency with applicable City General Plan policies, Improvement Standards, and design standards is already required and part of the City's processing of permits and plans, so these requirements do not appear as mitigation measures.

Discussion of Checklist Answers:

a) The project area has been master planned for development, including adequate roads, pedestrian paths, and bicycle paths to provide connections within the community. The project will not physically divide an established community.

b) The proposed development is consistent with the existing neighborhood and does not conflict with policies or regulations adopted for the purpose of avoiding or mitigating an environmental impact. Impacts are less than significant.

XII. Mineral Resources

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the State Geologist to classify land into Mineral Resource Zones (MRZ's) based on the known or inferred mineral resource potential of that land. The California Division of Mines and Geology (CDMG) was historically responsible for the classification and designation of areas containing—or potentially containing—significant mineral resources, though that responsibility now lies with the California Geological Survey (CGS). CDMG published Open File Report 95-10, which provides the mineral classification map for Placer County. A detailed evaluation of mineral resources has not been conducted within the City limits, but MRZ's have been identified. There are four broad MRZ categories (MRZ-1 through MRZ-4), and only MRZ-2 represents an area of known significant mineral resources. The City of Roseville General Plan EIR included Exhibit 4.1-3, depicting the location of MRZ's in the City limits. There is only one small MRZ-2 designation area, located at the far eastern edge of the City.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to mineral resources is based directly on the CEQA Guidelines checklist items a and b listed above.

Discussion of Checklist Answers:

a–b) The project site is not in the area of the City known to include any mineral resources that would be of local, regional, or statewide importance; therefore, the project has no impacts on mineral resources.

XIII. Noise

The project is located adjacent to Foothills Boulevard to the west and Southern Pacific Railroad to the east. Both Foothills Boulevard and the Southern Pacific Railroad are identified as being within the 60 dB Ldn Noise Contour. The nearest noise sensitive receptors are across Foothills Boulevard to the west. The other adjacent uses are industrial types and are not considered noise sensitive uses. The site will be developed with light industrial type uses. The specific uses within these buildings is not yet known. Typically, the noise associated with light industrial buildings is associated with loading docks.

Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Generation of excessive ground borne vibration of ground borne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

Thresholds of Significance and Regulatory Setting:

Standards for transportation noise affecting existing or proposed land uses are established within the City of Roseville General Plan Noise Element Table IX-1 these standards are used as the thresholds to determine the significance of impacts related to item a. For non-transportation noise sources the General Plan points to the City's Noise Ordinance. The significance of other noise impacts is based directly on the CEQA Guidelines checklist items b and c listed above. The Findings of the Implementing Procedures indicate that compliance with the City Noise Regulation (RMC Ch. 9.24) will prevent significant non-transportation noise as it relates to items a and b. The Ordinance establishes noise exposure standards that protect noise-sensitive receptors from a variety of noise sources, including non-transportation/fixed noise, amplified sound, industrial noise, and events on public property. The project is not within an airport land use plan, within two miles of a public or public use airport and there are also no private airstrips in the vicinity of the project area. Therefore, item c has been ruled out from further analysis.

Discussion of Checklist Answers:

a) The City's Noise Ordinance includes sound limits for industrial properties. Section 9.24.120 states that noise measured at the property line of a sensitive receptor, which was generated from an industrially zoned property shall not exceed the ambient sound level by 7 dBA, or exceed the sound level standard in Table 1 (Figure 8), whichever is greater. The subject property is surround by industrial uses and noise generating uses such as Foothills Boulevard and the Southern Pacific Railroad. The nearest sensitive land use to the site is located more than 500 feet to the southwest of the nearest loading dock. The project consists of industrial spec buildings and a parking lot, which are not expected to generate noise in excess of City standards. For light industrial buildings noise is typically generated from loading docks. The proposed loading docks would be separated from sensitive receptors By Foothills Boulevard and would be shielded by other onsite buildings. The project will not generate noise that that will exceed City standards at the property line of a sensitive receptor. Impact are less than significant.

Figure 8: Noise Ordinance Table 1

Table 1

SOUND LEVEL STANDARDS
(for non-transportation or fixed sound sources)

Sound Level Descriptor	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly l_{eq}, dB	50	45
Maximum level, dB	70	65

A. Each of the sound level standards specified in Table 1 shall be reduced by five dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus three dB.

B. If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table 1. (Ord. 3638 § 1, 2001.)

b) Surrounding uses may experience short-term increases in groundborne vibration, groundborne noise, and airborne noise levels during construction. However, these increases would only occur for a short period of time. When conducted during daytime hours, construction activities are exempt from Noise Ordinance standards, but the standards do apply to construction occurring during nighttime hours. While the noise generated may be a minor nuisance, the City Noise Regulation standards are designed to ensure that impacts are not unduly intrusive. Based on this, the impact is less than significant.

XIV. Population and Housing

The project site is located within the North Industrial Plan area and has a land use designation of LI. The City of Roseville General Plan Table II-4 identifies the total number of residential units and population anticipated as a result of buildout of the City, and the Specific Plan likewise includes unit allocations and population projections for the Plan Area. Residential units are not allocated to LI land uses within the plan area. Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, though extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to population and housing is based directly on the CEQA Guidelines checklist items a and b listed above.

Discussion of Checklist Answers:

a) The CEQA Guidelines identify several ways in which a project could have growth-inducing impacts (Public Resources Code Section 15126.2), either directly or indirectly. Growth-inducement may be the result of fostering economic growth, fostering population growth, providing new housing, or removing barriers to growth. Growth inducement may be detrimental, beneficial, or of no impact or significance under CEQA. An impact is only deemed to occur when it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be shown that the growth will significantly affect the environment in some other way. The project is consistent with the land use designation of the site. Therefore, while the project in question will induce some level of growth, this growth was already identified and its effects disclosed and mitigated within the GPU EIR. Therefore, the impact of the project is less than significant.

b) The project site is vacant. No housing exists on the project site, and there would be no impact with respect to these criteria.

XV. Public Services

Fire protection, police protection, park services, and library services are provided by the City. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to public services is based directly on the CEQA Guidelines checklist items a–e listed above. The EIR for the General Plan addressed the level of public services which would need to be provided in order to serve planned growth in the City. Development Agreements and other conditions have been adopted in all proposed growth areas of the City which identify the physical facilities needed to serve growth, and the funding needed to provide for the construction and operation of those facilities and services; the project is consistent with the General Plan. In addition, the project has been routed to the various public service agencies, both internal and external, to ensure that the project meets the agencies' design standards (where applicable) and to provide an opportunity to recommend appropriate conditions of approval.

Discussion of Checklist Answers:

a) Existing City codes and regulations require adequate water pressure in the water lines, and construction must comply with the Uniform Fire and Building Codes used by the City of Roseville. Additionally, the applicant is required to pay a fire service construction tax, which is used for purchasing capital facilities for the Fire Department. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

b) Sales taxes and property taxes resulting from the development will add revenue to the General Fund, which serves to fund police services. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

c) The applicant for this project is required to pay school impact fees at a rate determined by the local school districts. School fees will be collected prior to the issuance of building permits, consistent with City requirements. School sites have already been designated. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

d) Future park and recreation sites and facilities have already been identified as part of the General and Specific Plan process. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

e) The City charges fees to end-users for other services, such as garbage and greenwaste collection, in order to fund the library system and other such facilities and services. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

XVI. Recreation

The site is surrounded by industrial uses with no parks or recreation facilities within the immediate vicinity. The Woodcreek Oaks Golf Course is approximately 2,000 feet to the southwest of the site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to recreation services is based directly on the CEQA Guidelines checklist items a–b listed above.

Discussion of Checklist Answers:

a) Given that the project is consistent with the General Plan and NIPA, the project would not cause any unforeseen or new impacts related to the use of existing or proposed parks and recreational facilities. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

b) The project does not include recreation facilities and will not cause any unforeseen or new impacts related to the construction or expansion of recreational facilities.

XVII. Transportation

The project is located on the eastern side of Foothills Boulevard between Pleasant Grove Boulevard and East Roseville Parkway. Foothills Boulevard is a four-lane north/south arterial. The site has an existing access point from a signalized intersection off Foothills Boulevard. This ingrees/egress point provides access to the existing and developing industrial buildings on the site. The project includes completion of the frontage improvements along Foothills Boulevard in the northern portion of the project site. Also in the northernmost portion of the site, an existing, but partially constructed driveway off Foothills Boulevard will be widened to provide an additional access point to the industrial park. The project will complete the planned development within the industrial center consistent with the NIPA and General Plan land use assumptions.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature(s) (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Thresholds of Significance and Regulatory Setting:

CEQA Guidelines Section 15064.3 indicates that a project's effect on automobile delay cannot be considered a significant impact, and directs transportation system analysis to focus on vehicle miles traveled (VMT), per checklist item b. However, the CEQA Guidelines also include consistency with a program, plan, or policy addressing transportation systems as an area of potential environmental effects (checklist item a). The City has adopted the following plans, ordinances, or policies applicable to this checklist item: Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan, and Updated General Plan Circulation Element. The project is evaluated for consistencies with these plans and the policies contained within them, which includes an analysis of delay. The Updated Circulation Element of the General Plan establishes Level of Service C or better as an acceptable operating condition at all signalized intersections during a.m. and p.m. peak hours. Exceptions to this policy may be made by the City Council, but a minimum of 70% of all signalized intersections must maintain LOS C. The Findings of the Implementing Procedures indicate that compliance with the Traffic Mitigation Fee (RMC Ch. 4.44) will fund roadway projects and improvements necessary to maintain the City's Level of Service standards for projects consistent with the General Plan and related Specific Plan. An existing plus project conditions (short-term) traffic impact study may be required for projects with unique trip generation or distribution characteristics, in areas of local traffic constraints, or to study the proposed project access. A cumulative plus project conditions (long-term) study is required if a project is inconsistent with the General Plan or Specific Plan and would generate more than 50 pm peak-hour trips. The guidelines for traffic study preparation are found in the City of Roseville Design and Construction Standards–Section 4.

For checklist item b, the CEQA Guidelines Section 15064.3 establishes a detailed process for evaluating the significance of transportation impacts. In accordance with this section, the analysis must focus on the generation of vehicle miles traveled (VMT). Projects within one-half mile of either an existing major transit stop[5] or a stop along an existing high quality transit corridor[6] should be presumed to have less than significant impacts, as should any project which will decrease VMT when compared with the existing conditions. VMT may be analyzed qualitatively if existing models or methods are not available to estimate VMT for a particular project; this will generally be appropriate for discussions of construction traffic VMT.

Impacts with regard to items c and d are assessed based on the expert judgment of the City Engineer and City Fire Department, as based upon facts and consistency with the City's Design and Construction Standards.

Discussion of Checklist Answers:

a) The project was reviewed by the City's Engineering Division for consistency with the buildout assumptions in the City's General Plan. The City of Roseville has adopted a Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan. The project was reviewed for consistency with these documents. The project is located in an area planned for industrial uses along Foothills Boulevard between Pleasant Grove Boulevard and Roseville Parkway. The western boundary of the project site is adjacent to Foothills Boulevard, which is fully developed consistent with the requirements of these plans. The proposed project will be constructed consistent with the existing roadway system and in compliance with the requirements of the Pedestrian Master Plan, Bicycle Master Plan, and Short Range Transit Plan.

b) The GPU EIR used the Roseville travel forecasting model to estimate VMT for the City. The VMT data was then normalized to residents as a "per capita" rate. As described in the GPU EIR, and consistent with the VMT reductions in OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA,* the City has adopted a VMT significance threshold of 12.8 VMT/capita. This threshold represents a 15 percent reduction to

[5] A site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. (Public Resources Code Section 21064.3)
[6] A corridor with fixed route bus service at service intervals of 15 minutes or less during peak commute hours.

baseline per capita VMT. The GPU EIR concluded that buildout of the remaining undeveloped areas of the City, consistent with existing land use designations and existing development agreements, would exceed the City's adopted threshold resulting in a Significant Impact in both the constrained and unconstrained buildout scenarios; and that mitigation requiring land use changes was not feasible because of existing development agreements in place for the undeveloped areas of the City.

As stated in the GPU EIR and pursuant to the tiering provisions of CEQA, projects that are consistent with the General Plan do not require further VMT analysis and quantitative analyses are not required if it can be demonstrated that a project would generate VMT which is equivalent to or less than what was assumed in the GPU EIR. The proposed development is consistent with the planned land use designations and assumed square footage as presented in the General Plan and as analyzed in the GPU EIR, therefore the VMT for the project will be equal to the assumptions in the GPU EIR and no further analysis is required.

c, d) The project has been reviewed by the City Engineering and City Fire Department staff, and has been found to be consistent with the City's Design Standards. Furthermore, standard conditions of approval added to all City project require compliance with Fire Codes and other design standards. Compliance with existing regulations ensure that impacts are less than significant.

XVIII. Tribal Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller cultural resources, such as midden deposits and bedrock mortars, have also been recorded in the City. A majority of documented sites within the City are located in areas designated for open space uses.

Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

Thresholds of Significance and Regulatory Setting:

In addition to archeological resources, tribal cultural resources are also given particular treatment. Tribal cultural resources are defined in Public Resources Code Section 21074, as either 1) a site, feature, place, geographically-defined cultural landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register or Historical Resources, or on a local register of historical resources or as 2) a resource determined by the lead agency, supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1(c), and considering the significance of the resource to a California Native American Tribe.

Discussion of Checklist Answers:

a) The GPU EIR included historic and cultural resources study, which included research on whether any listed or eligible sites had been documented in the project area. No such sites were found. As discussed in the Cultural Resources section of this document, mitigation measures which are designed to reduce impacts to any previously undiscovered resources have been included to ensure that impacts are less than significant. With this mitigation project-specific impacts are less than significant.

b) Notice of the proposed project was mailed to tribes that had requested such notice pursuant to AB 52. Requests for consultation were received from the United Auburn Indian Community (UAIC) on February 27, 2020 and from the Shingle Springs Band of Miwok Indians on March 2, 2020. On March 12, 2020 UAIC recommended mitigation measures to reduce impacts to resources, should any be found on-site and require an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. This measure is included as CUL-1 and is discussed in the Cultural Resources section of this document. The UAIC also requested a tribal monitoring mitigation measure. Although tribal monitoring is not typically required by the City, the applicant has agreed to the measure adding the requirement that the tribal monitor meet their job-site safety and insurance requirements. On June 29, 2020 the UAIC agreed to the request. **Mitigation Measure TCR-1 r**eflects these negotiations. This measure will ensure that impacts are less than significant.

Mitigation Measure TCR-1 Native American Tribal Monitoring: The following mitigation measure is intended to minimize impacts to existing or previously undiscovered Tribal Cultural Resources (TCRs) at the earliest possible time during project-related earthmoving activities. Prior to approval of grading or improvement plans

the applicant shall provide to the City documentation of an agreement between the developer and UAIC showing the following:

1. UAIC shall provide documentation, to the satisfaction of the developer, showing that the tribal monitor meets the developer's job-site safety requirements.

2. Consulting tribes shall be contacted at least two weeks prior to project ground-disturbing activities in order to retain the services of a paid Tribal Monitor/s. The duration of the monitoring and construction schedule shall be determined at this time.

3. In order to track the status of mitigation measure implementation, field-monitoring activities will be documented on a Tribal Monitor log. The total time commitment of the Tribal Monitor will vary depending on the intensity and location of construction and the sensitivity of the area, including the number of finds.

4. A paid Tribal Monitor/s from traditionally and culturally affiliated Native American Tribes will monitor the vegetation grubbing, stripping, grading, or other ground-disturbing activities in the project area. The Tribal Monitor/s shall wear the appropriate safety equipment.

5. Native American Representatives and Tribal Monitors act as representative of their Tribal government and have the authority to identify sites or objects of cultural value to Native Americans and recommend appropriate treatment of such sites or objects.

6. Native American Monitors or their representatives have the authority to request that work be temporarily stopped, diverted, or slowed within 100 feet of the direct impact area if sites or objects of significance are identified. Only a Native American Monitor or Representative from a culturally affiliated tribe can recommend appropriate treatment and final disposition of TCRs.

XIX. Utilities and Service Systems

The project site is located within a developed area with the major utility infrastructure already installed, consistent with the General Plan and NIPA. Existing sewer systems, stormwater treatment facilities, and water facilities are available to serve the project site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves the project that it has adequate capacity to serve the project's projected demand in addition of the provider's existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to utilities and service systems is based directly on the CEQA Guidelines checklist items a–e listed above.

Discussion of Checklist Answers:

a) The project is consistent with the General Plan and the NIPA, and will be required to construct any utilities infrastructure necessary to serve the project, as well as pay fees which fund the operation of the facilities and the construction of major infrastructure. Minor additional infrastructure will be constructed within the project site to tie the project into the major systems, but these facilities will be constructed in locations where site development is already occurring as part of the overall project; there are no additional substantial impacts specific or particular to the minor infrastructure improvements.

b) The City of Roseville 2015 Urban Water Management Plan (UWMP), adopted May 2016, estimates water demand and supply for the City through the year 2040, based on existing land use designations and population projections. In addition, the Amoruso Ranch Water Supply Assessment (AR WSA, Appendix E of the Amoruso Ranch FEIR), dated May 2016, estimates water demand and supply for ultimate General Plan buildout. The project is consistent with existing land use designations, and is therefore consistent with the assumptions of the UWMP and AR WSA. The UWMP indicates that existing water supply sources are sufficient to meet all near

term needs, estimating an annual water demand of 45,475 acre-feet per year (AFY) by the year 2020 and existing surface and recycled water supplies in the amount of 70,421 AFY. The AR WSA estimates a Citywide buildout demand of 64,370 AFY when including recycled water, and of 59,657 AFY of potable water. The AR WSA indicates that surface water supply is sufficient to meet demand during normal rainfall years, but is insufficient during single- and multiple-dry years. However, the City's UWMP establishes mandatory water conservation measures and the use of groundwater to offset reductions in surface water supplies. Both the UWMP and AR WSA indicate that these measures, in combination with additional purchased water sources, will ensure that supply meets projected demand. The project, which is consistent with existing land use designations, would not require new or expanded water supply entitlements.

c) The proposed project would be served by the Pleasant Grove Wastewater Treatment Plant (PGWWTP). The Central Valley Regional Water Quality Control Board (RWQCB) regulates water quality and quantity of effluent discharged from the City's wastewater treatment facilities. The Pleasant Grove WWTP has the capacity[7] to treat 12 million gallons per day (mgd) and is currently treating 7.0[8] mgd. The project is consistent with existing land use designations, which is how infrastructure capacity is planned. Therefore, the volume of wastewater generated by the proposed project could be accommodated by the facility; the proposed project will not contribute to an exceedance of applicable wastewater treatment requirements. The impact would be less than significant.

d, e) The Western Placer Waste Management Authority is the regional agency handling recycling and waste disposal for Roseville and surrounding areas. The regional waste facilities include a Material Recovery Facility (MRF) and the Western Regional Sanitary Landfill (WRSL). Currently, the WRSL is permitted to accept up to 1,900 tons of municipal solid waste per day. According to the solid waste analysis of the Amoruso Ranch Specific Plan FEIR, under current projected development conditions the WRSL has a projected lifespan extending through 2058. There is sufficient existing capacity to serve the proposed project. Though the project will contribute incrementally to an eventual need to find other means of waste disposal, this impact of City buildout has already been disclosed and mitigation applied as part of each Specific Plan the City has approved, including the most recent Amoruso Ranch Specific Plan. All residences and business in the City pay fees for solid waste collection, a portion of which is collected to fund eventual solid waste disposal expansion. The project will not result in any new impacts associated with major infrastructure. Environmental Utilities staff has reviewed the project for consistency with policies, codes, and regulations related to waste disposal and waste reduction regulations and policies and has found that the project design is in compliance.

XX. Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X

[7] Waste Discharge Requirements/Monitoring & Reporting Program/NPDES Permit No. CA0079502, Adopted on 28 March 2014

[8] Dave Samuelson, City of Roseville Environmental Utilities, Personal communication, July 6, 2016.

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to wildfire is based directly on the CEQA Guidelines checklist items a–d listed above. The California Department of Forestry and Fire Protection (CAL FIRE) is the state agency responsible for wildland fire protection and management. As part of that task, CAL FIRE maintains maps designating Wildland Fire Hazard Severity zones. The City is not located within a Very High Fire Hazard Severity Zone, and is not in a CAL FIRE responsibility area; fire suppression is entirely within local responsibility.

Discussion of Checklist Answers:

a–d) Checklist questions a–d above do not apply, because the project site is not within a Very High Fire Hazard Severity Zone and is not in a CAL FIRE responsibility area.

XXI. Mandatory Findings of Significance

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, threatened or rare species, or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

Significance Criteria and Regulatory Setting:

The significance of impacts related to mandatory findings of significance is based directly on the CEQA Guidelines checklist items a–c listed above.

Discussion of Checklist Answers:

a–c) Long term environmental goals are not impacted by the proposed project. The cumulative impacts do not deviate beyond what was contemplated in the Specific Plan EIR, and mitigation measures have already been incorporated via the Specific Plan EIR. With implementation of the City's Mitigating Ordinances, Guidelines, and Standards and best management practices, mitigation measures described in this chapter, and permit conditions, the proposed project will not have a significant impact on the habitat of any plant or animal species. Based on the foregoing, the proposed project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of any wildlife species, or create adverse effects on human beings.

ENVIRONMENTAL DETERMINATION:

In reviewing the site specific information provided for this project and acting as Lead Agency, the City of Roseville, Development Services Department, Planning Division has analyzed the potential environmental impacts created by this project and determined that with mitigation the impacts are less than significant. As demonstrated in the initial study checklist, there are no "project specific significant effects which are peculiar to the project or site" that cannot be reduced to less than significant effects through mitigation (CEQA Section 15183) and therefore an EIR ***is not*** *required. Therefore,* ***on the basis of the foregoing initial study:***

[**X**] I find that the proposed project COULD, but with mitigation agreed to by the applicant, clearly will not have a significant effect on the environment and a *MITIGATED NEGATIVE DECLARATION* has been prepared.

Initial Study Prepared by:

Charity Gold

Charity Gold, Associate Planner
City of Roseville, Development Services – Planning Division

Attachments:

1. CalEEMod Air Quality Model
2. Revised Wetlands and Biological Resources Assessment
3. Mitigation Monitoring and Reporting Program

Roseville 80 MPP

Placer-Sacramento County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	450.00	1000sqft	10.33	450,000.00	0
Parking Lot	666.00	1000sqft	15.29	666,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2022
Utility Company	Roseville Electric				
CO2 Intensity (lb/MWhr)	793.8	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2634	46.4381	32.6624	0.1177	18.2141	2.0454	20.2595	9.9699	1.8818	11.8516	0.0000	11,861.3665	11,861.3665	1.9464	0.0000	11,884.9499
2022	3.8025	35.1597	31.2499	0.1159	5.0922	0.8705	5.9627	1.3787	0.8192	2.1979	0.0000	11,681.1702	11,681.1702	0.9174	0.0000	11,704.1043
2023	124.9669	30.6482	29.8450	0.1135	5.0921	0.7394	5.8315	1.3787	0.6956	2.0743	0.0000	11,446.1680	11,446.1680	0.8444	0.0000	11,467.2771
Maximum	**124.9669**	**46.4381**	**32.6624**	**0.1177**	**18.2141**	**2.0454**	**20.2595**	**9.9699**	**1.8818**	**11.8516**	**0.0000**	**11,861.3665**	**11,861.3665**	**1.9464**	**0.0000**	**11,884.9499**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2634	46.4381	32.6624	0.1177	18.2141	2.0454	20.2595	9.9699	1.8818	11.8516	0.0000	11,861.3665	11,861.3665	1.9464	0.0000	11,884.9499
2022	3.8025	35.1597	31.2499	0.1159	5.0922	0.8705	5.9627	1.3787	0.8192	2.1979	0.0000	11,681.1702	11,681.1702	0.9174	0.0000	11,704.1043
2023	124.9669	30.6482	29.8450	0.1135	5.0921	0.7394	5.8315	1.3787	0.6956	2.0743	0.0000	11,446.1680	11,446.1680	0.8444	0.0000	11,467.2771
Maximum	**124.9669**	**46.4381**	**32.6624**	**0.1177**	**18.2141**	**2.0454**	**20.2595**	**9.9699**	**1.8818**	**11.8516**	**0.0000**	**11,861.3665**	**11,861.3665**	**1.9464**	**0.0000**	**11,884.9499**

Roseville 80 MPP - Placer-Sacramento County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.0701	1.0400e-003	0.1141	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2442	0.2442	6.4000e-004		0.2604
Energy	0.2478	2.2530	1.8925	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.6261	2,703.6261	0.0518	0.0496	2,719.6924
Mobile	6.2441	36.6130	66.0464	0.2623	19.5493	0.2072	19.7565	5.2392	0.1947	5.4339		26,588.1063	26,588.1063	0.9325		26,611.4193
Total	**17.5621**	**38.8671**	**68.0531**	**0.2758**	**19.5493**	**0.3788**	**19.9281**	**5.2392**	**0.3663**	**5.6055**		**29,291.9767**	**29,291.9767**	**0.9850**	**0.0496**	**29,331.3721**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.0701	1.0400e-003	0.1141	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2442	0.2442	6.4000e-004		0.2604
Energy	0.2478	2.2530	1.8925	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.6261	2,703.6261	0.0518	0.0496	2,719.6924
Mobile	6.2441	36.6130	66.0464	0.2623	19.5493	0.2072	19.7565	5.2392	0.1947	5.4339		26,588.1063	26,588.1063	0.9325		26,611.4193
Total	**17.5621**	**38.8671**	**68.0531**	**0.2758**	**19.5493**	**0.3788**	**19.9281**	**5.2392**	**0.3663**	**5.6055**		**29,291.9767**	**29,291.9767**	**0.9850**	**0.0496**	**29,331.3721**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/10/2021	5/7/2021	5	20	
2	Grading	Grading	5/8/2021	7/9/2021	5	45	
3	Building Construction	Building Construction	7/10/2021	3/17/2023	5	440	
4	Paving	Paving	3/18/2023	5/5/2023	5	35	
5	Architectural Coating	Architectural Coating	5/6/2023	6/23/2023	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 15.29

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 675,000; Non-Residential Outdoor: 225,000; Striped Parking Area: 39,960 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	469.00	183.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	94.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0650	0.0344	0.4849	1.4300e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		142.1705	142.1705	3.2400e-003		142.2516
Total	**0.0650**	**0.0344**	**0.4849**	**1.4300e-003**	**0.1479**	**9.1000e-004**	**0.1488**	**0.0392**	**8.4000e-004**	**0.0401**		**142.1705**	**142.1705**	**3.2400e-003**		**142.2516**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0650	0.0344	0.4849	1.4300e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		142.1705	142.1705	3.2400e-003		142.2516
Total	**0.0650**	**0.0344**	**0.4849**	**1.4300e-003**	**0.1479**	**9.1000e-004**	**0.1488**	**0.0392**	**8.4000e-004**	**0.0401**		**142.1705**	**142.1705**	**3.2400e-003**		**142.2516**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0722	0.0383	0.5387	1.5900e-003	0.1643	1.0200e-003	0.1653	0.0436	9.4000e-004	0.0445		157.9673	157.9673	3.6000e-003		158.0573
Total	**0.0722**	**0.0383**	**0.5387**	**1.5900e-003**	**0.1643**	**1.0200e-003**	**0.1653**	**0.0436**	**9.4000e-004**	**0.0445**		**157.9673**	**157.9673**	**3.6000e-003**		**158.0573**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0722	0.0383	0.5387	1.5900e-003	0.1643	1.0200e-003	0.1653	0.0436	9.4000e-004	0.0445		157.9673	157.9673	3.6000e-003		158.0573
Total	**0.0722**	**0.0383**	**0.5387**	**1.5900e-003**	**0.1643**	**1.0200e-003**	**0.1653**	**0.0436**	**9.4000e-004**	**0.0445**		**157.9673**	**157.9673**	**3.6000e-003**		**158.0573**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5496	19.7266	3.4537	0.0536	1.2395	0.0447	1.2842	0.3568	0.0428	0.3996		5,603.6705	5,603.6705	0.2429		5,609.7418
Worker	1.6939	0.8974	12.6335	0.0372	3.8527	0.0238	3.8766	1.0219	0.0220	1.0439		3,704.3321	3,704.3321	0.0845		3,706.4439
Total	**2.2435**	**20.6241**	**16.0872**	**0.0907**	**5.0922**	**0.0686**	**5.1608**	**1.3788**	**0.0648**	**1.4435**		**9,308.0026**	**9,308.0026**	**0.3273**		**9,316.1856**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5496	19.7266	3.4537	0.0536	1.2395	0.0447	1.2842	0.3568	0.0428	0.3996		5,603.6705	5,603.6705	0.2429		5,609.7418
Worker	1.6939	0.8974	12.6335	0.0372	3.8527	0.0238	3.8766	1.0219	0.0220	1.0439		3,704.3321	3,704.3321	0.0845		3,706.4439
Total	**2.2435**	**20.6241**	**16.0872**	**0.0907**	**5.0922**	**0.0686**	**5.1608**	**1.3788**	**0.0648**	**1.4435**		**9,308.0026**	**9,308.0026**	**0.3273**		**9,316.1856**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5113	18.7363	3.2078	0.0531	1.2394	0.0382	1.2777	0.3568	0.0366	0.3934		5,558.3607	5,558.3607	0.2295		5,564.0972
Worker	1.5850	0.8077	11.6786	0.0358	3.8527	0.0233	3.8760	1.0219	0.0215	1.0434		3,568.4759	3,568.4759	0.0760		3,570.3749
Total	**2.0962**	**19.5441**	**14.8865**	**0.0889**	**5.0922**	**0.0615**	**5.1537**	**1.3787**	**0.0580**	**1.4368**		**9,126.8366**	**9,126.8366**	**0.3054**		**9,134.4721**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5113	18.7363	3.2078	0.0531	1.2394	0.0382	1.2777	0.3568	0.0366	0.3934		5,558.3607	5,558.3607	0.2295		5,564.0972
Worker	1.5850	0.8077	11.6786	0.0358	3.8527	0.0233	3.8760	1.0219	0.0215	1.0434		3,568.4759	3,568.4759	0.0760		3,570.3749
Total	**2.0962**	**19.5441**	**14.8865**	**0.0889**	**5.0922**	**0.0615**	**5.1537**	**1.3787**	**0.0580**	**1.4368**		**9,126.8366**	**9,126.8366**	**0.3054**		**9,134.4721**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3903	15.5350	2.8071	0.0522	1.2394	0.0169	1.2562	0.3568	0.0161	0.3729		5,458.5870	5,458.5870	0.1683		5,462.7947
Worker	1.4854	0.7284	10.7940	0.0344	3.8527	0.0228	3.8755	1.0219	0.0210	1.0429		3,432.3711	3,432.3711	0.0682		3,434.0763
Total	**1.8756**	**16.2634**	**13.6010**	**0.0866**	**5.0921**	**0.0397**	**5.1318**	**1.3787**	**0.0371**	**1.4159**		**8,890.9581**	**8,890.9581**	**0.2365**		**8,896.8710**

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3903	15.5350	2.8071	0.0522	1.2394	0.0169	1.2562	0.3568	0.0161	0.3729		5,458.5870	5,458.5870	0.1683		5,462.7947
Worker	1.4854	0.7284	10.7940	0.0344	3.8527	0.0228	3.8755	1.0219	0.0210	1.0429		3,432.3711	3,432.3711	0.0682		3,434.0763
Total	**1.8756**	**16.2634**	**13.6010**	**0.0866**	**5.0921**	**0.0397**	**5.1318**	**1.3787**	**0.0371**	**1.4159**		**8,890.9581**	**8,890.9581**	**0.2365**		**8,896.8710**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.1446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1773**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0475	0.0233	0.3452	1.1000e-003	0.1232	7.3000e-004	0.1240	0.0327	6.7000e-004	0.0334		109.7773	109.7773	2.1800e-003		109.8319
Total	**0.0475**	**0.0233**	**0.3452**	**1.1000e-003**	**0.1232**	**7.3000e-004**	**0.1240**	**0.0327**	**6.7000e-004**	**0.0334**		**109.7773**	**109.7773**	**2.1800e-003**		**109.8319**

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.1446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1773**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0475	0.0233	0.3452	1.1000e-003	0.1232	7.3000e-004	0.1240	0.0327	6.7000e-004	0.0334		109.7773	109.7773	2.1800e-003		109.8319
Total	**0.0475**	**0.0233**	**0.3452**	**1.1000e-003**	**0.1232**	**7.3000e-004**	**0.1240**	**0.0327**	**6.7000e-004**	**0.0334**		**109.7773**	**109.7773**	**2.1800e-003**		**109.8319**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	124.4776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**124.6692**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2977	0.1460	2.1634	6.9000e-003	0.7722	4.5700e-003	0.7768	0.2048	4.2100e-003	0.2090		687.9379	687.9379	0.0137		688.2797
Total	**0.2977**	**0.1460**	**2.1634**	**6.9000e-003**	**0.7722**	**4.5700e-003**	**0.7768**	**0.2048**	**4.2100e-003**	**0.2090**		**687.9379**	**687.9379**	**0.0137**		**688.2797**

3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	124.4776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**124.6692**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2977	0.1460	2.1634	6.9000e-003	0.7722	4.5700e-003	0.7768	0.2048	4.2100e-003	0.2090		687.9379	687.9379	0.0137		688.2797
Total	**0.2977**	**0.1460**	**2.1634**	**6.9000e-003**	**0.7722**	**4.5700e-003**	**0.7768**	**0.2048**	**4.2100e-003**	**0.2090**		**687.9379**	**687.9379**	**0.0137**		**688.2797**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.2441	36.6130	66.0464	0.2623	19.5493	0.2072	19.7565	5.2392	0.1947	5.4339		26,588.1063	26,588.1063	0.9325		26,611.4193
Unmitigated	6.2441	36.6130	66.0464	0.2623	19.5493	0.2072	19.7565	5.2392	0.1947	5.4339		26,588.1063	26,588.1063	0.9325		26,611.4193

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	3,136.50	594.00	306.00	6,916,113	6,916,113
Parking Lot	0.00	0.00	0.00		
Total	3,136.50	594.00	306.00	6,916,113	6,916,113

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.499712	0.039404	0.220288	0.124864	0.021993	0.006021	0.030614	0.046741	0.001428	0.001188	0.005840	0.000765	0.001142
Parking Lot	0.499712	0.039404	0.220288	0.124864	0.021993	0.006021	0.030614	0.046741	0.001428	0.001188	0.005840	0.000765	0.001142

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2478	2.2530	1.8925	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.6261	2,703.6261	0.0518	0.0496	2,719.6924
NaturalGas Unmitigated	0.2478	2.2530	1.8925	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.6261	2,703.6261	0.0518	0.0496	2,719.6924

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	22980.8	0.2478	2.2530	1.8925	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.6261	2,703.6261	0.0518	0.0496	2,719.6924
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2478**	**2.2530**	**1.8925**	**0.0135**		**0.1712**	**0.1712**		**0.1712**	**0.1712**		**2,703.6261**	**2,703.6261**	**0.0518**	**0.0496**	**2,719.6924**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	22.9808	0.2478	2.2530	1.8925	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.6261	2,703.6261	0.0518	0.0496	2,719.6924
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2478**	**2.2530**	**1.8925**	**0.0135**		**0.1712**	**0.1712**		**0.1712**	**0.1712**		**2,703.6261**	**2,703.6261**	**0.0518**	**0.0496**	**2,719.6924**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.0701	1.0400e-003	0.1141	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2442	0.2442	6.4000e-004		0.2604
Unmitigated	11.0701	1.0400e-003	0.1141	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2442	0.2442	6.4000e-004		0.2604

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.1936					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.8659					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0106	1.0400e-003	0.1141	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2442	0.2442	6.4000e-004		0.2604
Total	**11.0701**	**1.0400e-003**	**0.1141**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2442**	**0.2442**	**6.4000e-004**		**0.2604**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.1936					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.8659					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0106	1.0400e-003	0.1141	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2442	0.2442	6.4000e-004		0.2604
Total	**11.0701**	**1.0400e-003**	**0.1141**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2442**	**0.2442**	**6.4000e-004**		**0.2604**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

BARNETT ENVIRONMENTAL

Environmental Consulting,
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To: Steve Beauchamp, Development Manager at Panattoni Development

From: Bruce D. Barnett, Ph.D. – Principal at Barnett Environmental

Date: March 26, 2020

Re: **Response to City of Roseville Comments Regarding Barnett Environmental's 12/13/18 Wetlands & Biological Resources Assessment**

We have received your response to the Barnett Environmental December 13, 2018 *Wetland & Biological Resources Assessment*. Please find below our responses to each of your questions.

Question 1: Wetlands shown in summary do not match those shown on the Phase 1 Plan (page 13).

Response: *The wetlands shown on page 12 and Section 3 "Wetlands and "Other Waters of the U.S." reflects a total of 0.391 acres of wetlands and "other waters of the U.S." that consists of a wetland swale and a seasonal wetland centrally located within the project site at the time of the November 9, 2018 wetland delineation. Barnett Environmental provided Panattoni Development Company, Inc. with the updated W/BRA document on December 13, 2018 to reflect these updated findings, as well as an updated CADD wetlands layer, which was (unfortunately) only recently (March 2020) applied to the civil engineering drawings to reflect current wetland conditions.*

Question 2: Arborist summary refers to Sacramento County requirements (page 8), while the report (attachment) itself refers to the City of Roseville. The report (attachment) includes a list of trees with no map.

Response: *Sierra Nevada Arborists (SNA) prepared the arborist report, not Barnett Environmental. Consequently, any modification of these findings and report would need to be made by SNA.*

Question 3: The summary illustration does not show trees on Parcel 4 and shows the development boundary as just the southern portion of the site (page 11). Need a tree and shrubby inventory for Parcel 4.

Response*: Figure 5 – Tree Survey Map – on page 11 of the W/BRA does include Barnett's tree inventory of Parcel 4 for Phase 1 development as demonstrated by the dashed yellow lines labeled development boundary. Barnett Environmental conducted another tree and shrubby*

survey on March 20th of 2020 to confirm what was surveyed back in November 2018. The result of the botany survey is shown in the new Figure 8 – Vegetation Map – of the W/BRA. Our biologist identified six coyote brush shrubs (Baccharis pilularis), two Calley pear trees (Pyrus calleryana), seven cottonwood trees (Populus fremontii), and three gray pine trees (Pinus sabiniana) during this more recent survey.

Question 4 : On page 3, the parcel numbers and acreages have changed

Response: *The parcel numbers and acreages within the December 2018 W/BRA reflect what the proposed development was at that time by Panattoni Development Company, Inc. Our document states the existing conditions of the project and the project site at the time of our surveys.*

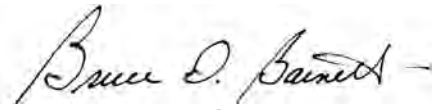
As the W/BRA is merely a description of current biological and wetland resources on the site, a change in the project scope of work following our 2018 publication of this document was naturally not reflected in the document.

Barnett Environmental has, however, updated the December 2018 Wetlands & Biological Resources Assessment to include Section 5.3 – Best Management Practices (BMPs) – to be implemented in Phase 1 of the development of the parking lot and bridge crossing to avoid any/all impacts to the seasonal wetland and wetlands swale.

Please do not hesitate to contact me with any questions or to otherwise discuss the results of this survey or response to comments.

Thank you for the opportunity to work with you on this project.

Sincerely



Bruce D. Barnett, Ph.D.
Owner/Principal

Attached to this memo, please find:

- Figure 8 – Vegetation Map
- Wetlands & Biological Resource Assessment

FIGURE 8- VEGETATION MAP

PANATTONI FOOTHILLS • PLACER COUNTY, CA

Date: March 24, 2020

Attachment 2

(Updated) Wetlands & Biological Resources Assessment (W/BRA) of Panattoni's Foothills Boulevard Project (APN 017-232-019) in Roseville, CA 95747

Prepared By:

BARNETT ENVIRONMENTAL

Prepared For:
Panattoni Development
Sacramento, CA

Attachment 2

Table of Contents

FIGURES

TABLES

ATTACHMENTS

1.0 Introduction

Barnett Environmental biologists conducted a Biological Resources Assessment (BRA) of the northern 26.8-acre portion of a 51.52-acre APN 017-232-019 at approximately 8001 Foothills Blvd in Roseville, California – between Blue Oaks and Pleasant Grove Boulevards – on behalf of the Panattoni Development Company, Inc. The Study Area is in Section 21 (Township 11 North, Range 6 East) of the Roseville, California 7.5-minute USGS quadrangle (Figure 1) and is bordered by Foothills Boulevard on the west, a FedEx Ground facility to the north, TSI Semiconductors to the south, and Southern Pacific Railroad tracks and Industrial Blvd to the east. Panattoni is currently constructing a commercial project (PROJECT 1) on the adjoining, southern two-thirds of the parcel.

The Foothills Blvd Study Area is a relatively flat area at 128-144 feet above mean sea level (msl) and centered at approximately 38° 47' 44" North latitude and 121° 18' 11" West Longitude in the Lower American River Watershed (HUC 18020111).

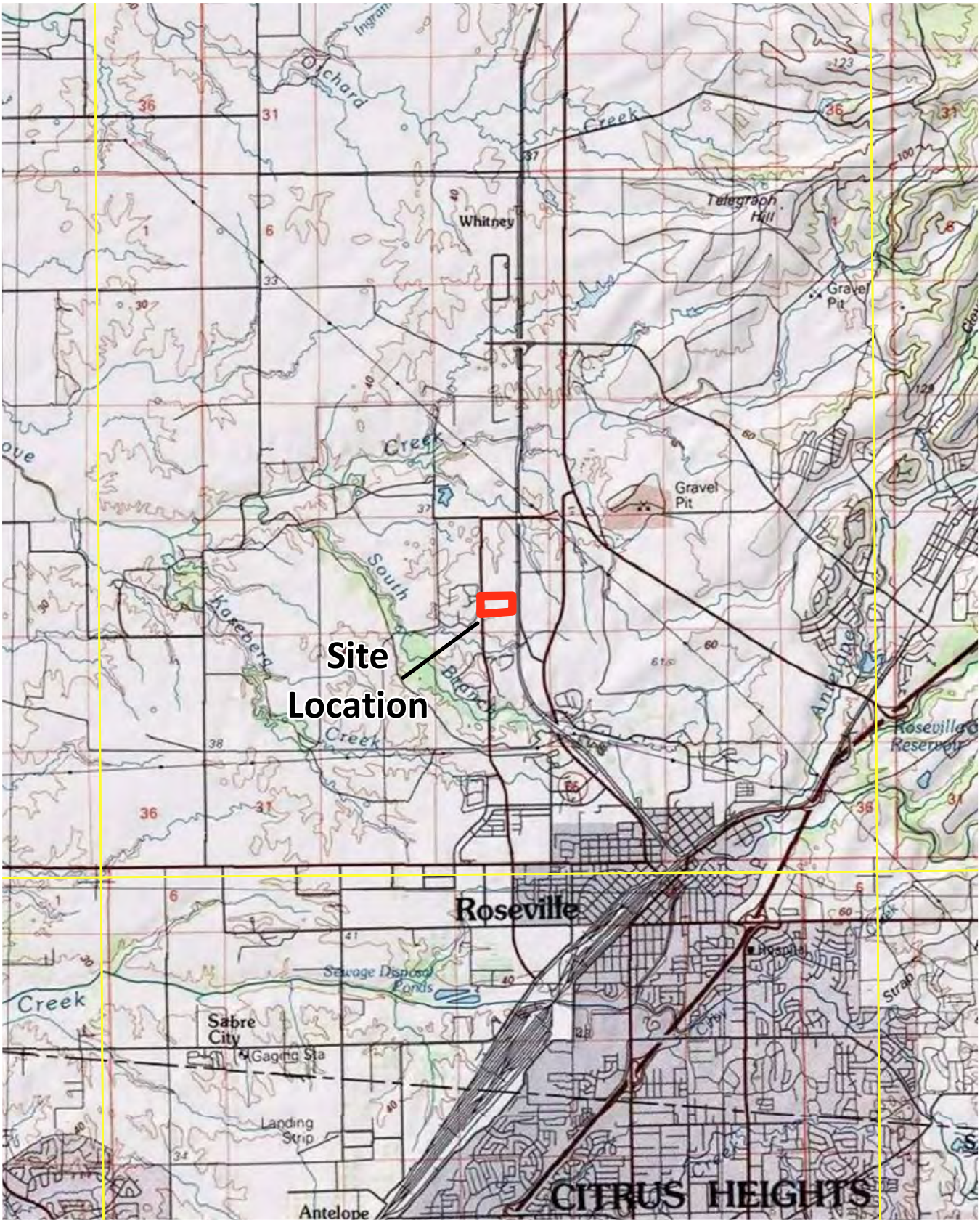
- Beyond recording the results of a jurisdictional wetlands delineation, this report:Identifies and describes the vegetation communities present;
- Records all plant and animal species observed during the field survey(s);
- Evaluates and identifies sensitive habitats and special status plant and animal species that may occur in the Study Area and could be affected by project activities; and
- Provides conclusions and recommendations for mitigating potential adverse impacts to identified resources.

2.0 Methodology

We queried both the U.S. Fish & Wildlife Service's National Wetland Inventory (NWI; Figure 2) and Ecoatlas' *California Aquatic Resources Inventory* (CARI; Figure 3) to determine whether any wetlands or "other waters of the U.S." or "waters of the State" had been previously recorded on or around the site. We then performed a jurisdictional wetland delineation of this Study Area in accordance with the 1987 U.S. Army Corps of Engineers (Corps) *Wetlands Delineation Manual* and its 2008 *Arid West Region Regional Supplement*. We prepared the current report in accordance with the Sacramento District U.S. Army Corps of Engineers' January 2016 *Minimum Standards for Acceptance of Preliminary Wetlands Delineations*.

We performed a Level 3, routine onsite determination – as defined in the 1987 *Wetlands Delineation Manual* – that evaluates three parameters that identify and determine the boundaries of jurisdictional wetlands and "other waters of the U.S." including: (1) the dominance of wetland vegetation; (2) the presence of hydric soils; and (3) hydrologic conditions that result in periods of inundation or saturation on the surface from flooding or ponding. We also referenced the:

We used *The Jepson Manual: Higher Plants of California* to identify vascular plant species observed during the field delineation;
The *National List of Plant Species That Occur in Wetlands: California (Region 0)* to determine the wetland



Source: USGS 7.5-Minute Series Topographic Map - Roseville Quadrangle

FIGURE 1: VICINITY MAP

Not to Specific Scale

N

FOOTHILL BLOUEVARD PROPERTY • PLACER COUNTY, CALIFORNIA

Date: March 8, 2017

BARNETT ENVIRONMENTAL

Attachment 2

U.S. Fish and Wildlife Service
National Wetlands Inventory

January 27, 2017

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

FIGURE 2: NATIONAL WETLANDS INVENTORY MAP

Not to Specific Scale

N

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FOOTHILL BOULEVARD PROPERTY • PLACER COUNTY, CALIFORNIA

Date: Janurary 30, 2017

Attachment 2

Legend

- Pond and Associated Vegetation
- Lake, Reservoir and Associated Vegetation
- Playa
- Project Boundary
- Fluvial Channel
- Slope and Seep Wetlands
- Vernal Pool

FIGURE 3: CALIFORNIA AQUATIC RESOURCES INVENTORY

Not to Specific Scale

N

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January 30, 2017

BARNETT ENVIRONMENTAL

indicator status of each plant species observed; and The *NRCS* Web Soil Survey and *Hydric Soil Map Units* for Placer County, California to identify soil types within the Study Area.

The November 9, 2018 field wetland delineation involved collection of detailed data on vegetation, soils, and hydrologic site characteristics within the Study Area to identify the upland/wetland boundaries of each identified feature and mapping of perimeters of all drainages and depressions on foot using a Trimble GeoXH$_{TM}$ GPS unity with sub-meter accuracy.. Besides identifying vascular plants at each sampling location, we also recorded the:

1. Percent dominance of hydrophytic vegetation;
2. Presence/absence of positive hydrologic indicators (e.g., sediment deposits, biotic crust, drainage patterns); and
3. Soils (via soil test pit) to determine composition, matrix color, and the presence of redoximorphic concentrations (e.g., mottles).

As a first step in assessing the Study Area's biological resources, we queried the following online resources:

1. California Department of Fish & Wildlife's Natural Diversity Database (RareFind 5) for observations of special status plant and animal species in the surrounding Roseville USGS 7.5' quadrangle (Table 2),
2. U.S. Fish and Wildlife Service's iPac Database of federally-listed special status species in Placer County, and
3. The California Native Plant Society's Inventory of Rare & Endangered Plants in California.

Barnett Environmental biologists previously surveyed the Study Area on January 16, 2017 for special status plant and/or wildlife species and their habitats that could be supported onsite and recorded observations of: (1) dominant plant communities, (2) plant and animal species (with emphasis on rare and endangered species) observed or their sign (nests, burrows, tracks, scat) and (3) the suitability of onsite habitats and those immediately adjoining the Study Area to support special status plant or animal species. We used generalized plant community classification schemes to classify onsite habitat types (Sawyer, Keeler-Wolf, and Evens, 2009).

Barnett biologists also conducted weekly raptor and migratory bird nesting surveys on the entire 56+-acre APN – from March 14th through April 17, 2017 – where we identified nest structures on and within a 500-foot radius around the APN. Each nest was photographed (Attachment H) and examined to determine whether it currently supported active breeding. Nests not currently supporting eggs or otherwise occupied by a breeding pair were removed to accommodate imminent development of the southern 2/3 of the site.

Barnett contracted Helm Biological Consulting (HBC) to collect two (February 1 & March 4, 2017) wet-season samples of federally listed as threatened or endangered vernal pool branchiopods (fairy shrimp [*Branchinecta lynchi*] and tadpole shrimp [*Lepidurus packardi*] under permit TE-795930-8 of Section 10(a)(1)(A) of the federal Endangered Species Act, 16 U.S.C. 1531 et seq., and its implementing regulations (Attachment A). Methods generally followed USFWS's Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods (1996).

Barnett also contracted Sierra Nevada Arborists to prepare an *Arborist Report & Tree Inventory* of trees four inches or greater in diameter at breast height ("DBH") within and/or overhanging the proposed project site,

concentrating on those native trees requested by the Sacramento County Department of Environmental Review and Assessment ("DERA") in their January 25, 2008 *Arborist Report Requirements* (Attachment B). These trees include native oaks (*Quercus* sp.), California sycamore (*Platanus racemosa*), northern California black walnut (*Juglans hindsii*), Oregon ash (*Fraxinus latifolia*), Goodding's black willow (*Salix gooddingii*), California box elder (*Acer negundo* var. *californicum*), white alder (*Alnus rhombifolia*) and California buckeye (*Aesculus californica*).

3.0 Existing Conditions

3.1 Soils

The Natural Resources Conservation Service (NRCS) has mapped the entire Study Area's soils as *Cometa-Fiddyment Complex*, 1 to 5 percent slopes (Figure 4). This map unit generally occupies low terrace landforms with undulating microtopography, and consists of approx. 35 percent Cometa soil on younger land surfaces and 35 percent Fiddyment soil on older surfaces.

- The Cometa is a deep, well-drained claypan soil that formed in alluvium, mainly from granitic sources. Typically, the surface layer is brown sandy loam about 18 inches thick. The subsoil is brown clay. At a depth of about 29 inches is compacted very pale brown sandy loam.
-
- The Fiddyment is a well-drained soil that is moderately deep over a hardpan; it formed in old valley fill siltstone. Typically, the surface layer is light yellowish brown loam and silt loam about 12 inches thick. The subsoil is yellowish brown and brown dense clay loam. At a depth of 28 inches is silica-indurated siltstone.
-
- Also included in this map unit are smaller areas of San Joaquin sandy loam (10% of total area), Kaseberg loam (10%), Ramona sandy loam on scattered narrow ridges (5%), and Alamo clay in some drainageways and basins (5%).

"Cometa-Fiddyment Complex, 1 to 5 percent slopes" appears on the Hydric Soils List for Placer County, California, Western Part because it includes small areas of Alamo clay in depressions. The Alamo is a poorly drained soil with a duripan at a depth of 20 to 40 inches. The other soil types in this map unit are non-hydric.

Historical satellite imagery (Google Earth) indicates that between the years 1998 and 2002 there was extensive earthmoving and grading activity on this site, with associated soil disturbance. During this time period, a large mound or small hill of spoil material was deposited in the north-central part of the study area. In the northeastern portion of the site, the terrain and associated soil profile remained undisturbed.

3.2 Hydrology

The Study Area lies within the Lower American watershed (HUC 18020111) and receives water in the form of direct precipitation and runoff from surrounding uplands and hardscape surfaces. Rainfall in Roseville averages 20.45 inches per year with most of this occurring in the winter months (November – March) followed by a long dry season (April – October).

An unnamed, intermittent drainage (tributary to the South Branch of Pleasant Grove Creek) enters the property on the eastern side and traverses the site in a southwesterly direction, eventually passing through a culvert under Foothills Boulevard. This shallow drainage feature clearly existed prior to the earthmoving and grading activity described earlier (see 3.1, Soils), because it can be seen in the 1992 edition of the USGS Roseville 7.5' topo quad, as well as the GE image dated 22 May 1993. No surface water was present during the site visit on 09 November 2018, but there was evidence of wetland hydrology (still-green vegetation indicating subsurface moisture) in the area near the eastern boundary (where the drainage first enters the property).

An upland swale was seen in the northeastern part of the site, at the eastern base of the large mound or small hill of spoil material described earlier (see 3.1, Soil). This swale drains in a southerly direction, eventually entering the intermittent drainage described above. This swale lacks a clearly defined channel, and no hydrologic indicators were observed.

Several shallow depressions were seen on the flat just north of the intermittent drainage and appear to be artifacts of past earthmoving and grading activities on the site. These depressions are mostly very small and are likely inundated for short periods after heavy winter rains.

3.3 Vegetation Communities

The Study Area occupies gently rolling terrain along the eastern edge of the *Sacramento Valley* subdivision of the California Floristic Province (Baldwin et al., 2012). Vegetation over most of the site consists of non-native, annual grassland dominated by Medusa-head grass (*Taeniatherum caput-medusae*) with widely scattered coyote brush (*Baccharis pilularis*). Other common non-native plants include soft chess (*Bromus hordeaceus*), winter vetch (*Vicia villosa*), yellow star-thistle (*Centaurea solstitialis*), and Italian thistle (*Carduus pycnocephalus*). Also commonly observed was a summer-flowering native annual, the pitgland tarplant (*Holocarpha virgata* subsp. *virgata*).

A complete list of vascular plant species observed during the site visit on 09 November 2018 is provided in Appendix C.

Trees in the study area consist of landscape plantings generally grouped by species, including cottonwood (*Populus* sp.), poplar (*Populus* sp.), willow (*Salix* sp.), deodar cedar (*Cedrus deodara*), Aleppo pine (*Pinus halepensis*), and sycamore (*Platanus racemosa*) (Figure 5). All the trees appeared "stressed" and in need of maintenance, with some requiring removal due to the degree of decline and/or structural defects. There were no native oak trees observed on-site, and none of the exotic, landscape trees observed are protected under the City of Roseville's tree preservation ordinance.

3.4 Wildlife and Their Habitats

Wildlife species likely to use the Study Area include those species adapted to annual grasslands, including reptiles such as the western fence lizard (*Sceloporus occidentalis*), common garter snake (*Thamnophis sirtalis*), and western rattlesnake (*Crotalus viridis*). Mammals using this habitat include black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Spermophilus beecheyi*), western harvest mouse (*Reithrodontomys megalotis*), and California vole (*Microtus californicus*). Common birds found here include the western scrub jay (*Aphelocoma californica*), western meadowlark (*Sturnella neglecta)*, killdeer (*Charadrius vociferus*), and western kingbird

Attachment 2

Map Scale: 1:2,470 if printed on A landscape (11" x 8.5") sheet.

Meters
0 35 70 140 210

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84

Placer County, California, Western Part (CA620)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
141	Cometa-Fiddyment complex, 1 to 5 percent slopes	26.8	100.0%
Totals for Area of Interest		**26.8**	**100.0%**

FIGURE 4:SOILS IN PROJECT VICINIT Y

N

BARNETT ENVIRONMENTAL

FOOTHILLS BOULEVARD PROJECT • PLACER COUNTY, CALIFORNIA

Date: January 30, 2017

Attachment 2

Vincinity Map

Legend

- Aleppo Pine
- Cottonwood / Poplar
- Coyote Brush
- Deodora Cedar
- Sycamore
- Willow
- Development Boundary

0 250 500
Feet

Scale - 1:2,400
1" = 200' @ 11 x 17 Sheet Size

Data Source: Barnett Environmental
Image Source:Google Earth, 04/05/2014
Projected Coordinate System: NAD 1983 State Plane CA II

FIGURE 5: TREE SURVEY MAP

Not to Specific Scale

N

BARNETT ENVIRONMENTAL

FOOTHILL BLOUEVARD PROPERTY • PLACER COUNTY, CALIFORNIA

Date: March 8, 2017

(*Tyrannus verticalis*). Raptors such as the burrowing (*Athene cunicularia*) and short-eared owl (*Asio flammeus*), northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*) black-shoulder kite (*Elanus axillaris*), and the prairie falcon (*Falco mexicanus*) are also typical of annual grasslands in this area.

3.4.1 Nesting Birds

A total of 12 nest structures were encountered on the site – 6 corvid (blue jay, crow, magpie or similar), 5 passerine, and 1 hummingbird. None of these nests contained eggs at the time(s) of the survey(s), though four of the nests did show some signs of active refurbishment in anticipation of breeding. These nests were removed to ensure no subsequent occupation of the development area by nesting birds.

3.5 Wetlands and "Other Waters of the U.S"

We mapped a total of 0.391 acre of wetlands and "other waters of the U.S." within the Study Area (see Table 1 and Figure 6)

Table 1 Mapped Wetlands by Type

Label	Name	Area (SF)	Area (acres)
WS-1	**Wetland** Swale	12,193	0.28
SW-2	**Seasonal Wetland**	4,826	0.111
	Total	**17,022**	**0.391**

Delineation Table

Description	Area (sf)	Area (AC)
Seasonal Wetland	4,829	0.111
Wetland Swale	12,193	0.280
Total	**17,022**	**0.391**

Data Points

- Upland
- Wetland
- Culvert
- Study Area (26.83 acres)

Wetlands

- Seasonal Wetland (SW-2)
- Wetland Swale (WS-1)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Field data collected November 9, 2018. Scale 1:1,800, original report. 11/26/2018

FIGURE 6 - PROJECT AREA WETLANDS AND "OTHER WATERS OF THE U.S."

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BARNETT ENVIRONMENTAL

Weltand Swale (0.28 acre; WS-1) - A single wetland swale enters the Study Area at its northeast corner and flows in a southwesterly direction, exiting the site through a culvert under Foothills Blvd. This low-gradient drainage feature supports a mix of wetland and u pland plant species;

- Wetland plant species: common spikerush (Eleocharis macrostachya, OBL), tall flatsedge (Cyperus eragrostis, FACW) Mexican rush (Juncus mexicanus, FACW), rabbit's-foot grass (Polypogon monspeliensis, FACW), perennial ryegrass (Festuca perennis, FAC), Mediterranean barley (Hordeum marinum subsp. gussoneanum, FAC), and curly dock (Rumex crispus, FAC).
- Upland plant species: Medusa-head grass, soft chess (FACU), Fitch's tarweed (Centromadia fitchii, FACU), and pitgland tarweed (UPL).

Portions of this wetland swale have a shallow but well-defined channel whilst in other sections the channel is broader and poorly defined. In the central portion of the site, the channel is ± straight and extremely narrow (< 3 feet wide). In one place, it passes through a small culvert approx. 25 feet long.

Seasonal Wetland (0.111 acre) – Feature SW-2 is centrally located on the site, on a flat to the north of the wetland swale but south of the large mound or small hill of spoil material remaining from earlier earthmoving and grading activities. The seasonal wetland is formed in a shallow depression that is long and narrow in outline (approx. 175 feet long × 20–30 feet wide) and appears to be man-made (i.e., as a result of scraping by a grader or bulldozer). Plant cover on the dried bed of this depression is patchy or sparse but includes some obligate wetland species such as common spikerush and selfing willow-herb (*Epilobium cleistogamum*), with Fitch's tarplant (FACU) also frequent. Perennial rye-grass (FAC) is dominant in some shallower areas near the margins.
Two smaller, temporarily inundated depressions were also seen in the area north of the wetland swale, but hydrophytic vegetation was not associated with either of these features at the time of the site visit (even though the soils may be hydric and there is evidence of wetland hydrology). The first of these isolated depressions is located about 250 feet west-southwest of feature SW-2, and is identifiable as a patch of mostly bare ground with some noticeable cracks formed as the soil dried. At the time of the site visit, the only vegetation was a sparse cover of Fitch's tarplant (FACU). The second small depression (represented by sampling point DP-2a) is located approx. 110 feet east-northeast of feature SW-2, and is surrounded by an upland swale (sampling point DP-2b). The dried bed of this depression was mostly barren with sparse vegetation cover dominated by Fitch's tarplant (FACU) and Mediterranean barley (FAC).

4.0 Special Status Species

Special status species are those that fall into one or more of the following categories:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for listing),
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing),
- Designated a Species of Concern by the Sacramento District of the U.S. Fish and Wildlife Service,
- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code,
- Designated as a Species of Concern by the California Department of Fish and Game,

- Defined as rare or endangered under the California Environmental Quality Act (CEQA), or
- Occurring on List 1 or 2 maintained by the California Native Plant Society.

Five plant species could potentially occur within the Study Area or vicinity, including big-scale balsamroot (Balsamorhiza macrolepis var. macrolepis), hispid salty bird's-beak (Chloropyron molle ssp. hispidum), dwarf downingia (Downingia pusilla), red bluff dwarf rush (Juncus leiospermus var. leiospermus), and legenere (Legenere limosa).

Nine (9) special status animal species could also potentially occur in this area, including the: Valley elderberry longhorn beetle (Desmocerus californicus dimorphus); vernal pool fairy shrimp (Branchinecta lynchi); vernal pool tadpole shrimp (Lepidurus packardi); conservancy fairy shrimp (Branchinecta conservatio); western spadefoot toad (Spea hammondii); tricolored blackbird (Agelaius tricolor); white-tailed kite (Elanus leucurus); Swainson's hawk (Buteo swainsoni); and western burrowing owl (Athene cunicularia).

A query of the California Natural Diversity Database (Rarefind 5) resulted in a 1958 big-scale big-scale balsamroot record and 1995 vernal pool fairy shrimp record in the Study Area itself (Attachment F) and several other recorded species occurrences nearby (Figure 7).

Table 2: Special Status Species with Potential to Occur in the Study Area

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
Plants					
Big-scale balsamroot *Balsamorhiza macrolepis var. macrolepis*	-	-	1B	Valley and foothill grassland, cismontane woodland. Sometimes on serpentine. 15-3300 feet in elevation.	Possible. While there is suitable habitat for this species onsite, none were observed during field surveys. There is a single (1958) CNDDB recorded occurrence along the RR tracks immediately east of the Study Area.
Hispid salty bird's-beak *Chloropyron molle ssp.hispidum*	-	-	1B	Meadows and seeos, playas, valley and foothill grasslands on serpentine soil substrates.	Unlikely. The Study Area lacks preferred serpentine soils and the species was not observed during the field survey, There is a single (1997) CNDDB recorded occurrence approximately 2.5 miles northeast of the Study Area.

Species	Federal	State	CNPS	Habitat	Rationale for Assessing Potential of Occurrence
Plants					
Dwarf downingia *Downingia pusilla*	-	-	2B	Valley and foothill grassland and vernal pools.	Possible. There is suitable habitat for this species onsite, though none were observed during field surveys. There is a (1985) CNDDB recorded occurrence approximately ½ mile east of the Study Area.
Red bluff dwarf rush *Juncus leiospermus var. leiospermus*	-	-	1B	Chaparral, valley and foothill grasslands, cismontane woodlands, vernal pools, meadows and seeps.	Possible. There is suitable habitat for this species onsite, though none were found during field surveys. There is a single (1997) CNDDB recorded occurrence approximately 1 mile north of the Study Area.
Legenere **Legenere limosa**	-	-	1B	Wet areas, vernal pools, and ponds within valley grasslands, freshwater wetlands, and riparian areas.	Unlikely. There is suitable habitat for this species onsite, though none were found during field surveys. There is a single (1997) CNDDB recorded occurrence approximately 2 miles northeast of the Study Area.
Insects					
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	-	-	Riparian and oak woodlands. Requires the presence of blue or Mexican elderberry shrubs.	Absent: Study Area lacks suitable habitat (i.e. riparian and oak woodlands). Additionally, no elderberry shrubs were observed during the field survey.
Invertebrates					
Vernal pool fairy shrimp *Branchinecta lynchi*	FE	-	-	Valley and foothill grasslands and vernal pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Possible. There is suitable habitat for this species onsite, though no fairy shrimp were found during the 2016/17 wet-season field sampling surveys. There is a single (1995) CNDDB recorded (generalized) occurrence in the northwest portion of the Study Area.

Species	Federal	State	CNPS	Habitat	Rationale for Assessing Potential of Occurrence
Invertebrates					
Conservancy fairy shrimp *Branchinecta conservatio*	FE	-	-	Endemic to the grasslands of the northern two-thirds of the Central Valley in large pools or swales.	Possible: There is suitable habitat for this species onsite, though none were found during the wet-season field sampling surveys and there are no recorded CNDDB occurrences in the vicinity.
Vernal pool tadpole shrimp *Lepidurus packardi*	FE	-	-	Valley and foothill grassland and vernal pools commonly found in grass bottomed swales of unplowed grasslands in the Sacramento Valley containing clear to highly turbid water.	Possible. There is suitable habitat for this species onsite, though no tadpole shrimp were found during the wet-season field sampling surveys and onsite depressions are not deep. The nearest (1995) CNDDB record of the species is from between Kaseberg Creek & south branch Pleasant Grove Creek; about 0.6 mile SW of Foothills Blvd @ Pleasant Grove Blvd.
Amphibians and Reptiles					
Western spadefoot toad Spea hammondii	-	CSC	-	Found in grasslands, scrub, chaparral, and oak woodlands within the central valley	Possible: There is suitable habitat for this species onsite, though none were found onsite in 2017 during their preferred breeding season (Jan-Apr). There is a single (1991) CNDDB recorded occurrence approximately 1.2 miles southwest of the Study Area.
Birds					
Tricolored blackbird Agelaius tricolor	-	CE	-	Freshwater marsh, swamp, and wetlands. Most numerous in Central Valley and vicinity. Requires open water, protected nesting substrates, & foraging area with insect prey within a few km. of the nest.	Likely Absent. The Study Area lacks suitable nesting substrate. No tricolored blackbirds were observed during field surveys and there are no CNDDB recorded occurrences nearby.

Species	Federal	State	CNPS	Habitat	Rationale for Assessing Potential of Occurrence
Birds					
Western burrowing owl Athene cunicularia	-	CSC	-	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Likely Absent. Potential suitable habitat (i.e. annual grasslands), no ground squirrel or jackrabbit burrows observed that could provide burrowing owl nest sites. There are no CNDDB recorded occurrences of this species within five miles of the Study Area.
Swainson's hawk Buteo swainsoni	-	CT	-	Nests in riparian forests and woodlands, and oak savannas in the Central Valley and forages in grasslands and agricultural row crops.	Possible (foraging only). The Study Area contains annual grasslands, though no possible nest trees. Swainson's hawks were not observed on or over the site during field surveys. There are two CNDDB recorded occurrences within two miles of the Study Area.
White-tailed kite Elanus leucurus	-	CFP	-	Open grassland, meadows, and farmlands. Nests in tall trees near foraging areas.	Possible (foraging only): The Study area contains the required open grassland foraging habitat, though the species was not observed during field surveys. There is a recorded CNDDB occurrence within one mile of the Study Area.

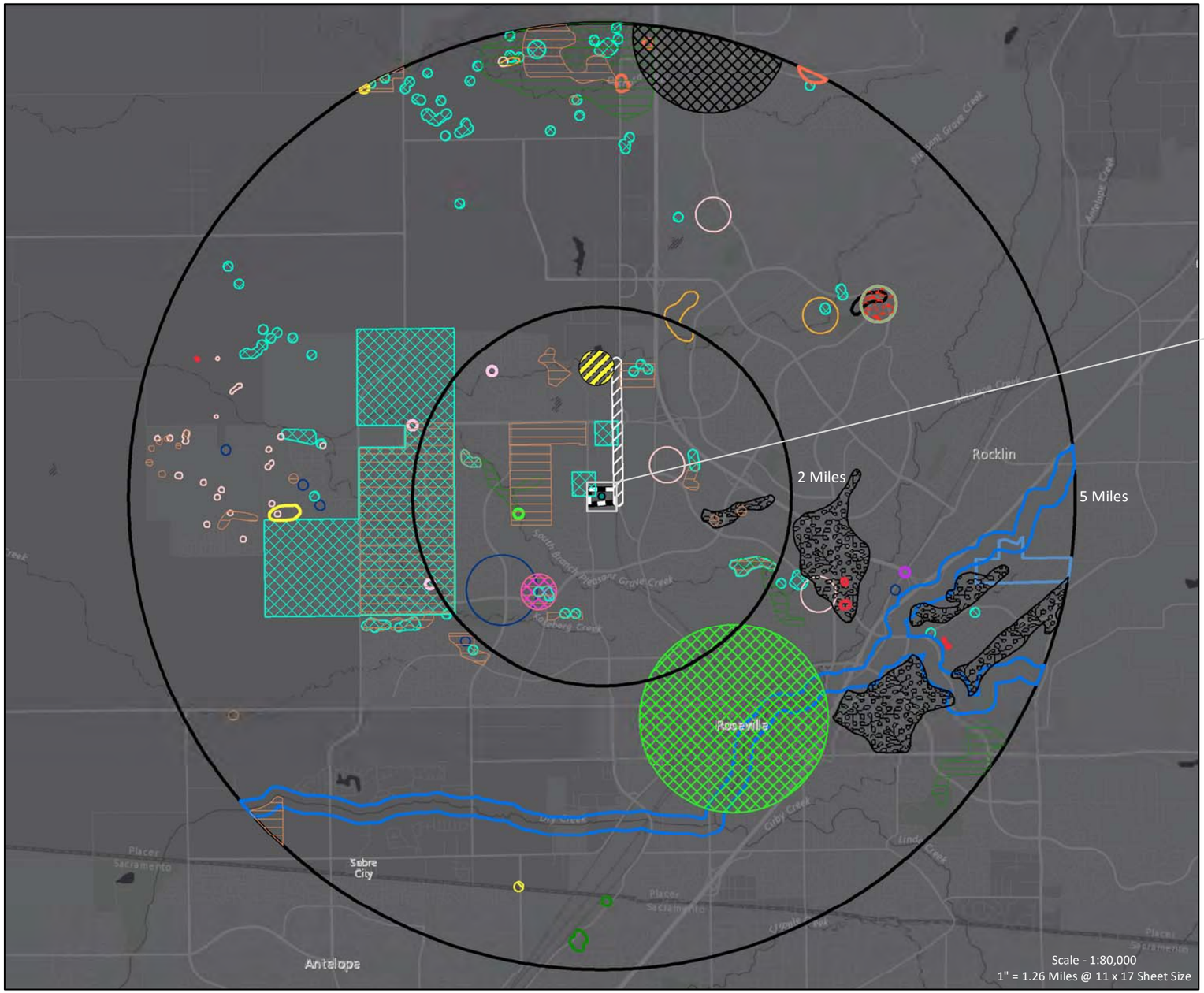
Special Status Species Codes:

Federal: *FE = Federal Endangered* *FT = Federal Threatened*

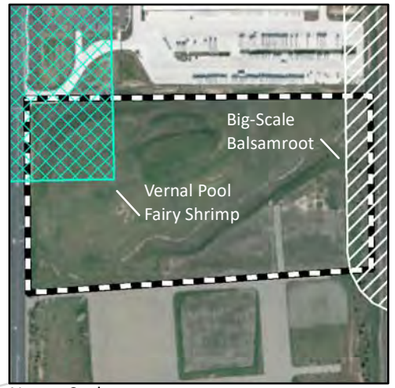
State: *CSC = California Species of Concern* *CE = California Endangered*

CFP = California Fully Protected *CT = California Threatened*

CNPS: *1B = Rare or threatened in CA and elsewhere* *2B = Rare, threatened, or Endangered in CA, but more common elsewhere*



Detail Map



Not to Scale

Vincinity Map

Not to Scale

Legend

- Alkali Meadow
- Alkali Seep
- Boggs Lake Hedge-Hyssop
- California Linderiella
- Northern Hardpan Vernal Pool
- Northern Volcanic Mud Flow Vernal Pool
- Red Bluff Dwarf Rush
- Ricksecker's Water Scavenger Beetle
- Sanford's Arrowhead
- Swainson's Hawk
- An Andrenid Bee
- Big-Scale Balsamroot
- Burrowing Owl
- Dwarf Downingia
- Hispid Salty Bird's-beak
- Legenere
- Purple Martin
- Steelhead - Central Valley DPS
- Stinkbells
- Tricolored Blackbird
- Valley Elderberry Longhorn Beetle
- Vernal Pool Fairy Shrimp
- Vernal Pool Tadpole Shrimp
- Western Spadefoot
- White-Tailed Kite
- Study Area

FIGURE 7: CALIFORNIA NATIONAL DIVERSITY DATABASE

FOOTHILL BLVD PROJECT • PLACER COUNTY, CALIFORNIA

Date:February 9, 2017 Scaled to Fit

BARNETT ENVIRONMENTAL

4.1 Critical Habitat for Special Status Species

The Federal Endangered Species Act (FESA) requires the federal government to designate critical habitat for any listed species. Critical habitat is defined as: (1) specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation, and those features may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. According to the there is no designated critical habitat within the Study Area (Attachment G).

4.2 Special Status Plants

Five special status plant species could occur within the Study Area according to the California Native Plant Society, including big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), hispid salty bird's-beak (*Chloropyron molle ssp. hispidum*), dwarf downingia (*Downingia pusilla*), red bluff dwarf rush (*Juncus leiospermus var. leiospermus*),and legenere (*Legenere limosa*).

4. **Big-scale balsamroot** (*Balsamorhiza macrolepis* var. *macrolepis*) – is a herbaceous perennial member of the sunflower family (Asteraceae) It has no state or federal status, but it is on the CNPS List 1B.This species has large yellow flowering heads and leaves that arise from the ground. It differs, in part, from other balsam-roots by having coarsely serrate leaves. It blooms from March to June at elevations ranging from 420 to 510 feet in a variety of habitats including chaparral, cismontane woodland and valley and foothill grasslands, often on serpentine soil substrates. The species is threatened primarily by grazing. This species was not observed during the January 2017 biological field survey (Figure 7), though there is a single CNDDB (1958) recorded occurrence of big-scale balsamroot approximately 0.12 miles to the west of the Study Area, along the railroad tracks.

5. **Hispid salty bird's-beak** (*Chloropyron molle ssp. hispidum*) – is a herbaceous annual member of the broomrape family (Orobanchaceae) It has no state or federal status, but it is on the CNPS List 1B. This species has nonglandular, hairy, grey-green stems (4 to 16 inches long) and leaves with white and purple inflorescence. It blooms from June through July at elevations ranging from 420 to 510 feet in a variety of habitats including meadows, seeps, playa, and valley and foothill grasslands, often on serpentine soil substrates. The species is threatened by grazing and urbanization. This species was not observed during January 2017 field survey. There is a single CNDDB record approximately three miles northeast of the Study Area (Figure 7).

6. **Dwarf downingia** (*Downingia pusilla;* CNPS List 2B.2) – is a small erect annual member of the bellflower family (Campanulaceae). It has no state or federal status, but it is on the CNPS List 2B (i.e. rare, threatened, or endangered in CA, but more common elsewhere). It can be found in valley and foothill grasslands as well as vernal pools of the Sacramento Valley. It blooms from March to May at elevations ranging from 3 to 1,500 feet. Urbanization, development, agriculture, grazing, non-native plants, vehicles, and industrial forestry threaten it. This species was not observed during January 2017 field survey (Figure 7). There are twelve CNDDB-recorded occurrences of this species within five miles, with the nearest sighting approximately half a mile northeast of the Study Area.

7. **Red bluff dwarf rush** (*Juncus leiospermus var. leiospermus*) – is a small erect annual member of the rush family (Juncaeae). It has no state or federal status, but it is on the CNPS List 1B. It can be found in vernal pool margins, chaparral, and woodland. It blooms from April to June at elevations ranging from 920 to

1,640 feet. This pale to red-brown erect plant species has main stems ranging from 0.7 to 4.5 inches long. The inflorescence consists of head-like clusters of two to seven florets that range from green to brown or purple-black. This species is threatened by urbanization, development, agriculture, grazing, and non-native plants. This species was not observed during the biological assessment conducted in January 2017 (Figure 7). According to CNDDB, there are no recorded occurrences of this species within five miles of the Study Area.

Legenere (*Legenere limosa*) – is an annual herb of the bellflower family (Campanulaceae). It has no state or federal status, but is on the CNPS List 1B. This is an erect plant species with main stems ranging from four to twelve inches long. The leaves are produced underwater and are approximately a half an inch to an inch long and triangular in shape. The inflorescence in made of white or yellow flowers less than a quarter inch long. It blooms from April to June within vernal pool habitats or moist habitat at elevations below 2000 feet. It is threatened by grazing, road widening, non-native plants, and development. This species was not observed during the biological assessment conducted in January 2017 and the CNDDB contains recorded three recorded occurrences of legenere within five miles with the nearest sighting two miles north of the project site (Figure 7).

4.3 Special Status Wildlife

Federally Listed Species

While four federally listed animal species was found during our January 2017 surveys, three have the potential to occur within the Study Area or surrounding vicinity (CNDDB, Table 2). These include:

1. **Valley elderberry longhorn beetle** (*Desmocerus californicus dimorphus)* – This beetle is listed as threatened by the U. S. Fish and Wildlife Service. Live blue elderberry shrubs (Sambucus mexicana) are this borer's exclusive host plant. Elderberry shrubs are primarily associated with riparian corridors and moist oak woodlands at elevations below 2,500 feet. Exit holes made by the emerging adults are distinctive small oval openings (approx. ¼-inch width). Adults eat elderberry foliage until about June when they mate. Females lay eggs in crevices in the bark before dying a short time later. Upon hatching the larvae then begin to tunnel into the tree where they spend one-two years eating the interior wood, which is their sole food source. This species was not observed during the biological assessment conducted in January 2017 and the CNDDB report revealed a single recorded occurrence approximately four miles east of the Study Area (Figure 7).
2. **Vernal pool tadpole shrimp** (*Lepidurus packardi)* – This crustacean, listed as endangered by the U.S. Fish and Wildlife Service, is generally five centimeters long and occurs in deeper vernal pools with clear-to-turbid water. Their eggs are drought-tolerant cysts that hatch within three weeks of a pool or swale filling with water. The adults mature around day 38 and are able to reproduce at day 54. The new eggs encyst and bury themselves in the muddy soil. The CNDDB contains one recorded occurrences of tadpole shrimp within approximately one mile south of the Study Area (Figure 7). Additionally, Helm Biological Consulting found no evidence of vernal pool tadpole shrimp during their preliminary wet-season sampling for vernal pool crustaceans in February and March of 2017 (Attachment A).
3. **Vernal pool fairy shrimp** (*Branchinecta lynchi)* – This crustacean, listed as threatened by the U. S. Fish and Wildlife Service, ranges in size from 0.43 to 0.98 inches and occurs in vernal pools, seasonal wetlands and wetland swales through most of the Central Valley to Tulare County. The habitats can be grass- or mud-bottomed, with clear to tea-colored water, and can be underlain by claypan or basalt-flow hardpan in grasslands.

Vernal pool fairy shrimp have a lifespan of two months, from January to early March. Females lay drought-resistant eggs that embed into the soil and hatch the next winter when the pools refill. No fairy shrimp were observed during either of Helms wet sampling surveys in February and March of 2017 (Attachment A). The CNDDB contains twenty four recorded occurrences of fairy shrimp within five miles, with the nearest generalized sighting in the northwestern portion of the Study Area (Figure 7).

4. **Conservancy fairy shrimp** (*Branchinecta conservatio*) – The Conservancy fairy shrimp is listed as endangered by the U.S. Fish and Wildlife Service. This species range in sizes from half an inch to an inch. They have elongated bodies, large staked compound eyes, no carapaces, and eleven pairs of swimming legs. Conservancy fairy shrimp inhabit large cool-water vernal pools throughout large portions of the Central Valley, and southern coastal regions of California. Their diet is comprised of algae, bacteria, protozoa, rotifers, and detritus. Females carry their eggs in a ventral brood sac. Eggs are either dropped to the pool bottom or remain in the broad sac until the mother dies and sinks. When the pool dries out, so do the eggs and when the pools refill, some, but not all, of the eggs may hatch within a week of the pool refilling. Average time of maturity is 49 days and as low as 19 days in warmer water temperatures. No conservancy fairy shrimp were observed during Helm's February and March 2017 preliminary wet season sampling surveys (Attachment and there are no CNDDB recorded occurrences of conservancy fairy shrimp within five miles of the Study Area (Figure 7).

California (State) Listed Species

State listed species are plants and animals that are legally protected under the California Endangered Species Act (CESA). Three such species have the potential to occur in the Study Area:

1. **Tricolored blackbird** (*Agelaius tricolor*) – SSC This California endangered species nests in colonies in the vicinity of freshwater marshes or ponds and prefer heavy growths of cattails, tules or willows. Tricolored blackbirds forage on insects, seeds of grasses and weeds, and waste grain. Nest heights range from a few centimeters in cattail marshes to 1.5 meters above water in freshwater marshes. Their breeding requirements include open accessible water, a protected nesting substrate, and a foraging area with insect pray located within a few kilometers of colony. Breeding occurs from mid-March through early August. The incubation period lasts about 11 days, with the young dispersing about 11-14 days after hatching. No tricolored blackbirds were observed January 2017 field surveys and no suitable nesting habitat occurs onsite. There are three CNDDB recorded occurrences of tricolored blackbirds within five miles of the Study Area, with the nearest sighting approximately four miles southeast (Figure 7).

2. **Swainson's hawk** (*Buteo swainsoni*) – The California threatened Swainson's hawk is a large (1.75 - 2 pounds), broad-winged bird-of-prey (raptor) that frequents open country. It is a long-distance migrator that nests in the Central Valley from March 1 to September 15 and over-winters in Mexico or South America. This hawk forages almost exclusively in agricultural row-crops and grasslands. Its favored prey is voles and small rodents that are more readily available in suitable densities on agricultural lands. Unlike some other local raptors, urban areas or dense vegetation do not provide suitable foraging habitat for this hawk. Sacramento, Yolo, and San Joaquin Counties support most of the Central Valley Swainson's hawk breeding population. Narrow riparian systems and scattered Valley oak trees, combined with suitable agricultural foraging habitat, provide high-quality habitat conditions in Sacramento County, where an estimated 100 pairs nest. Swainson's hawks are monogamous and actively nest from March through July. Nests of twigs and grasses are constructed in

isolated trees or bushes, shelterbelts, riparian groves, or abandoned homesteads, approximately nine to 15 feet above the ground in cottonwood, poplar, oak and the occasional pine tree in the Central Valley. The incubation period is 34 to 35 days, with fledging at about 38 to 46 days. No swainson's hawks or their nests were observed during January 2017 field surveys, though there are three CNDDB recorded occurrences of Swainson's hawk within five miles of the Study Area, with the nearest sighting two miles to the northwest (Figure 7).

3. **White-tailed kite** (*Elanus leucurus*) – The California fully-protected white-tailed kite is a medium-sized raptor (12-15 inches long) with long, narrow, pointed wings and a long white tail. The outer portion of the top of the wings is grey with a black inner portion. This species has a white face and underside with exception of a black spot on the inner portion of each of its wings. Additionally, white-tailed kites have yellow feet and red eyes. Their diet consists of mainly small mammals, as well as some birds, lizards, and insects. This species is commonly found in savanna, open woodlands, marshes, desert grasslands, partially cleared lands, and cultivated fields. Nests are typically found in the upper third of trees found in the open country growing in isolation or at the edge of or within a forest that range in size from 10-160 feet tall. Their nests take the form of a shallow bowl made mostly of small twigs and lined with grass, hay, or leaves. Females usually lay four eggs per clutch with an incubation period of 30-32 days. While the Study Area does contain suitable foraging habitat for the species and there is a single CNDDB occurrence approximately 0.86 mile southeast of the Study Area (Figure 7), no white-tailed kites were observed during the January 2017 field survey.

California (State) Species of Concern

In addition to California rare, threatened, and fully protected species, the CDFW has also identified California Species of Concern (CSC), which could be a species, subspecies, or distinct population of an animal native to California that:

- Is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- Is listed as Federally-, but not State-, threatened or endangered;
- Meets the State definition of threatened or endangered, but has not formally been listed;
- Is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or
- Is part of naturally small populations exhibiting high susceptibility to risk from an factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

The following CSC species, because of their known habitat requirements, have the potential to occur on the Study Area:

1. **Western burrowing owl** (*Athene cunicularia*) – This raptor is found in annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. They are subterranean nesters dependent upon burrowing animals like the California ground squirrel, black-tailed jackrabbit, or gophers to excavate their burrows. Western burrowing owls are opportunistic feeders with a diet consisting of arthropods, small mammals, birds, and amphibians and reptiles. They nest in single pairs and in colonies within underground burrows in grasslands or prairies. The nests are constructed by a wide variety of material, most common being animal dung. Breeding takes place in late March through September in open grasslands or prairies.

Incubation lasts 28-30 days, with young dispersing to nearby burrows in early fall. No western burrowing owls were observed during the January 2017 field survey and there are no CNDDB reported occurrences within five miles of the Study Area (Figure 7).

2. **Western spadefoot toad** (*Spea hammondii)* - This toad is not federally and state listed but is ranked G3S3 which means it's rare and uncommon but not susceptible to extinction. This species has relatively smooth skin that is green or grey in color with orange tipped skin tubercles and a white abdomen. It also has a wedge-shaped black spade on each hind foot. Adults range in size from one and a half inches to three inches long. The western spadefoot prefers grasslands, scrub and chaparral within the central valley but can also occur in oak woodland. Their diet consists of mainly plants, planktonic organisms, and insects such as algae, small invertebrates, moths, grasshoppers, flies, ground beetles, and ants. Reproduction occurs from late winter to the end of March where the females lay numerous, irregular clusters that contain from 10 up to 42 eggs. Eggs hatch in 6 to 21 days and become adults by week 12 of metamorphosis. No western spadefoot toads were observed during the January 2017 field survey, though the CNDDB contains five recorded occurrences of the species within five miles of the Study Area, with the nearest sighting approximately two miles to the southwest (Figure 7). Though these species could potentially use the Study Area vicinity for some portion(s) of their life cycle, our field surveys found no indication of their use of the proposed project area itself.

5.0 Effects of the Proposed Action and Avoidance and Minimization Efforts

5.1 Effects of Proposed Action on Wetlands and "Other Waters of the U.S."

The proposed project could have direct and/or indirect impacts on up to 0.645-acre of wetlands and "other waters of the U.S." that would require U.S. Clean Water Act, Section 404 permitting with the U.S. Army Corps of Engineers and Section 401 Water Quality Certification with the Central Valley Regional Water Quality Control Board. The developer of the property would therefore pursue U.S. Clean Water Act permitting with these resource agencies prior to development of the site and mitigate any losses through purchase of equivalent wetland credits at an approved Mitigation/Conservation Bank within the project's service area.

5.2 Effects of Proposed Action on Wildlife and Habitat

The following discussion of biological resources impacts and mitigation measures is based on implementation of the proposed project in comparison to existing conditions.

Vernal Pool Fairy Shrimp – Helm Biological Consulting also found no presences of vernal pool fairy shrimp during their preliminary wet season sampling in February and March of 2017.The CNDDB query (Figure 6) revealed that there is a single recorded occurrences of fairy shrimp within the Study Area. Therefore, no vernal pool fair shrimp will effected by the proposed project.

Swainson's Hawks – No swainson's hawks were observed during the biological assessment conducted in January 2017. The CNDDB indicates three recorded occurrences of Swainson's hawks within a two-mile radius of the Study Area (Figure 6).

Prior to issuance of a grading permit for development, however:

1. A preconstruction nesting bird survey shall be conducted on-site within 15 days prior to construction if construction associated with the project would commence between March 1st and September 1st ("the nesting season"). If disturbance associated with the project would occur outside of the nesting season, no surveys shall be required.
2. If Swainson's hawk are identified as nesting on the project site, a non-disturbance buffer of 75-feet shall be established or as otherwise prescribed by a qualified ornithologist. The buffer shall be demarcated with painted orange lath or via the installation of orange construction fencing. Disturbance within the buffer shall be postponed until a qualified ornithologist has determined that the young have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.
3. If the proposed project requires a loss of potential foraging habitat than the project proponent shall be responsible for mitigating on the project site at a ratio of 0.75:1, as per the CDFW's 1994 Guidance on Swainson's Hawk Mitigation.

Big-scale balsamroot – According to CNDDB and CNPS records, there is a single occurrence of this species within the Study Area. Barnett conducted a biological assessment in January 2017 and did not find any presence of this species. However, the blooming period for the big-scale balsamroot is March through June. Therefore, a protocol level survey will need to be conducted during this species blooming period prior to the start of construction to determine the presence within the Study Area.

5.3 Best Management Practice

In order to avoid all biological impacts to the seasonal wetland and wetland swale centrally located within the property the following mitigation measures will be implemented in the Phase 1 development of the parking lot and bridge crossing of the proposed project.

- Setbacks of at least 10 feet from the wetlands will be set to demarcate where no development will occur.
- No grading, site construction, or other disturbance within 10 feet of any aquatic feature will occur at any time. Disturbance within, but more than 10 feet from, the above-mentioned setbacks will not occur until silt fencing, fiber rolls, or other similar BMP is installed at least 10 feet away and along the perimeter of the encroached feature.
- Graded areas will be covered with straw, mats, natural wood chips with no artificial dyes or preservatives, or other erosion control measure within 72 hours.
- No nutrients, pesticides, fuel, or other potential pollutants will be used within 50 feet of any aquatic resource.
- No machinery will operate closer than 15 feet from an aquatic resource. Required grading between 10 and 15 feet from the resource will be conducted using only hand tools.
- Machinery operating between 15 and 25 feet from an intermittent drainage, or between 25 and 50 feet from a perennial drainage, will be checked daily for fuel or oil discharge and moved outside these setbacks if discharge is found.
- No grading will occur within aquatic resources setbacks for after 14 days following a storm event or 14 days before the next anticipated storm event.
- During construction, the construction crew shall conduct daily clean-ups efforts to rid the area of trash and debris.

- A qualified biologist will monitor all construction to ensure that no resource violations related to the U.S. Clean Water Act (CWA), the California Porter Cologne Act (PCA), or California Fish and Game Code (FGC) occur.

6.0 Conclusions

1. There are 0.391-acre of wetlands and "other waters of the U*nited States" within* the project area. A Section 404 permit from the U.S. Army Corps of Engineers and a Section 401 water quality certification from the Regional Water Quality Control Board maybe required if there are any activities affecting these features. A section 404 Nationwide Permit will be required if the project results in an impact of less than 0.5 acre to wetlands and "other waters of the United States. However, if the project results in an impact greater than 0.5 acre to wetlands and "other waters of the United States" than a Standard Individual Permit (SIP) may be required.
2. A query of the California Natural Diversity Database (Rarefind) resulted in recorded occurrences of vernal pool fairy shrimp and big-scale balsamroot within the Foothills Boulevard Study Area. Helm Biological Consulting did not observe any evidence of vernal pool fairy or tadpole shrimp within the seasonal wetlands during their preliminary wet sampling surveys, as well as, no big-scale balsamroot was observed during Barnett biological assessment. A protocol-level survey for big-scale balsamrrot will need to be conducted during the blooming period to determine presence. While the other species listed in Table 2 may potentially occupy the site based on habitat requirements, historic and ongoing disturbance may preclude presence of these species.

7.0 References

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Attachment A:
Helms Wet Sample Surveys

Attachment 2

RECONNAISSANCE-LEVEL WET-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE 7950 FOOTHILLS BLVD PROJECT

(USFWS# 2017-TA-0965)

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RECONNAISSANCE-LEVEL WET-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE 7950 FOOTHILLS BLVD PROJECT

(USFWS# 2017-TA-0965)

INTRODUCTION

Helm Biological Consulting (HBC), a division Tansley Team, Inc., was contracted by Barnett Environmental Consulting to conduct wet-season sampling for large branchiopods (fairy shrimp, tadpole shrimp, and clam shrimp) that are listed as threatened or endangered under the federal Endangered Species Act (e.g., vernal pool fairy shrimp [*Branchinecta lynchi*] and vernal pool tadpole shrimp [*Lepidurus packardi*]) at the 7950 Foothills Boulevard Project.

The 7950 Foothills Blvd Project (hereafter referred to as "Project") is located immediately east of Foothills Blvd, immediately west of Industrial Ave, and just under one-mile south of Blue Oaks Blvd, in the City of Roseville, Placer County, California. In addition, the Project is located mostly in the southwest ¼ of the southeast ¼ and the southeast ¼ of the southwest ¼ of Section 21, Township 11 North, Range 6 East, and Mount Diablo Meridian of the Roseville 7.5 minute U.S. Geological Survey topographic quadrangle map (center coordinates: WGS84 Latitude 38.784074, Longitude -121.311044; UTM Zone 10 Northing 4294170.1, Easting 646697.8) (Figure 1).

The Project consists of roughly 27 acres and a preliminary estimate of wetlands onsite suggest five seasonal wetlands (0.193 ac) and one wetland swale (0.452 ac) occur (Exhibit A).

This report discusses the methods and results of the wet-season sampling for the presence of federally listed large branchiopods at the 7950 Foothills Blvd Project.

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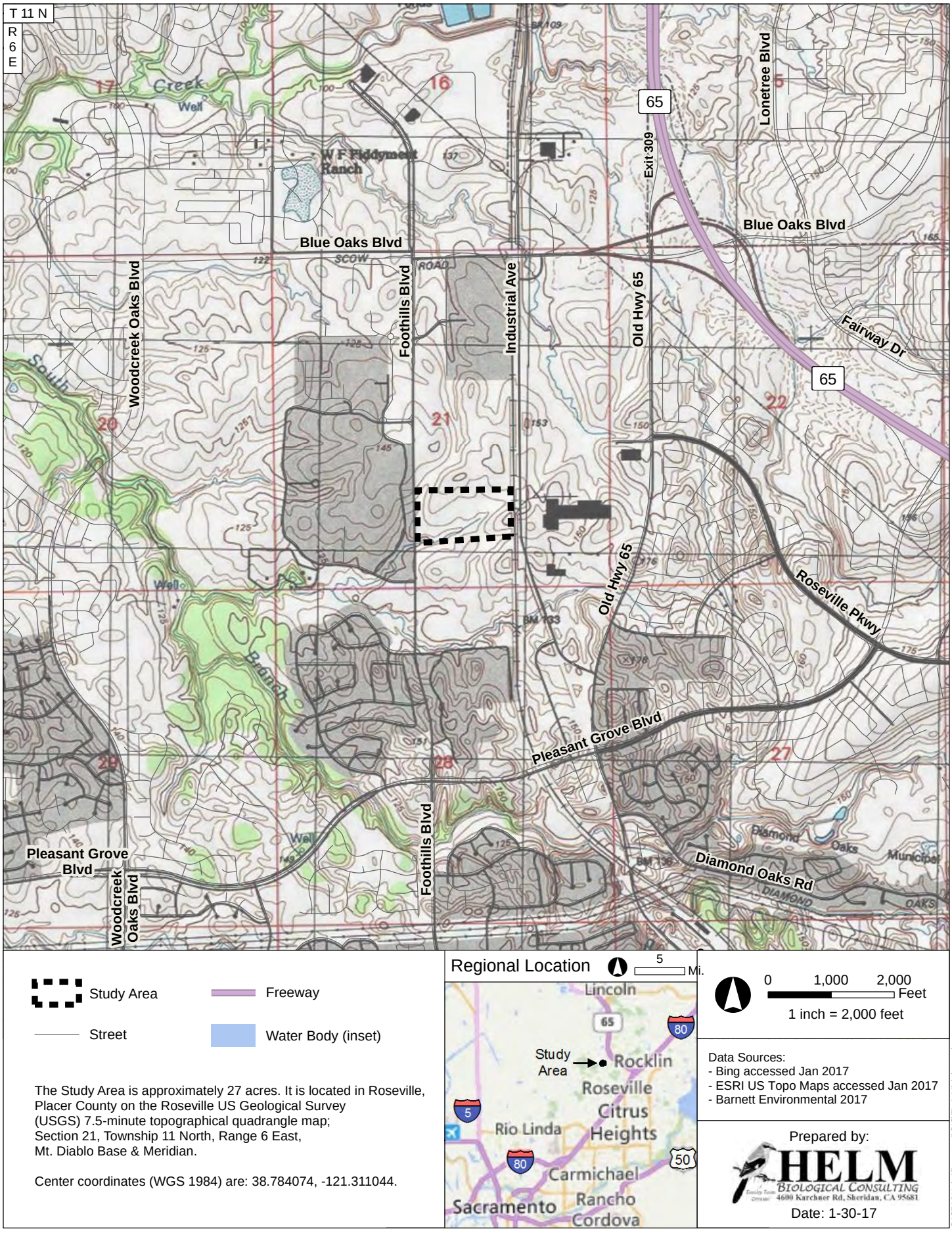
"We certify that the information in this survey report and attached exhibits fully and accurately represents our work."

Brent P. Helm Signature _____ Date 3-10-2017

Sean M. O'Brien Signature _____ Date 3-10-2017

Attachment 2



The Study Area is approximately 27 acres. It is located in Roseville, Placer County on the Roseville US Geological Survey (USGS) 7.5-minute topographical quadrangle map; Section 21, Township 11 North, Range 6 East, Mt. Diablo Base & Meridian.

Center coordinates (WGS 1984) are: 38.784074, -121.311044.

Data Sources:
- Bing accessed Jan 2017
- ESRI US Topo Maps accessed Jan 2017
- Barnett Environmental 2017

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Figure 1. Study Area Vicinity

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METHODS

Dr. Brent Helm and Mr. Sean O'Brien of HBC conducted wet-season sampling on February 1, 2017 and Mr. Sean O'Brien conducted wet-season sampling on March 5, 2017 as authorized by the U.S. Fish and Wildlife Service (USFWS) (Appendix A). The wet-season sampling was conducted under permit TE-795930-10 of Section 10(a)(1)(A) of the federal Endangered Species Act, 16 U.S.C. 1531 *et seq.*, and its implementing regulations. Methods generally followed USFWS's (2015) *Survey Guidelines for Listed Large Branchiopods* for wet-season sampling as described below.

Each basin (e.g., vernal pool or swale) was viewed for active large branchiopods prior to entering the water. Any large branchiopods observed were quickly netted, viewed with the aid of an 30x hand lens to determine species, and released unharmed back into the environment from which they were obtained. If no large branchiopods were observed, then a semi-quantitative sample was taken to determine the relative abundance of aquatic macroscopic (>2 mm) invertebrates as follows.

A dip net was lowered vertically into the deepest portion of the inundated pool (usually the center) and rested on the bottom. The 80-µm mesh size dip net was then moved in the direction of the longest axis of the basin for approximately one-meter. In instances where half of the basin length is less than one meter in length, the dip net was repositioned in the deepest portion of the basin and moved in the opposite direction for the remainder of the one-meter sample. Given the aperture of the dip net of 0.025 m^2 and distance the dip net was moved, roughly 0.025 m^3 or 25 liters of the water column was sampled horizontally each time. In those cases when the water column was shallower than the dip net aperture height, the volume of water per sweep was calculated by the horizontal distance the net is moved multiplied by the width of the dip net (25-cm) multiplied by the depth of water. After the completion of each sample sweep, the contents of the net were examined for large branchiopods. Large branchiopods captured were identified to species (with the use of a 30x hand lens) and their relative abundances were recorded in one of five categories: rare (R, ≤2 individuals), not common (NC, 3-10 individuals), common (C, 11-50 individual), very common (VC, 51 -100 individuals), and abundant (A, >100 individuals) on standardized data sheets. After the taxonomic identification and enumeration were completed, the contents of the net were placed back into the pool from which they were collected.

This method allows for the relative abundances and richness of large branchiopods to be compared between and among wetlands through time. Additionally, this method allows for concentration estimates of large branchiopods to be calculated as number of individuals per liter of water (= number of individuals/net aperture area x length of sweep).

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If large branchiopods were not detected during the semi-quantified sampling method, then the entire pool was sampled as follows. Starting at one end of the pool, the net was moved from one side of the pool to the other in a zigzag fashion, until the opposite end of the pool was reached. During this procedure, the net was often bounced along the pool bottom (to encourage large branchiopods to move up into the water column from hiding places for easier capture) and viewed often for evidence of large branchiopods. If still no federally listed large branchiopods were captured, then additional netting took place in specific locations within the pool that may have not been sampled during prior efforts.

Large branchiopods detected using this alternative method was noted as present by an "X" on the standardized field data sheet.

Data concerning water temperature and present depths (maximum and average) were collected during each field visit. The potential depths (maximum and average) and percent of surface area inundation were estimated. Additionally, presence and abundance data were recorded for all other aquatic invertebrates using the same methods as described above for large branchiopod sampling.

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RESULTS

A total of six wetland habitats (five seasonal wetlands and one wetland swale) were sampled using wet-season sampling techniques (Exhibit A). No large branchiopods were observed (Table 1). Representative photographs of the wetland habitats sampled are found in Appendix B.

Attachment 2

Table 1. Results of Wet-season Sampling at the 7950 Foothills Blvd Project

Abundance: R = Rare (≤2 individuals), NC = Not Common (3-10 individuals), C = Common (11-50 individuals), VC = Very Common (51-100 individuals), A = Abundant (>100 individuals), X = Present but not observed in 1 meter sample

			Present Depth (inches)		Potential Depth (Inches)			Crustacea										Insecta											Mollusca			Turbellaria	Acari	Collembola	Other	Herps		
									Copepods			Large Branchiopods (LB)						Coleoptera			Hemiptera			Odanota		Diptera													
Date Sampled	Pool No.	Water Temp (°F)	Max	Ave.	Max	Ave.	Present Surface Area (%) Inundation	Ostracods	Calanoida	Cyclopoda	Cladocera	*LIOC*	*BRLY*	*BRME*	*LEPA*	*LYBR*	*CYCA*	Dytiscidae	Hydrophilidae	Haliplidae	Notonectidae	Corixidae	Ephemeroptera	Zygoptera	Anisoptera	Culicidae	Chironomidae	Trichoptera	Lymnaeidae	Physidae	Planorbidae	Micro-turbularian	Hydracarini		Other Invertebrate	Pseudacris	Other	Comments
2/1/2017	WS-1	44	7	4	9	6	25	NC																		R						X						
2/1/2017	SW-1	-	0	0	0	0	0																															Dry
2/1/2017	SW-2	47	7	4	9	5	75	C			C							X			X	X				X					NC	X			X		
2/1/2017	SW-3	47	7	4	8	5	80	C										X								X					C						
2/1/2017	SW-4	48	3	1	5	3	70	C										X								NC					C						
2/1/2017	SW-5	44	4	2	6	4	60	NC																														
3/5/2017	WS-1	58	6	3	9	6	20	C										X																			
3/5/2017	SW-1	-	0	0	0	0	0																															Dry
3/5/2017	SW-2	59	6	4	9	5	60	C			C							NC			X					X					NC				X		
3/5/2017	SW-3	58	6	3	8	5	50	NC										NC													NC				X		
3/5/2017	SW-4	57	3	2	5	3	40	NC										NC																			
3/5/2017	SW-5	59	4	2	6	4	50	NC										X																			

HELM
A Tansley Team Division
BIOLOGICAL CONSULTING
4600 Karchner Rd, Sheridan, CA 95681

LITERATURE CITED

U.S. Fish and Wildlife Service. 1996. Interim Survey Guidelines to Permittees for Recovery Permits under Section 10 (a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods. 11 pp.

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BIOLOGICAL CONSULTING
4600 Karchner Rd, Sheridan, CA 95681

EXHIBIT A.
FIGURE 1. DELINEATED WETLANDS AND OTHER US WATERS

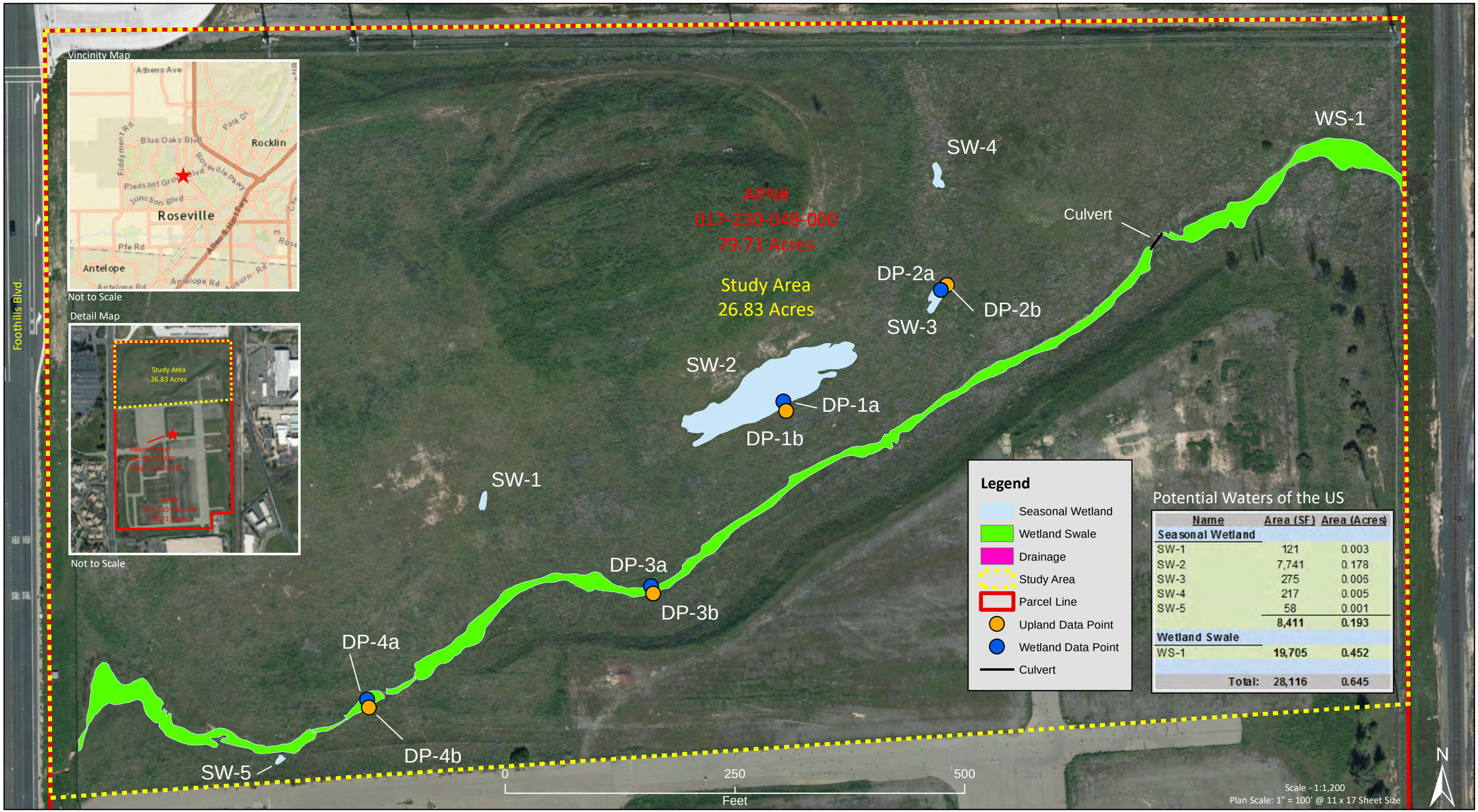

Figure 1: Delineated Wetlands and Other US Waters

Data Source: Barnett Environmental
Image Source: ESRI Basemaps
Projected Coordinate System: NAD 1983 State Plane CA II
Delineation 01/16/2017 By Chris Bronny

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APPENDIX A.
USFWS AUTHORIZATION LETTER

Attachment 2

From: Markegard, Sarah <sarah_markegard@fws.gov>
To: Brent P Helm <bhelm69485@aol.com>
Cc: Kellie Berry <kellie_berry@fws.gov>
Subject: Re: Recon Wet-season sampling
Date: Tue, Jan 31, 2017 11:08 am

Brent Helm,

By this email message you are authorized to conduct reconnaissance wet- and dry-season surveys (2017) for federally-listed large branchiopods, per the conditions of recovery permit TE-795930-10 and as specified in your email request dated January 30, 2017.

The surveys will be conducted at the 7590 Foothills Blvd Property, located east of Foothills Blvd., west of Industrial Ave., and south of Blue Oaks Blvd. in Roseville, Placer County, California. Surveys may be conducted within all seasonally inundated wetlands identified on-site that may provide suitable vernal pool crustacean habitat. Suitable habitat not previously identified on the project site may also be sampled under this authorization.

Remember to carry a copy of your permit while doing the work, and to follow the terms and conditions of the permit and the May 31, 2015 USFWS Survey Guidelines for the Listed Large Branchiopods, including the reporting requirements. **If voucher specimens are collected, we request that you send them to the Sacramento Fish and Wildlife Office (Attn: Josh Hull, Sacramento Fish and Wildlife Office, 2800 Cottage Way, Room W-2605, Sacramento, California 95825). Please use the same procedures for salvaging voucher specimens as outlined in the Survey Guidelines and in your permit terms and conditions.**

In your report, please include which surveys were authorized, the names of all persons involved in the surveys, their recovery permit numbers, if applicable, and the date of this authorization, to help ensure that we correctly record the fulfillment of the reporting requirement under this authorization. Please let us know if the surveys are not performed as authorized, or if they are done by a different permittee under a separate authorization. This authorization does not include access to the property which must be arranged with the landowner or manager.

Please send an electronic copy of the report(s) to Sarah Markegard, of our Recovery Division and Kellie Berry of our Sacramento Valley Division. **We ask that you use UTM coordinates for all spatial data and that you use Service reference number 2017-TA-0965 in future correspondence for these surveys.**

To ensure the accuracy and data integrity of your project, it is requested that you provide spatial information (boundaries, study areas, parcels, point locations, etc.) in the form of an ESRI shape file with projection, a GPS file with projection, or locations in an Excel spreadsheet with projection information. The preferred projection is UTM, Zone 10S, NAD83; the Sacramento Fish and Wildlife Office (SFWO) standard. FGDC compliant metadata must accompany each file. Please include any USFWS File Numbers associated with the data in your documentation. For additional information regarding metadata standards refer to http://www.fgdc.gov. For more information regarding spatial data please contact: Cheryl L. Hickam, GIS Branch Chief, U.S. Fish and Wildlife Service, 2800 Cottage Way, Suite W-2605, Sacramento, Ca 95825-1846, office: 916-414-6708

On Mon, Jan 30, 2017 at 10:23 PM, Brent P Helm <bhelm69485@aol.com> wrote:
Sarah,

Attached is our request to conduct reconnaissance-level wet-season sampling, followed by dry-season sampling, at

Attachment 2

7950 Foothills Blvd., Roseville, California. Thanks for your time and consideration regarding this matter.

Brent

Tansley Team, Inc.
DBA Helm Biological Consulting
4600 Karchner Rd
Sheridan, CA 95681
Phone: (530) 633-0220
Fax: (530) 633-0230
Email: bhelm69485@aol.com

--

Sarah Markegard
Endangered Species Biologist
Listing and Recovery Division
Sacramento Fish and Wildlife Office
2800 Cottage Way W-2605
Sacramento, CA 95825-1888
Office Phone: 916-414-6492

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A Tansley Team Division
BIOLOGICAL CONSULTING
4600 Karchner Rd, Sheridan, CA 95681

APPENDIX B.
REPRESENTATIVE PHOTOGRAPHS

SW-1. Photograph taken facing east on February 1, 2017.

SW-1. Photograph taken facing east on March 5, 2017.

SW-2. Photograph taken facing east on February 1, 2017.

SW-2. Photograph taken facing east on March 5, 2017.

SW-3. Photograph taken facing east on February 1, 2017.

SW-3. Photograph taken facing east on March 5, 2017.

SW-4. Photograph taken facing east on February 1, 2017.

SW-4. Photograph taken facing east on March 5, 2017.

SW-5. Photograph taken facing east on February 1, 2017.

SW-5. Photograph taken facing east on March 5, 2017.

WS-1 (eastern portion). Photograph taken facing east on February 1, 2017.

WS-1 (eastern portion). Photograph taken facing east on March 5, 2017.

WS-1 (middle portion). Photograph taken facing east on March 5, 2017.

WS-1 (middle portion). Photograph taken facing east on March 5, 2017.

WS-1 (western portion). Photograph taken facing east on February 1, 2017.

WS-1 (western portion). Photograph taken facing east on March 5, 2017.

Attachment B:
Sierra Nevada Arborists Report

Attachment 2

SIERRA NEVADA ARBORISTS

February 2, 2017

Bruce D. Barnett, Ph.D.
Barnett Environmental
5214 El Cemonte Avenue
Davis, California 95618

RE: Tree Inventory 8001 Foothills Boulevard, Roseville, Ca

Dear Mr. Barnett,

As you are aware Barnett Environmental retained the services of Sierra Nevada Arborists to conduct a field review and tree identification of the 79 acre parcel located at 8001 Foothills Boulevard in the City of Roseville, California. The purpose of the field review and tree identification was to identify any protected trees which may be located on the site and if any protected trees were identified on the site, prepare an arborist report and tree inventory for those trees. Following are the observations and findings of the field review conducted on February 2, 2017.

This site is partially developed with approximately ¾ of the site having been previously graded with portions of the graded area paved. Vegetation on the site is primarily around the perimeter and the majority of the perimeter vegetation is located on the west side adjacent to Foothills Boulevard and mostly south of the existing driveway access into the site and along the east boundary adjacent to the Union Pacific Rail Road right of way.

The vegetation is comprised of landscape plantings that are generally grouped by species and have been roughly identified on the attached exhibit. Species diversity includes Cottonwood, Poplar, Willow, Deodora Cedar, Aleppo Pine, Sycamore and Coyote Brush. Generally speaking all the trees are stressed and in need of maintenance with some requiring removal due to the degree of decline and/or structural defects.

There were no native Oak trees identified on the site and none of the landscape trees are protected under the City of Roseville tree preservation ordinance. Therefore, no tree permit should be required for this project.

7425 W. 4th Street ◆ Rio Linda, CA 95673 ◆ 916-878-0299

Mr. Bruce Barnett
Barnett Environmental
8001 Foothills Bl Roseville
Tree Identification

Thank You for choosing Sierra Nevada Arborists for your Arboricultural needs, please feel free to contact me with any questions,

Sincerely,

Edwin E. Stirtz

SIERRA NEVADA ARBORISTS
ISA Certified Arborist WE0510A
ISA Tree Risk Assessment Qualified

ees/enclosure

Attachment C:
Plant Species Observed

Family name	Species name	Vernacular name	Wetland indicator status
Apocynaceae	*Asclepias* sp.	milkweed	—
Asteraceae	*Baccharis pilularis*	coyote brush	—
Asteraceae	**Carduus pycnocephalus*	Italian thistle	—
Asteraceae	**Centaurea melitensis*	tocalote	—
Asteraceae	**Centaurea solstitialis*	yellow star-thistle	—
Asteraceae	*Centromadia fitchii*	Fitch's tarplant	FACU
Asteraceae	**Cirsium vulgare*	bull thistle	FACU
Asteraceae	*Holocarpha virgata*	pit-gland tarplant	—
Asteraceae	**Lactuca serriola*	prickly lettuce	FACU
Boraginaceae	*Amsinckia* sp.	fiddleneck	—
Brassicaceae	**Hirschfeldia incana*	Mediterranean mustard	—
Cyperaceae	*Cyperus eragrostis*	tall flat-sedge	FACW
Cyperaceae	*Eleocharis macrostachya*	common spikerush	OBL
Euphorbiaceae	*Croton setiger*	doveweed, turkey-mullein	—
Fabaceae	**Trifolium hirtum*	rose clover	—
Fabaceae	*Vicia villosa*	winter vetch	
Juncaceae	*Juncus mexicanus*	Mexican rush	FACW
Onagraceae	*Epilobium brachycarpum*	tall willow-herb	—
Onagraceae	*Epilobium cleistogamum*	selfing willow-herb	OBL
Poaceae	**Avena* sp.	wild oat	—
Poaceae	**Bromus hordeaceus*	soft chess	FACU
Poaceae	**Elymus caput-medusae*	Medusa-head grass	—
Poaceae	**Festuca perennis*	rye-grass	FAC
Poaceae	**Hordeum marinum* subsp. *gussoneanum*	Mediterranean barley	FAC
Poaceae	**Polypogon monspeliensis*	rabbitfoot grass	FACW
Polygonaceae	**Rumex crispus*	curly dock	FAC
Polygonaceae	**Rumex pulcher*	fiddle dock	FAC
Rosaceae	**Prunus* sp.	cherry, not identified to species (evidently a waif or escape from cultivation)	—
Salicaceae	***Populus nigra*	Lombardy poplar	—

Attachment D: Wetland Delineation Data Sheet

Attachment 2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eastern side of Foothills Boulevard City/County: Roseville / Placer County Sampling Date: 11/09/2018

Applicant/Owner: Panattoni Development Co. State: CA Sampling Point: DP-1a

Investigator(s): R. D. Stone Section, Township, Range: S.21 SE1/4, T.11N R.6E

Landform (hillslope, terrace, etc.): alluvial flat Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): LRR C Lat: 38.784064° Long: -121.310802° Datum: NAD 83

Soil Map Unit Name: Cometa-Fiddyment complex, 1 to 5 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

Shallow depression (man-made, a result of scraping by a grader or bulldozer). Google Earth imagery indicates earthmoving & grading activity on-site between years 1998 & 2002. Sample point corresponds with SW-2.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Eleocharis macrostachya	70	Yes	OBL
2. Centromadia fitchii	5		FACU
3.			
4.			
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: DP-1a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9"	10YR 4/3	70	7.5YR 4/6	30	C	M	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Texture is sandy silty clay below partially decomposed organic material in the upper 0.5". Mottles many / prominent.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✓ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✓ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ___ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation / possible inundation visible on Google Earth imagery dated 19 April 2017. Ponding up to 5 inches deep observed during a previous site visit (see data sheet for sampling point DP-1a dated 16 Jan. 2017).

Attachment 2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eastern side of Foothills Boulevard City/County: Roseville / Placer County Sampling Date: 11/09/2018

Applicant/Owner: Panattoni Development Co. State: CA Sampling Point: DP-1a

Investigator(s): R. D. Stone Section, Township, Range: S.21 SE1/4, T.11N R.6E

Landform (hillslope, terrace, etc.): alluvial flat Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): LRR C Lat: 38.784064° Long: -121.310802° Datum: NAD 83

Soil Map Unit Name: Cometa-Fiddyment complex, 1 to 5 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

Shallow depression (man-made, a result of scraping by a grader or bulldozer). Google Earth imagery indicates earthmoving & grading activity on-site between years 1998 & 2002. Sample point corresponds with SW-2.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
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1. Eleocharis macrostachya	70	Yes	OBL
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	75 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
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% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
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FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: DP-1a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

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- ___ 1 cm Muck (A9) (**LRR C**)
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- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

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Hydric Soil Present? Yes ✓ No ___

Remarks:

Texture is sandy silty clay below partially decomposed organic material in the upper 0.5". Mottles many / prominent.

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- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✓ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
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- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ___ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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Investigator(s): R. D. Stone Section, Township, Range: S.21 SE1/4, T.11N R.6E

Landform (hillslope, terrace, etc.): alluvial flat Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): LRR C Lat: 38.784064° Long: -121.310802° Datum: NAD 83

Soil Map Unit Name: Cometa-Fiddyment complex, 1 to 5 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

Shallow depression (man-made, a result of scraping by a grader or bulldozer). Google Earth imagery indicates earthmoving & grading activity on-site between years 1998 & 2002. Sample point corresponds with SW-2.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Eleocharis macrostachya	70	Yes	OBL
2. Centromadia fitchii	5		FACU
3.			
4.			
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: DP-1a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9"	10YR 4/3	70	7.5YR 4/6	30	C	M	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Texture is sandy silty clay below partially decomposed organic material in the upper 0.5". Mottles many / prominent.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✓ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✓ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ___ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation / possible inundation visible on Google Earth imagery dated 19 April 2017. Ponding up to 5 inches deep observed during a previous site visit (see data sheet for sampling point DP-1a dated 16 Jan. 2017).

Attachment 2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eastern side of Foothills Boulevard City/County: Roseville / Placer County Sampling Date: 11/09/2018

Applicant/Owner: Panattoni Development Co. State: CA Sampling Point: DP-1a

Investigator(s): R. D. Stone Section, Township, Range: S.21 SE1/4, T.11N R.6E

Landform (hillslope, terrace, etc.): alluvial flat Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): LRR C Lat: 38.784064° Long: -121.310802° Datum: NAD 83

Soil Map Unit Name: Cometa-Fiddyment complex, 1 to 5 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

Shallow depression (man-made, a result of scraping by a grader or bulldozer). Google Earth imagery indicates earthmoving & grading activity on-site between years 1998 & 2002. Sample point corresponds with SW-2.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Eleocharis macrostachya	70	Yes	OBL
2. Centromadia fitchii	5		FACU
3.			
4.			
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: DP-1a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9"	10YR 4/3	70	7.5YR 4/6	30	C	M	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Texture is sandy silty clay below partially decomposed organic material in the upper 0.5". Mottles many / prominent.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✓ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✓ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ___ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation / possible inundation visible on Google Earth imagery dated 19 April 2017. Ponding up to 5 inches deep observed during a previous site visit (see data sheet for sampling point DP-1a dated 16 Jan. 2017).

Attachment 2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eastern side of Foothills Boulevard City/County: Roseville / Placer County Sampling Date: 11/09/2018

Applicant/Owner: Panattoni Development Co. State: CA Sampling Point: DP-1a

Investigator(s): R. D. Stone Section, Township, Range: S.21 SE1/4, T.11N R.6E

Landform (hillslope, terrace, etc.): alluvial flat Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): LRR C Lat: 38.784064° Long: -121.310802° Datum: NAD 83

Soil Map Unit Name: Cometa-Fiddyment complex, 1 to 5 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

Shallow depression (man-made, a result of scraping by a grader or bulldozer). Google Earth imagery indicates earthmoving & grading activity on-site between years 1998 & 2002. Sample point corresponds with SW-2.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Eleocharis macrostachya	70	Yes	OBL
2. Centromadia fitchii	5		FACU
3.			
4.			
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: DP-1a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9"	10YR 4/3	70	7.5YR 4/6	30	C	M	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Texture is sandy silty clay below partially decomposed organic material in the upper 0.5". Mottles many / prominent.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✓ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✓ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ___ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation / possible inundation visible on Google Earth imagery dated 19 April 2017. Ponding up to 5 inches deep observed during a previous site visit (see data sheet for sampling point DP-1a dated 16 Jan. 2017).

Attachment 2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eastern side of Foothills Boulevard City/County: Roseville / Placer County Sampling Date: 11/09/2018

Applicant/Owner: Panattoni Development Co. State: CA Sampling Point: DP-1a

Investigator(s): R. D. Stone Section, Township, Range: S.21 SE1/4, T.11N R.6E

Landform (hillslope, terrace, etc.): alluvial flat Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): LRR C Lat: 38.784064° Long: -121.310802° Datum: NAD 83

Soil Map Unit Name: Cometa-Fiddyment complex, 1 to 5 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

Shallow depression (man-made, a result of scraping by a grader or bulldozer). Google Earth imagery indicates earthmoving & grading activity on-site between years 1998 & 2002. Sample point corresponds with SW-2.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Eleocharis macrostachya	70	Yes	OBL
2. Centromadia fitchii	5		FACU
3.			
4.			
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: DP-1a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9"	10YR 4/3	70	7.5YR 4/6	30	C	M	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Texture is sandy silty clay below partially decomposed organic material in the upper 0.5". Mottles many / prominent.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✓ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✓ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ___ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation / possible inundation visible on Google Earth imagery dated 19 April 2017. Ponding up to 5 inches deep observed during a previous site visit (see data sheet for sampling point DP-1a dated 16 Jan. 2017).

Attachment 2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eastern side of Foothills Boulevard City/County: Roseville / Placer County Sampling Date: 11/09/2018

Applicant/Owner: Panattoni Development Co. State: CA Sampling Point: DP-1a

Investigator(s): R. D. Stone Section, Township, Range: S.21 SE1/4, T.11N R.6E

Landform (hillslope, terrace, etc.): alluvial flat Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): LRR C Lat: 38.784064° Long: -121.310802° Datum: NAD 83

Soil Map Unit Name: Cometa-Fiddyment complex, 1 to 5 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

Shallow depression (man-made, a result of scraping by a grader or bulldozer). Google Earth imagery indicates earthmoving & grading activity on-site between years 1998 & 2002. Sample point corresponds with SW-2.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Eleocharis macrostachya	70	Yes	OBL
2. Centromadia fitchii	5		FACU
3.			
4.			
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

Attachment 2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eastern side of Foothills Boulevard City/County: Roseville / Placer County Sampling Date: 11/09/2018

Applicant/Owner: Panattoni Development Co. State: CA Sampling Point: DP-1a

Investigator(s): R. D. Stone Section, Township, Range: S.21 SE1/4, T.11N R.6E

Landform (hillslope, terrace, etc.): alluvial flat Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): LRR C Lat: 38.784064° Long: -121.310802° Datum: NAD 83

Soil Map Unit Name: Cometa-Fiddyment complex, 1 to 5 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

Shallow depression (man-made, a result of scraping by a grader or bulldozer). Google Earth imagery indicates earthmoving & grading activity on-site between years 1998 & 2002. Sample point corresponds with SW-2.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Eleocharis macrostachya	70	Yes	OBL
2. Centromadia fitchii	5		FACU
3.			
4.			
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

Attachment 2

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Eastern side of Foothills Boulevard City/County: Roseville / Placer County Sampling Date: 11/09/2018

Applicant/Owner: Panattoni Development Co. State: CA Sampling Point: DP-1a

Investigator(s): R. D. Stone Section, Township, Range: S.21 SE1/4, T.11N R.6E

Landform (hillslope, terrace, etc.): alluvial flat Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): LRR C Lat: 38.784064° Long: -121.310802° Datum: NAD 83

Soil Map Unit Name: Cometa-Fiddyment complex, 1 to 5 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

Shallow depression (man-made, a result of scraping by a grader or bulldozer). Google Earth imagery indicates earthmoving & grading activity on-site between years 1998 & 2002. Sample point corresponds with SW-2.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Eleocharis macrostachya	70	Yes	OBL
2. Centromadia fitchii	5		FACU
3.			
4.			
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: DP-1a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9"	10YR 4/3	70	7.5YR 4/6	30	C	M	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Texture is sandy silty clay below partially decomposed organic material in the upper 0.5". Mottles many / prominent.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✓ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✓ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ___ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation / possible inundation visible on Google Earth imagery dated 19 April 2017. Ponding up to 5 inches deep observed during a previous site visit (see data sheet for sampling point DP-1a dated 16 Jan. 2017).

Attachment E: Site Photos for September and December 2016 Surveys

1. View to southeast along the eastern property boundary where an intermittent drainage (WS-1) enters the site. Background shows the grade of the Union Pacific Railroad, and behind it a white car traveling north on Industrial Ave.

2. View to southeast along the eastern property boundary where an intermittent drainage (WS-1) enters the site.

Barnett Environmental, Inc.
Foothills Boulevard, Roseville; November 2018

3. View to southwest from near eastern property boundary, showing the dried bed of an intermittent drainage (WS-1).

4. View to northeast from south-central portion of study area, with intermittent drainage (WS-1) in the middle ground.

Barnett Environmental, Inc.
Foothills Boulevard, Roseville; November 2018

5. View to southwest near western property boundary, with intermittent drainage (WS-1) in the middle ground.

6. View to southwest at western property boundary, showing culverts where intermittent drainage (WS-1) passes under Foothills Blvd.

Barnett Environmental, Inc.
Foothills Boulevard, Roseville; November 2018

7. View to east from top of large mound of spoil material in the north-central part of the study area (panorama 1 of 5).

8. View to southeast from top of large mound of spoil material in the north-central part of the study area (panorama 2 of 5).

Barnett Environmental, Inc.
Foothills Boulevard, Roseville; November 2018

9. View to south from top of large mound of spoil material in the north-central part of the study area (panorama 3 of 5).

10. View to southwest from top of large mound of spoil material in the north-central part of the study area (panorama 4 of 5).

Barnett Environmental, Inc.
Foothills Boulevard, Roseville; November 2018

11. View to west from top of large mound of spoil material in the north-central part of the study area (panorama 5 of 5).

Barnett Environmental, Inc.
Foothills Boulevard, Roseville; November 2018

Attachment F: CNDDB Reports

Multiple Occurrences per Page

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: County IS (Placer)
 AND Quad IS (Roseville (3812173))
 AND Elevation IS greater than OR equal to "100"
 AND Elevation IS less than OR equal to "150"
 AND Habitat IS (Aquatic OR Pavement plain OR Valley & foothill grassland OR Wetland)

Spea hammondii **Element Code:** AAABF02020

western spadefoot

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened			
Habitat:	**General:**	OCCURS PRIMARILY IN GRASSLAND HABITATS, BUT CAN BE FOUND IN VALLEY-FOOTHILL HARDWOOD WOODLANDS.			
	Micro:	VERNAL POOLS ARE ESSENTIAL FOR BREEDING AND EGG-LAYING.			

Occurrence No.	171	**Map Index:**	42145	**EO Index:**	42145	**Element Last Seen:**	1991-04-12
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1991-04-12
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2000-01-20

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.76197 / -121.33795	**Accuracy:**	80 meters
UTM:	Zone-10 N4291674 E644405	**Elevation (ft):**	115
PLSS:	T11N, R06E, Sec. 32, NW (M)	**Acres:**	0.0

Location:	TRIB TO KASEBERG CREEK, 1.3 MILES NE OF JCT BASE LINE & FIDDYMENT ROADS, ROSEVILLE.
Detailed Location:	5 CONSTRUCTED VERNAL POOLS AND TRIB TO KASEBERG CREEK. MAPPED TO SITE DESCRIPTION (ELEVATION GIVEN DOESN'T MATCH).
Ecological:	VERNAL POOLS AND INTERMITTENT CREEK. SURROUNDING LAND USE: MITIGATION SITE, VARIOUS DEVELOPMENTS.
General:	SEVERAL TADPOLES OBSERVED, 1991.
Owner/Manager:	UNKNOWN

Occurrence No.	173	**Map Index:**	42150	**EO Index:**	42150	**Element Last Seen:**	1990-02-XX
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	1990-02-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2000-01-12

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.76985 / -121.33078	**Accuracy:**	2/5 mile
UTM:	Zone-10 N4292560 E645012	**Elevation (ft):**	140
PLSS:	T11N, R06E, Sec. 29 (M)	**Acres:**	0.0

Location:	NEAR THE INTERSECTION OF WOODCREEK OAKS BLVD AND PLEASANT GROVE BLVD, WOODCREEK OAKS SUBDIVISION IN WESTERN ROSEVILLE.
Detailed Location:	MAPPED TO DESCRIPTION GIVEN (TOWNSHIP, SECTION AND ELEVATION DON'T MATCH SITE DESCRIPTION).
Ecological:	GRASSLAND WITH NUMEROUS VERNAL POOLS AND SWALES.
General:	30+ METAMORPHS OBSERVED IN A DRYING INTERMITTENT DRAINAGE, 1990.
Owner/Manager:	PVT

Elanus leucurus

Element Code: ABNKC06010

white-tailed kite

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S3S4
	Other:	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern			
Habitat:	**General:**	ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.			
	Micro:	OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.			

Occurrence No.	56	**Map Index:** 42671	**EO Index:** 42671	**Element Last Seen:**	1998-07-XX
Occ. Rank:	Good		**Presence:** Presumed Extant	**Site Last Seen:**	1999-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2000-03-30

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.78150 / -121.32739	**Accuracy:**	80 meters
UTM:	Zone-10 N4293858 E645282	**Elevation (ft):**	125
PLSS:	T11N, R06E, Sec. 20, SE (M)	**Acres:**	0.0

Location: ON THE WEST SIDE OF THE SOUTH BRANCH OF PLEASANT GROVE CREEK, BETWEEN FOOTHILLS BLVD AND WOODCREEK OAKS BLVD, ROSEVILLE.

Detailed Location: SITE IS LOCATED ALONG THE BORDER BETWEEN WOODCREEK GOLF COURSE AND HEWLETT-PACKARD.

Ecological: HABITAT CONSISTS OF RIPARIAN/OAK WOODLAND, DOMINATED BY BLUE OAKS AND INTERIOR LIVE OAKS.

General: SITE WAS VISITED WEEKLY, MAR-JUL 1998; ADULT COURTSHIP TO 5 BEGGING FLEDGLINGS OBSERVED. KITES DID NOT NEST AT THIS LOCATION IN 1999, POSSIBLY DUE TO BOTH GREAT HORNED OWLS AND AMERICAN KESTRELS NESTING NEARBY.

Owner/Manager: PVT-HEWLETT PACKARD

Buteo swainsoni

Element Code: ABNKC19070

Swainson's hawk

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	Threatened		**State:**	S3
	Other:	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern			
Habitat:	**General:**	BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.			
	Micro:	REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.			

Occurrence No.	791	**Map Index:**	42026	**EO Index:**	42026	**Element Last Seen:**	1996-07-01
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	2001-05-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Decreasing	**Record Last Updated:**	2013-05-24

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.77076 / -121.34480	**Accuracy:**	80 meters
UTM:	Zone-10 N4292639 E643792	**Elevation (ft):**	125
PLSS:	T11N, R06E, Sec. 30, SE (M)	**Acres:**	0.0

Location:	KASEBERG CREEK, 0.75 MILE E OF FIDDYMENT ROAD AND 0.25 MILE N OF PLEASANT GROVE BOULEVARD, E SIDE OF ROSEVILLE.
Detailed Location:	NEST TREE WAS LOCATED IN WHAT BECAME THE NORTH EDGE OF AN OPEN SPACE CORRIDOR/GOLF COURSE IN 1996. MAPPED TO PROVIDED TOPO MAP.
Ecological:	HABITAT WAS A WOODLAND CORRIDOR ALONG KASEBERG CREEK. DEVELOPMENT BEGINNING IN THE MID-1990S CONTINUES TO REPLACE FORAGING & NESTING HABITAT. NEST SITE IS NOW WITHIN THE CITY OF ROSEVILLE PUBLIC GOLF COURSE, SURROUNDED BY DEVELOPMENT.
General:	NESTING INITIATED IN 1996 DURING GRADING BUT PRIOR TO CONSTRUCTION OF HOUSES; 2 YOUNG PRODUCED. NEST SITE VACANT IN 1997, THOUGH NEST TREE REMAINED WITHIN AN OPEN SPACE/GOLF COURSE. NO ACTIVITY IN 2000 & 2001; TERRITORY APPEARS ABANDONED.
Owner/Manager:	CITY OF ROSEVILLE, UNKNOWN

Occurrence No.	952	**Map Index:**	46025	**EO Index:**	46025	**Element Last Seen:**	2001-06-XX
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-06-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2001-10-03

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.79509 / -121.34800	**Accuracy:**	80 meters
UTM:	Zone-10 N4295334 E643465	**Elevation (ft):**	110
PLSS:	T11N, R06E, Sec. 19, N (M)	**Acres:**	0.0

Location:	ALONG PLEASANT GROVE CREEK, BETWEEN FIDDYMENT ROAD AND BLUE OAKS BOULEVARD, WEST SIDE OF ROSEVILLE.
Detailed Location:	
Ecological:	NEST TREE WAS A BLUE OAK; SURROUNDING HABITAT CONSISTS OF BLUE OAK WOODLAND GROWING ALONG PLEASANT GROVE CREEK.
General:	DARK-PHASE ADULT SWHA OBSERVED ON 26 APR 2001; NO NEST FOUND. NEST FOUND BY THOMAS LEEMAN (ESA), AND HE REPORTED THAT AT 2 YOUNG HAD BEEN PRODUCED. BY 27 JUN 2001, WHEN WE RETURNED TO GPS THE NEST, THE YOUNG HAD FLEDGED.
Owner/Manager:	UNKNOWN

Multiple Occurrences per Page

California Department of Fish and Wildlife

California Natural Diversity Database

Occurrence No.	2115	**Map Index:**	88290	**EO Index:**	89301	**Element Last Seen:**	2009-04-28
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-04-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2013-03-04

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.80336 / -121.33236	**Accuracy:**	80 meters
UTM:	Zone-10 N4296277 E644806	**Elevation (ft):**	100
PLSS:	T11N, R06E, Sec. 17, NW (M)	**Acres:**	0.0

Location:	NORTH SIDE OF PLEASANT GROVE CREEK, JUST S OF STARWOOD CT AT TRADEWINDS DR IN BLUE OAKS DEVELOPMENT NW OF ROSEVILLE.
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF NEST RECORDS FROM 2009.
Ecological:	NEST IN 55' BLUE OAK IN RIPARIAN STRIP WITH AN OPEN FIELD DIRECTLY NE, SURROUNDED BY RESIDENTIAL DEVELOPMENT.
General:	NEST WITH YOUNG OBSERVED ON 28 APR 2009; FLEDGING SUCCESS UNKNOWN.
Owner/Manager:	UNKNOWN

Athene cunicularia

Element Code: ABNSB10010

burrowing owl

Listing Status: **Federal:** None — **CNDDB Element Ranks:** **Global:** G4
State: None — **State:** S3
Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern

Habitat: **General:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.
Micro: SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Occurrence No.	339	**Map Index:**	42028	**EO Index:**	42028	**Element Last Seen:**	1998-05-08
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2003-05-05
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2003-08-21

Quad Summary: Roseville (3812173), Pleasant Grove (3812174)
County Summary: Placer

Lat/Long:	38.78190 / -121.37308	**Accuracy:**	nonspecific area
UTM:	Zone-10 N4293831 E641313	**Elevation (ft):**	100
PLSS:	T11N, R05E, Sec. 24 (M)	**Acres:**	26.8

Location: NORTH SIDE OF PHILIP ROAD, APPROXIMATELY 0.75 MILE WEST OF FIDDYMENT ROAD, NW OF ROSEVILLE.
Detailed Location:
Ecological: HABITAT CONSISTS OF MODERATELY-GRAZED, ROLLING GRASSLAND, WITH NO EVIDENCE OF HISTORIC SOIL DISTURBANCE. SITE WOULD BE BETTER IF MORE BURROWS WERE PRESENT; HARD SOILS AND LACK OF GROUND SQUIRRELS MAY BE THE CAUSE.
General: OWLS (NEVER MORE THAN 2) OBSERVED YEAR-ROUND DURING 1998. HABITAT APPEARS EXTANT, BUT NO OWLS WERE OBSERVED ON 5 MAY 2003 - DATE OF SITE VISIT LIKELY TO EARLY.
Owner/Manager: PVT

Occurrence No.	1177	**Map Index:**	71623	**EO Index:**	72527	**Element Last Seen:**	2008-02-18
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2008-02-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2008-07-01

Quad Summary: Roseville (3812173)
County Summary: Placer

Lat/Long:	38.84685 / -121.35702	**Accuracy:**	80 meters
UTM:	Zone-10 N4301064 E642578	**Elevation (ft):**	110
PLSS:	T12N, R06E, Sec. 31 (M)	**Acres:**	0.0

Location: 250 FT NORTH OF EAST CATLETT RD, 0.4 MI WEST OF FIDDYMENT RD, SW OF LINCOLN.
Detailed Location: LOCATED ON MOORE RANCH WETLAND RESTORATION PROJECT PROPERTY.
Ecological: HABITAT CONSISTS OF MIXED NATIVE AND NON-NATIVE GRASSLAND, WHICH IS WITHIN A VERNAL POOL RESTORATION PROJECT AREA. SURROUNDED BY GRAZED AND UNGRAZED PASTURES.
General: 1 ADULT OBSERVED AT BURROW SITE ON 30 JAN, 1 FEB AND 18 FEB 2008. GULLS ATTRACTED BY NEARBY WASTEWATER & GARBAGE COLLECTION FACILITIES COULD POSSIBLY PREY UPON BUOW CHICKS IF NESTING OCCURS.
Owner/Manager: MOORE RANCH CONSERVANCY

Agelaius tricolor

Element Code: ABPBXB0020

tricolored blackbird

Listing Status: **Federal:** None — **CNDDB Element Ranks:** **Global:** G2G3
State: Candidate Endangered — **State:** S1S2
Other:

BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern

Habitat: **General:** HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro: REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Occurrence No.	242	**Map Index:**	23971	**EO Index:**	4277	**Element Last Seen:**	2000-04-22
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-04-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-08-29

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.86064 / -121.31537	**Accuracy:**	specific area
UTM:	Zone-10 N4302661 E646164	**Elevation (ft):**	125
PLSS:	T12N, R06E, Sec. 28, SW (M)	**Acres:**	17.0

Location: ~0.2 MI WSW OF BRENTFORD CIR & FOREBRIDGE LN, 0.8 MI NW OF TWELVE BRIDGES DR & INDUSTRIAL AVE INTERSECTION, LINCOLN.

Detailed Location: MAPPED TO PROVIDED MAPS, COORDINATES, AND LOCATION DESCRIPTIONS. COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "INDUSTRIAL AVENUE." AN ADDITIONAL 2,000 BIRDS NOTED SOMETIME IN 1992.

Ecological: NESTING SUBSTRATE CONSISTED OF BULRUSH GROWING IN A SHALLOW FARM POND. POND WAS A SMALL LAKE & MARSHY CREEK WITH PAVED WALKING, BIKE, & DOG WALKING TRAILS. AT THE EDGE OF A DEVELOPED SUBDIVISION (2011). HABITAT STILL EXISTS (2015).

General: 25 BIRDS OBSERVED NESTING IN JUL 1992. NESTING COLONY ANECDOTALLY REPORTED IN 1993. 1K NESTING BIRDS OBS IN APR 1994. 2K NESTING BIRDS OBS ON 21 APR 1995. 5K NESTING ON 22 APR 2000, ADDITIONAL 4K FORAGING NEARBY. 0 OBS IN 2011 & 2015.

Owner/Manager: UNKNOWN

Occurrence No.	579	**Map Index:**	96865	**EO Index:**	98087	**Element Last Seen:**	2011-04-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-04-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-02-01

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.86119 / -121.29819	**Accuracy:**	1/10 mile
UTM:	Zone-10 N4302749 E647654	**Elevation (ft):**	140
PLSS:	T12N, R06E, Sec. 27 (M)	**Acres:**	0.0

Location: ABOUT 0.7 MI N OF HWY 65 AT TWELVE BRIDGES DR, 0.9 MI S OF HWY 65 AT JOINER PKWY, S OF LINCOLN.

Detailed Location: COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTA; SITE NAME "RODEO GROUND OPEN SPACE 3." MAPPED TO LOCATION/COORDINATES PROVIDED BY PORTAL.

Ecological: BLACKBERRY BRAMBLES ALONG A CATTAIL/TULE MARSH. 2011 COLONY CONSISTED OF 3 BLACKBERRY BRAMBLES WITH OVER 100 BIRDS EACH; COLONY GROWING IN SIZE. DRY CONDITIONS AND MINIMAL WATER IN 2015.

General: APPROXIMATELY 500 BIRDS OBSERVED ON 18 OR 19 APR 2011; COLONY NOT PREVIOUSLY OBSERVED, MARKED AS SINGING AND CARRYING NEST MATERIAL IN PORTAL. 0 BIRDS OBSERVED ON 18 APR 2014. 0 OBSERVED ON 17 APR 2015; ABOUT 1,500 OBS THE WEEK PRIOR.

Owner/Manager: UNKNOWN

Occurrence No.	580	**Map Index:**	96871	**EO Index:**	98094	**Element Last Seen:**	2011-04-16
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-04-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-02-01

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.85339 / -121.30139	**Accuracy:**	80 meters
UTM:	Zone-10 N4301878 E647392	**Elevation (ft):**	130
PLSS:	T12N, R06E, Sec. 34, NW (M)	**Acres:**	0.0

Location: ABOUT 0.2 MI NNW OF HWY 65 & TWELVE BRIDGES DR INTERSECTION, 0.3 MI NE OF TWELVE BRIDGES DR AT INDUSTRIAL AVE, LINCOLN.

Detailed Location: COLONY LOCATED "WEST OF THE SOUTH BOUND OFF RAMP FOR TWELVE BRIDGES AND HWY 65." BLACKBERRY BRAMBLES VISIBLE IN GOOGLE STREET VIEW. COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL. MAPPED TO LOCATION PROVIDED IN PORTAL.

Ecological: HIMALAYAN BLACKBERRY AND TULES. BIRDS OBSERVED FORAGING IN SURROUNDING GRASSLANDS IN 2011.

General: 200 BIRDS OBS ON 22 APR 2000. 200 BIRDS OBS ON 25 APR 2008; CLASSIFIED AS SINGING/CARRYING NEST MATERIAL. 0 OBS ON 29 MAR 2011. 2.5K BIRDS OBS FORAGING/NESTING ON 16 APR 2011. 0 OBS ON 18 APR 2014. 0 OBS ON 17 APR 2015; 200 OBS WEEK PRIOR.

Owner/Manager: PVT

Occurrence No.	581	**Map Index:**	96873	**EO Index:**	98096	**Element Last Seen:**	2015-04-10
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-04-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-11-15

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.84723 / -121.30647	**Accuracy:**	specific area
UTM:	Zone-10 N4301186 E646965	**Elevation (ft):**	121
PLSS:	T12N, R06E, Sec. 33, NE (M)	**Acres:**	11.0

Location: ABOUT 0.2 MI S OF TWELVE BRIDGES DR & INDUSTRIAL AVE INTERSECTION, 0.6 MI N OF ATHENS RD AT INDUSTRIAL AVE, LINCOLN.

Detailed Location: COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "ORCHARD CREEK." MAPPED TO LOCATION PROVIDED IN PORTAL. LOCATION DESCRIBED AS "JUST EAST OF INDUSTRIAL AVENUE, ABOUT 0.25 MILE SOUTH OF TWELVE BRIDGES RD."

Ecological: HABITAT COMPOSED OF SEVERAL ADJACENT CLUMPS OF HIMALAYAN BLACKBERRY. IN 2014, FORAGING BIRDS WERE FLYING LOW ACROSS INDUSTRUAL AVE TO FORAGE AND AT LEAST ONE WAS HIT BY A CAR.

General: 300-500 OBS NESTING ON 5 APR 2014. 1.8K OBS NESTING ON 18 APR 2014. 2.2K OBS ON 16 MAY 2014; 15+ FLEDGLINGS. 2.2K OBS ON 23 MAY 2014; 160 FLEDGLINGS. 5K BIRDS SINGING IN & OUT BLACKBERRY ON 10 APR 2015; ONLY 10 REMAINING BY 17 APR.

Owner/Manager: PVT

Multiple Occurrences per Page

California Department of Fish and Wildlife

California Natural Diversity Database

Occurrence No.	582	**Map Index:**	96876	**EO Index:**	98101	**Element Last Seen:**	2015-04-17
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-04-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-02-01

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.86869 / -121.32209	**Accuracy:**	80 meters
UTM:	Zone-10 N4303543 E645565	**Elevation (ft):**	125
PLSS:	T12N, R06E, Sec. 20, SE (M)	**Acres:**	0.0

Location:	ABOUT 0.3 MI S OF MOORE RD AT PHEASANT WAY, 0.7 MI WSW OF FERRARI RANCH RD AT HWY 65 BYPASS, LINCOLN.
Detailed Location:	COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "WEST FERRARI RANCH ROAD." MAPPED TO PROVIDED COORDINATES FROM PORTAL. LOCATION DESCRIBED AS "AT WEST END OF FERRARI RANCH ROAD."
Ecological:	BIRDS USING HIMALAYAN BLACKBERRY. SITE CONSISTED OF STREAM, POND, AND MARSH HABITAT. A PUBLIC TRAIL FOLLOWS THE STREAM AND MARSH. BIRDS FORAGE IN SURROUNDING GRASSLANDS.
General:	ABOUT 1,800 BIRDS OBSERVED ON 18 APR 2014; FORAGING & SINGING, CLASSIFIED AS BREEDING. ABOUT 1,000-1,200 OBS ON 16 & 23 MAY 2014; ADULTS CARRYING FOOD, LESS THAN 10 FLEDGLINGS OBS. ABOUT 1,500 OBS ON 17 APR 2015; NEST & EGGS PRESENT.
Owner/Manager:	UNKNOWN

Northern Hardpan Vernal Pool

Element Code: CTT44110CA

Northern Hardpan Vernal Pool

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3.1
	Other:				
Habitat:	**General:**				
	Micro:				

Occurrence No.	23	**Map Index:** 11651	**EO Index:** 16254	**Element Last Seen:**	1980-XX-XX
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1980-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	1998-07-15

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.85348 / -121.31556	**Accuracy:**	specific area
UTM:	Zone-10 N4301865 E646163	**Elevation (ft):**	125
PLSS:	T12N, R06E, Sec. 33, NW (M)	**Acres:**	1251.8

Location: SOUTH OF LINCOLN 2-3 MILES WEST OF HWY 65.

Detailed Location: POOLS IN TREELESS ANNUAL GRASSLAND. BOUNDARIES INDICATE EXTENT OF UNDEVELOPED AREA.

Ecological: DIVERSE POOL FLORA. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: SEVERAL POOLS KNOWN FOR THEIR INVERTEBRATE FAUNA. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Occurrence No.	68	**Map Index:** 11613	**EO Index:** 16247	**Element Last Seen:**	1982-XX-XX
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1982-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	1998-07-15

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.78625 / -121.32487	**Accuracy:**	specific area
UTM:	Zone-10 N4294389 E645492	**Elevation (ft):**	110
PLSS:	T11N, R06E, Sec. 20, S (M)	**Acres:**	51.4

Location: ADJACENT TO SOUTH BRANCH (PLEASANT GROVE CREEK) ABOUT 1 MILE SW OF FIDDYMENT RANCH, ROSEVILLE.

Detailed Location: TWO AREAS; 38 AC RANKED AS MEDIUM QUALITY BY WESCO, 1982, ZONED FORM AG IN 1977 ROSEVILLE GENERAL PLAN; 13 AC OF LOW QUALITY POOLS, ZONED RESIDENTIAL.

Ecological: LOW TERRACE HARDPAN SUBSTRATE. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Alkali Seep

Element Code: CTT45320CA

Alkali Seep

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S2.1
	Other:				
Habitat:	**General:**				
	Micro:				

Occurrence No.	2	**Map Index:** 11773	**EO Index:** 13316	**Element Last Seen:**	1982-08-23
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1989-04-19
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	1998-07-20

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.81323 / -121.25662	**Accuracy:**	1/5 mile
UTM:	Zone-10 N4297494 E651363	**Elevation (ft):**	150
PLSS:	T11N, R06E, Sec. 12, S (M)	**Acres:**	0.0

Location: 0.5 MILE EAST OF PLEASANT GROVE CREEK, APPROX 2.5 MILES NORTH OF ROCKLIN. ACCESS VIA HWY 65.

Detailed Location:

Ecological: SEEPS AND OLNEY BULLRUSH DOM. OCCURS IN PATCHES W/ALKALI MEADOW BTWN A HOMOGENEOUS STAND OF VEG APPROX 1 M TALL. FRESHWATER SEEP OCCURS ABOVE ALKALINE-SEEP. FILL HAS BEEN ILLEGALLY DISCHARGED INTO SITE AS OF 1989.

General: ARMY CORPS INVOLVED IN RESTORATION AND MITIGATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Branchinecta lynchi

Element Code: ICBRA03030

vernal pool fairy shrimp

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3
	Other:	IUCN_VU-Vulnerable			
Habitat:	**General:**	ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.			
	Micro:	INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.			

Occurrence No.	29	**Map Index:**	33250	**EO Index:**	2571	**Element Last Seen:**	2009-02-11
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-02-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-11-14

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.86617 / -121.29710	**Accuracy:**	specific area
UTM:	Zone-10 N4303303 E647738	**Elevation (ft):**	140
PLSS:	T12N, R06E, Sec. 27, NW (M)	**Acres:**	79.0

Location:	EASTRIDGE SOUTHERN WETLAND PRESERVE, JUST EAST OF HWY 65 (AT THE LINCOLN RODEO GROUNDS), 0.5 MILE SE OF LINCOLN.
Detailed Location:	KNOWN AS "RODEO GROUNDS PRESERVE" IN 2008 & 2009 REPORTS. LOCALITY FOR 1980 SPECIMENS GIVEN AS "2 MI S OF LINCOLN," ATTRIBUTED HERE. MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS.
Ecological:	145-ACRE NORTHERN HARDPAN VERNAL POOL PRESERVE WITH CONSTRUCTED VERNAL POOLS (3.95 ACRES), CONSTRUCTED SEASONAL WETLANDS (1.95 ACRES), AND REFERENCE VERNAL POOLS IN ANNUAL GRASSLAND.
General:	COLLECTED IN 1980 AND 1994. FOUND IN 26 OF 56 POOLS SAMPLED 1995. IN 27 OF 55 POOLS, 1996. PRESENT, 1997 & 1998. IN 2 OF 30 POOLS, 2008. SINGLE FEMALE BRANCHINECTA FOUND IN 1 OF 31 POOLS SAMPLED FEB 2009; PRESUMED B. LYNCHI.
Owner/Manager:	PVT

Occurrence No.	41	**Map Index:**	32449	**EO Index:**	1022	**Element Last Seen:**	2009-02-13
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-02-13
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-01-05

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.78926 / -121.29294	**Accuracy:**	specific area
UTM:	Zone-10 N4294775 E648259	**Elevation (ft):**	150
PLSS:	T11N, R06E, Sec. 22 (M)	**Acres:**	12.9

Location:	HIGHLAND RESERVE SOUTH; S SIDE OF HWY 65, ABOUT 0.5 MILE NW OF THE PLEASANT GROVE BLVD OVERPASS.
Detailed Location:	PARCEL 84 OF A MULTI-PARCEL PRESERVE. MAPPED TO INCLUDE OCCUPIED POOLS N10, N42, N8, NA & NB.
Ecological:	CONSTRUCTED & HISTORIC VERNAL POOLS IN NON-NATIVE ANNUAL GRASSLAND ON A WETLAND COMPENSATION/MITIGATION PRESERVE SURROUNDED BY DEVELOPED LAND. IN 1995, POOL NB WAS 94 SQ METERS & 17 CM DEEP. LINDERIELLA OCCIDENTALIS ALSO FOUND.
General:	OVER 50 FOUND IN 1 POOL, 1995; 1 COLLECTED AND SENT TO CAS. TENS FOUND IN 1 POOL, 2000. HUNDREDS IN 3 POOLS, 4 JAN 2002. HUNDREDS IN 1 POOL, 29 JAN 2003. NOT FOUND ON THIS PARCEL IN 2005 & 2008. FOUND IN 2 POOLS, 13 FEB 2009.
Owner/Manager:	PVT-ROSEVILLE PROPERTIES

Occurrence No.	44	**Map Index:**	94478	**EO Index:**	1903	**Element Last Seen:**	2011-03-03
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2011-03-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-11-13

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.76062 / -121.33646	**Accuracy:**	80 meters
UTM:	Zone-10 N4291527 E644536	**Elevation (ft):**	120
PLSS:	T11N, R06E, Sec. 32, NW (M)	**Acres:**	0.0

Location: SILVERADO OAKS MITIGATION SITE, ABOUT 0.2 MI NW OF WOODCREEK OAKS BLVD AT JUNCTION BLVD AND 3 MI WNW OF ROSEVILLE PO.

Detailed Location: 1995: 15 WETLANDS SAMPLED AMONG PARCELS 72 (EO #44, THIS OCCURRENCE) & 32 (EO #635); EXACT DETECTION LOCATIONS UNKNOWN. 1996: 10 SAMPLED. 1997: 13 SAMPLED. MAPPED TO LOCATION OF 2010-2011 DETECTIONS FROM 2013 SHAPEFILE.

Ecological: CONSTRUCTED AND SEASONAL HARDPAN VERNAL POOLS WITH NON-NATIVE ANNUAL GRASSLAND. PROTECTED AREA, SURROUNDED BY RESIDENTIAL DEVELOPMENT.

General: OBSERVED IN CONSTRUCTED VERNAL POOLS IN 1995. NO B. LYNCHI OBSERVED, BUT L. OCCIDENTALIS PRESENT, 1996 & 1997. DETECTED ON 16 FEB 2010 AND 3 MAR 2011.

Owner/Manager: CITY OF ROSEVILLE

Occurrence No.	45	**Map Index:**	94758	**EO Index:**	1899	**Element Last Seen:**	2013-08-09
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-08-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-12-29

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.76886 / -121.32151	**Accuracy:**	specific area
UTM:	Zone-10 N4292464 E645818	**Elevation (ft):**	130
PLSS:	T11N, R06E, Sec. 28, SE (M)	**Acres:**	23.0

Location: BETWEEN KASEBERG & S BRANCH PLEASANT GROVE CKS; FROM ABOUT 0.1MI NNW-0.4MI SE PLEASANT GROVE BLVD AT COUNTRY CLUB DR.

Detailed Location: N OF PLEASANT GROVE BLVD: WOODCREEK OAKS MITIGATION SITE. MAPPED TO POOL C2 PER LOCATION ON MAP FROM 1995 REPORT & POINTS FROM 2013 SHAPEFILE & FIELD SURVEY FORM. S OF BLVD: SILVERADO OAKS SITE, 1995 LOC UNKNOWN, MAPPED TO 2013 SHAPEFILE.

Ecological: 1995: NATURAL AND CONSTRUCTED HARDPAN VERNAL POOLS IN ANNUAL NON-NATIVE GRASSLAND ON WETLAND COMPENSATION/MITIGATION PRESERVES. 2013: CONSTRUCTED VERNAL POOLS SURROUNDED BY DEVELOPMENT.

General: S OF BLVD: DETECTED, 1995. FOUND IN 1 POOL, 2010. IN 2 POOLS, 2012. N OF BLVD: IN 1 OF 14 POOLS, FEB-MAR 1995; 1 ADULT COLLECTED, IN CAS (CASIZ #103127). ADULTS IN 1 POOL, JAN 2013; BRANCHINECTA CYSTS FOUND IN DRY-SEASON SAMPLES, 2013.

Owner/Manager: PVT-SARES REGIS GROUP

Occurrence No.	46	**Map Index:**	32458	**EO Index:**	9535	**Element Last Seen:**	1996-01-29
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1996-01-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2008-04-29

Quad Summary: Roseville (3812173)
County Summary: Placer

Lat/Long:	38.85840 / -121.31539	**Accuracy:**	specific area
UTM:	Zone-10 N4302411 E646168	**Elevation (ft):**	130
PLSS:	T12N, R06E, Sec. 28, SW (M)	**Acres:**	19.0

Location: INGRAM SLOUGH; 3.2 KM ESE OF INTERSECTION OF MOORE ROAD AND FIDDYMENT ROAD; SSW OF LINCOLN.

Detailed Location: LINCOLN CROSSING MITIGATION SITE. 1995: 10 TOTAL WETLANDS SAMPLED, THE INFORMATION FROM CONSULTANT HAD DISCREPANCIES BETWEEN FIELD SURVEY FORMS AND MAP - MAPPED ACCORDING TO THEIR MAP. 1996: 42 TOTAL WATERBODIES WERE SURVEYED.

Ecological: CONSTRUCTED HARDPAN VERNAL POOL IN ANNUAL NON-NATIVE GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.

General: 1995: <50 ADULTS OBSERVED IN POOL #211. 1996: <50 ADULTS OBSERVED IN 5 POOLS (101, 204, 206, 216 & 220). LINDERIELLA OCCIDENTALIS ALSO PRESENT IN MOST OF SITE DURING 1995 AND 1996.

Owner/Manager: PVT-STERLING PACIFIC ASSETS

Occurrence No.	139	**Map Index:**	34813	**EO Index:**	1874	**Element Last Seen:**	1997-01-14
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1997-01-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-12-16

Quad Summary: Roseville (3812173)
County Summary: Placer

Lat/Long:	38.80409 / -121.30324	**Accuracy:**	specific area
UTM:	Zone-10 N4296404 E647334	**Elevation (ft):**	100
PLSS:	T11N, R06E, Sec. 16, NE (M)	**Acres:**	15.0

Location: 0.3 TO 0.5 MILE SE OF THE INTERSECTION OF INDUSTRIAL AVENUE AND JUSTICE CENTER DRIVE, WEST OF HIGHWAY 65, ROCKLIN.

Detailed Location: FOOTHILL BUSINESS PARK MITIGATION SITE, PARCEL 1. 1993: DETECTIONS SOMEWHERE IN T11N R6E SEC 16, ATTRIBUTED HERE. 1995: 12 FEATURES SURVEYED. 1996: 14 FEATURES SURVEYED. 1997: 29 FEATURES SURVEYED. MAPPED TO 1996 & 1997 LOCATIONS.

Ecological: CONSTRUCTED VERNAL POOLS WITHIN NON-NATIVE ANNUAL GRASSLAND.

General: FOUND IN 5 OF 54 FEATURES SAMPLED ON 18 FEB 1993. NOT FOUND IN 12 FEATURES SAMPLED JAN-FEB 1995. OVER 50 FOUND IN 1 OF 14 POOLS, 30 JAN 1996. TENS FOUND IN 2 OF 29 POOLS, 14 JAN 1997.

Owner/Manager: PVT-STANFORD RANCH

Occurrence No.	141	**Map Index:**	34819	**EO Index:**	17500	**Element Last Seen:**	1996-01-30
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1996-01-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1996-07-17

Quad Summary: Roseville (3812173)
County Summary: Placer

Lat/Long:	38.86474 / -121.30580	**Accuracy:**	80 meters
UTM:	Zone-10 N4303130 E646987	**Elevation (ft):**	140
PLSS:	T12N, R06E, Sec. 28, NE (M)	**Acres:**	0.0

Location: NNW OF ROSEVILLE IN INGRAM SLOUGH; 0.4 KM WEST OF INTERSECTION OF HIGHWAY 65 AND INDUSTRIAL BLVD.
Detailed Location: LINCOLN CROSSING MITIGATION SITE. 1996: 42 TOTAL WATERBODIES SURVEYED.
Ecological: CONSTRUCTED HARDPAN VERNAL POOL WITHIN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.
General: 1996: <50 ADULTS OBSERVED IN POOL #222; SURFACE AREA=574 SQ METERS, WATER DEPTH=32.0 CM, TEMPERATURE= 11.5 DEGREES C, CONDUCTIVITY=75.80, TURBIDITY WAS LOW. LINDERIELLA ALSO PRESENT IN POOL AND IN SURROUNDING AREAS.
Owner/Manager: PVT-STERLING PACIFIC ASSETS

Occurrence No.	155	**Map Index:**	33674	**EO Index:**	30808	**Element Last Seen:**	1997-01-16
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1997-01-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-19

Quad Summary: Roseville (3812173), Pleasant Grove (3812174)
County Summary: Placer

Lat/Long:	38.78731 / -121.34962	**Accuracy:**	nonspecific area
UTM:	Zone-10 N4294468 E643339	**Elevation (ft):**	100
PLSS:	T11N, R06E, Sec. 19 (M)	**Acres:**	2551.0

Location: VICINITY OF FIDDYMENT RD, FROM PLEASANT GROVE BLVD TO ABOUT 3 MILES NORTH, ROSEVILLE.
Detailed Location: MAPPED TO INCLUDE 1993 DETECTION LOCATIONS GIVEN AS T11N R6E SECTION 18 (SUGNET ID #91), T11N R5E SECTION 25 (SUGNET ID #89), AND BOUNDARY OF AREA SURVEYED IN 1997 IN SECTIONS 19 AND 30. EXACT LOCATIONS UNKNOWN.
Ecological: AERIAL PHOTOS INDICATE DEVELOPMENT IN THE VICINITY OF THE 1993 DETECTIONS; HABITAT MAY HAVE BEEN LOST. 1997: A MITIGATION AREA WITH SEASONAL WETLANDS, REFERENCE VERNAL POOLS, AND CONSTRUCTED POOLS IN ANNUAL GRASSLAND/OAK WOODLAND.
General: FOUND IN 3 OF 3 BASINS SAMPLED IN SEC 18, 16 JAN 1993. FOUND IN 5 OF 31 BASINS SAMPLED IN SEC 25, 27 JAN 1993. FOUND IN 71 BASINS, 16 JAN 1997.
Owner/Manager: UNKNOWN

Occurrence No.	157	**Map Index:**	33676	**EO Index:**	30431	**Element Last Seen:**	1993-01-18
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1993-01-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-21

Quad Summary:	Roseville (3812173), Lincoln (3812183)
County Summary:	Placer

Lat/Long:	38.87219 / -121.29344	**Accuracy:**	nonspecific area
UTM:	Zone-10 N4303977 E648043	**Elevation (ft):**	150
PLSS:	T12N, R06E, Sec. 22 (M)	**Acres:**	647.0

Location:	FROM AUBURN RAVINE TO 1 MILE SOUTH OF RAVINE, BETWEEN HIGHWAY 65 AND SUN CITY BLVD, LINCOLN.
Detailed Location:	LOCATION DESCRIBED ONLY AS T12N R6E SECTION 22.
Ecological:	NATURAL VERNAL POOLS.
General:	B. LYNCHI OBSERVED IN 2 OF 5 FEATURES SURVEYED ON 18 JAN 1993. NO LEPIDURUS PACKARDI OBSERVED. SUGNET RECORD #95.
Owner/Manager:	UNKNOWN

Occurrence No.	191	**Map Index:**	36947	**EO Index:**	31944	**Element Last Seen:**	2011-01-27
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2014-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-22

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.84466 / -121.31547	**Accuracy:**	specific area
UTM:	Zone-10 N4300887 E646189	**Elevation (ft):**	115
PLSS:	T12N, R06E, Sec. 33, SW (M)	**Acres:**	15.0

Location:	ORCHARD CREEK CONSERVATION BANK; ABOUT 0.6 MI NW OF INDUSTRIAL AVE AT ATHENS AVE, 1 MI SW OF CA-65 AT TWELVE BRIDGES RD.
Detailed Location:	MAPPED TO LOCATIONS OF OCCUPIED POOLS FROM 1997 REPORT AND 2009-2011 FIELD SURVEY FORMS. EXACT LOCATION NOT GIVEN FOR DETECTIONS IN 2002 & 2008.
Ecological:	632-ACRE PRESERVE WITH NORTHERN HARDPAN VERNAL POOLS, SWALES, & EMERGENT MARSH IN GRAZED ANNUAL GRASSLAND. MAJORITY OF VERNAL POOLS LOCATED ON SAN JOAQUIN SANDY LOAM AND ALAMO-FIDDYMENT COMPLEX SOILS.
General:	FOUND IN LOW ABUNDANCE IN VP584, MEDIUM IN VP610, 2 OF 170 POOLS SAMPLED, 17 JAN 1997. 100S OF ADULTS FOUND, 10 JAN 2002. FEWER THAN 10 FOUND, 22 JAN 2008. FOUND IN 1 POOL, 16 MAR 2009, 16 FEB 2010 & 27 JAN 2011. NONE FOUND IN 2014 SURVEY.
Owner/Manager:	PVT-WILDLANDS INC

Occurrence No.	196	**Map Index:**	38629	**EO Index:**	33636	**Element Last Seen:**	1997-11-06
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	1997-11-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-04-20

Quad Summary: Roseville (3812173)
County Summary: Placer

Lat/Long:	38.85775 / -121.37303	**Accuracy:**	80 meters
UTM:	Zone-10 N4302249 E641167	**Elevation (ft):**	100
PLSS:	T12N, R05E, Sec. 25, SW (M)	**Acres:**	0.0

Location: MOORE RANCH PROPERTY, 0.8 MILE NORTH OF PLEASANT VALLEY ROAD, SOUTH OF AUBURN RAVINE, 7 MILES NNW OF ROSEVILLE.
Detailed Location:
Ecological: HABITAT CONSISTS OF A VERNAL POOL IN GRAZED ANNUAL GRASSLAND.
General: SITE WAS HISTORICALLY (SINCE AT LEAST 1937) DISKED; HAS ONLY BEEN GRAZED OVER THE PAST SEVERAL YEARS. 6 CYSTS FOUND IN POOL #3 (PRESUMED TO BE BRANCHINESTA LYNCHI, SINCE THAT IS THE ONLY MEMBER OF THAT GENUS KNOWN TO OCCUR IN THIS AREA).
Owner/Manager: UNKNOWN

Occurrence No.	247	**Map Index:**	43395	**EO Index:**	43395	**Element Last Seen:**	2001-03-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-03-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2004-06-22

Quad Summary: Roseville (3812173)
County Summary: Placer

Lat/Long:	38.82671 / -121.29569	**Accuracy:**	80 meters
UTM:	Zone-10 N4298927 E647942	**Elevation (ft):**	150
PLSS:	T11N, R06E, Sec. 03, SW (M)	**Acres:**	0.0

Location: STANFORD RANCH NORTH, 0.75 MILE NNE JCT OF SUNSET BLVD & HWY 65, 1.8 MILES WSW OF TELEGRAPH HILL, 4 MI N OF ROCKLIN.
Detailed Location: VERNAL POOL AT THIS SITE NUMBERED VP42, MAX SURFACE AREA ABOUT 10 METERS BY 13 METERS & 35 CM DEEP. B. LYNCHI FOUND IN 1 OF 65 SEASONAL WATERBODIES SURVEYED BETWEEN 28 JAN & 24 MAR 2000.
Ecological: HABITAT CONSISTS OF FORMERLY GRAZED, NON-NATIVE ANNUAL GRASSLAND, INTERSPERSED WITH VERNAL POOLS.
General: VPFS NUMBERING IN THE 10'S OBSERVED ON 11 FEB 2000 (2 FEMALES) AND ON 25 FEB 2000 (2 MALES) IN VERNAL POOL #VP42. 8 MAR 2001: 1 MALE OBSERVED WITHIN POOL #42.
Owner/Manager: PVT

Occurrence No.	304	**Map Index:**	46034	**EO Index:**	46034	**Element Last Seen:**	2013-01-25
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-01-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-12-18

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.76472 / -121.34923	**Accuracy:**	specific area
UTM:	Zone-10 N4291962 E643418	**Elevation (ft):**	125
PLSS:	T11N, R06E, Sec. 31, NW (M)	**Acres:**	46.0

Location: WOODCREEK WEST WETLAND COMPENSATION AREA, S SIDE OF PLEASANT GROVE RD FROM ABOUT 0.1 TO 0.6 MI E OF FIDDYMENT RD.

Detailed Location: MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS. 2001: FOUND IN POOL 55. 2002: IN POOL 17. 2003: POOLS 8, 22, 49, & 55. 2005: IN POOL 22. 2007: IN "INCIDENTAL WETLAND." 2008: IN POOLS 13, 20, 30, 68, & 69.

Ecological: ANNUAL GRASSLAND INTERSPERSED WITH CONSTRUCTED AND HISTORIC VERNAL POOLS. SURROUNDING LAND HAS BEEN DEVELOPED.

General: OVER 10 FOUND IN 1 POOL, 2001. 10S IN 1 POOL, 2002. 10S-100S IN 4 POOLS, 2003. 10S FOUND IN 1 OF 22 POOLS, 2005. IN 1 POOL, 2007. IN 5 POOLS, FEB 2008. 0 FOUND IN 24 POOLS, FEB 2009. IN 1 POOL, FEB 2010. IN 1 POOL, APR 2012. IN 2, JAN 2013.

Owner/Manager: CITY OF ROSEVILLE

Occurrence No.	307	**Map Index:**	46096	**EO Index:**	46096	**Element Last Seen:**	2001-03-09
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-03-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-22

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.87145 / -121.32514	**Accuracy:**	80 meters
UTM:	Zone-10 N4303844 E645295	**Elevation (ft):**	120
PLSS:	T12N, R06E, Sec. 20, SE (M)	**Acres:**	0.0

Location: SW OF LINCOLN, 0.15 MILE SOUTH OF MOORE ROAD AND 0.25 MILE NW OF INGRAM SLOUGH.

Detailed Location:

Ecological: HABITAT CONSISTS OF LAND WHICH HAS BEEN DRY-FARMED (DISKED ETC.)

General: TENS OF ADULTS OBSERVED ON 9 MAR 2001; COLLECTION DEPOSITED AT CAS (CASIZ #158791).

Owner/Manager: UNKNOWN

Occurrence No.	308	**Map Index:**	46098	**EO Index:**	46098	**Element Last Seen:**	2013-12-04
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-12-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-03-03

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.85182 / -121.32849	**Accuracy:**	nonspecific area
UTM:	Zone-10 N4301661 E645044	**Elevation (ft):**	120
PLSS:	T12N, R06E, Sec. 32 (M)	**Acres:**	44.0

Location: ANTONIO MOUNTAIN RANCH PROPERTY, ABOUT 1.5 MILES E OF FIDDYMENT RD AT ATHENS AVE, BETWEEN INGRAM SLOUGH & ORCHARD CREEK.

Detailed Location: 3 MI SSW OF LINCOLN. 2 DIFFERENT LOCATIONS GIVEN FOR 2001 DETECTION: N-MOST POLYGON MAPPED TO LOCATION GIVEN ON FIELD SURVEY FORM, E-MOST POLYGON MAPPED TO COORDINATES FROM MUSEUM CATALOG.

Ecological: GRAZED NON-NATIVE GRASSLAND. LINDERIELLA OCCIDENTALIS ALSO FOUND.

General: 10S FOUND ON 9 MAR 2001, 6 COLLECTED (CASIZ #158782). FOUND IN 6 OF 313 BASINS, FEB-MAR 2007 (1 MAPPED HERE). FOUND IN 7-8 POOLS, FEB 2010 (1 MAPPED HERE). 2 COLLECTED 29 JAN (CASIZ #193787), & FOUND IN 14 POOLS (4 MAPPED HERE) DEC 2013 .

Owner/Manager: CITY OF ROSEVILLE

Occurrence No.	309	**Map Index:**	46106	**EO Index:**	46106	**Element Last Seen:**	2001-03-07
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-02-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-22

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.78973 / -121.33683	**Accuracy:**	nonspecific area
UTM:	Zone-10 N4294757 E644445	**Elevation (ft):**	115
PLSS:	T11N, R06E, Sec. 20, NW (M)	**Acres:**	15.4

Location: 1 MILE SW OF THE INTERSECTION OF FIDDYMENT ROAD AND PLEASANT GROVE CREEK, ROSEVILLE.

Detailed Location: WOODCREEK NORTH OPEN SPACE PRESERVE/WETLAND COMPENSATION AREA; POOL #6. IDENTIFIED AS "BLUE OAKS OPEN SPACE," CITY PROPERTY, IN CALIFORNIA PROTECTED AREAS DATABASE.

Ecological: ANNUAL GRASSLAND WITH CONSTRUCTED AND HISTORIC VERNAL POOLS SURROUNDED BY OAK WOODLAND. LINDERIELLA OCCIDENTALIS ALSO FOUND HERE.

General: HUNDREDS OBSERVED IN 1 OF 15 POOLS SAMPLED DURING SURVEY CONDUCTED ON 7 MAR 2001. NONE FOUND DURING SURVEYS ON 28 FEB 2002, 7 JAN 2005, 23 FEB 2007, 16 JAN 2008, AND 17 FEB 2009.

Owner/Manager: CITY OF ROSEVILLE

Occurrence No.	315	**Map Index:**	93548	**EO Index:**	47900	**Element Last Seen:**	2013-12-04
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-12-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-03-03

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.84961 / -121.35819	**Accuracy:**	specific area
UTM:	Zone-10 N4301368 E642471	**Elevation (ft):**	100
PLSS:	T12N, R06E, Sec. 31 (M)	**Acres:**	118.0

Location: MOORE RANCH PRESERVE & ANTONIO MOUNTAIN RANCH; FROM ABOUT 0.7 MI NW TO 0.8 MI SE OF FIDDYMENT RD AT E CATLETT RD.

Detailed Location: MOORE RANCH [MR]: W OF FIDDYMENT; "HIGHLAND RESERVE NORTH" ON SEC 36, "WOODCREEK WEST" ON SEC 31. ANTONIO MOUNTAIN RANCH [AMR]: E OF FIDDYMENT AND NORTH OF ATHENS AVE.

Ecological: MR: 2 CONTIGUOUS RESTORATION SITES W/CONSTRUCTED & REFERENCE WETLANDS; 10S-100S FOUND PER POOL; LINDERIELLA OCCIDENTALIS ALSO FOUND ONSITE. AMR: 808-AC MITIGATION SITE W/ VERNAL POOLS IN GRAZED ANNUAL GRASSLAND; 10S-1000S FOUND PER POOL.

General: MR: 0 FOUND 1997; IN 2 POOLS, 2002; IN 4 POOLS, 2003; IN 1 POOL, 2005; IN 1 POOL, 2008; IN 5 POOLS, FEB-MAR 2010. AMR: IN 6 POOLS, 2007 (5 MAPPED HERE); IN 7-8 POOLS, 2010 (6 HERE); 6 COLLECTED, FOUND IN 14 POOLS (10 HERE) IN 2013.

Owner/Manager: MOORE RANCH CONSERVANCY, PVT

Occurrence No.	733	**Map Index:**	93531	**EO Index:**	94666	**Element Last Seen:**	2015-01-09
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-01-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-03-04

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.81452 / -121.26366	**Accuracy:**	specific area
UTM:	Zone-10 N4297626 E650749	**Elevation (ft):**	150
PLSS:	T11N, R06E, Sec. 12 (M)	**Acres:**	15.0

Location: STANFORD RANCH OPEN SPACE PRESERVE, BOTH SIDES OF STANFORD RANCH ROAD, BETWEEN DELTA DRIVE AND DARBY ROAD, ROCKLIN.

Detailed Location: 2014: MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS VP-22, VP-109, AND VP-111. 2015: IN POOLS 22, 23, 109, & 111.

Ecological: DESIGNATED OPEN SPACE PRESERVE. VERNAL POOL GRASSLAND DOMINATED BY NON-NATIVE ANNUALS. SOME DISTURBANCE FROM OCCASIONAL HUMAN VISITATION.

General: THOUSANDS WERE FOUND IN 3 OF 12 POOLS SAMPLED ON 13 MAR 2014. 100S FOUND IN 4 POOLS, 9 JAN 2015.

Owner/Manager: CITY OF ROCKLIN

Occurrence No.	734	**Map Index:**	93539	**EO Index:**	94675	**Element Last Seen:**	2014-02-24
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2014-02-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-22

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.85386 / -121.30925	**Accuracy:**	specific area
UTM:	Zone-10 N4301917 E646709	**Elevation (ft):**	125
PLSS:	T12N, R06E, Sec. 28, SE (M)	**Acres:**	40.0

Location:	WEST SIDE OF INDUSTRIAL AVE, FROM INTERSECTION WITH TWELVE BRIDGES DRIVE TO 0.4 MILE NORTH OF THE INTERSECTION, LINCOLN.
Detailed Location:	ORCHARD CREEK VERNAL POOL PRESERVE. MAPPED TO LOCATIONS OF POOLS OCCUPIED IN 2009 AND 2014 (EXACT LOCATIONS NOT GIVEN FOR 2008 DETECTIONS)
Ecological:	AN 80 ACRE PRESERVE WITH 7.4 ACRES OF CREATED AND NATURAL VERNAL POOLS, AND VERNAL SWALES. USED FOR GRAZING.
General:	FEWER THAN 10 REPRODUCTIVE ADULTS OBSERVED ON 22 JAN 2008. DETECTED IN 3 POOLS ON 16 MAR 2009. FOUND IN 5 OF 17 POOLS SAMPLED 4 APR 2012. DETECTED IN 3 OF 17 POOLS SAMPLED JAN-MAR 2014.
Owner/Manager:	PVT-WILDLANDS INC

Occurrence No.	736	**Map Index:**	93547	**EO Index:**	94682	**Element Last Seen:**	2008-01-31
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2008-01-31
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-22

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.82914 / -121.33844	**Accuracy:**	80 meters
UTM:	Zone-10 N4299127 E644226	**Elevation (ft):**	125
PLSS:	T11N, R06E, Sec. 05, SW (M)	**Acres:**	0.0

Location:	ABOUT 0.7 MILE NE OF FIDDYMENT RD AT SUNSET BLVD WEST AND 1 MILE SW OF ATHENS AVE AT N FOOTHILLS BLVD, NW OF ROSEVILLE.
Detailed Location:	CALIFORNIA MOTOCROSS PROJECT SITE. MAPPED TO PROVIDED SHAPEFILE.
Ecological:	VIABLE POPULATION IN SEASONAL WETLAND 8 INCHES DEEP. DISTURBANCE FROM OFF-ROAD VEHICLES NOTED. SITE WAS PLOWED/DISKED HISTORICALLY.
General:	FOUND IN 1 BASIN DURING 2007-2008 WET SEASON SAMPLING.
Owner/Manager:	PVT

Occurrence No.	737	**Map Index:**	93556	**EO Index:**	94689	**Element Last Seen:**	1995-02-06
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1995-02-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-21

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.78673 / -121.31513	**Accuracy:**	nonspecific area
UTM:	Zone-10 N4294458 E646337	**Elevation (ft):**	130
PLSS:	T11N, R06E, Sec. 21 (M)	**Acres:**	78.0

Location:	VICINITY OF FOOTHILLS BLVD FROM BLUE OAKS BLVD SOUTH ABOUT 0.7 MILE, ROSEVILLE.
Detailed Location:	MAPPED GENERALLY TO TRS GIVEN FOR SPECIMENS, "NW 1/4 OF NE 1/4 SECTION 21" & "NW 1/4 OF SW 1/4 SECTION 21; T11N R6E." EXACT DETECTION LOCATIONS NOT KNOWN.
Ecological:	WETLAND FEATURE IN NE 1/4 WAS 95 SQ METERS, 17 CM DEEP. FEATURE IN SW 1/4 WAS 95 SQ METERS AND 14 CM DEEP.
General:	2 COLLECTED ON 31 JAN 1995 (CASIZ #103126). 1 COLLECTED ON 6 FEB 1995 (CASIZ #103125).
Owner/Manager:	UNKNOWN

Occurrence No.	738	**Map Index:**	93575	**EO Index:**	94708	**Element Last Seen:**	2006-11-24
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2006-11-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-09-09

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.83786 / -121.30612	**Accuracy:**	specific area
UTM:	Zone-10 N4300147 E647014	**Elevation (ft):**	125
PLSS:	T11N, R06E, Sec. 04, NE (M)	**Acres:**	14.0

Location:	WEST OF HIGHWAY 65, JUST EAST AND SE OF THE INTERSECTION OF ATHENS AVE AND INDUSTRIAL AVE, NW OF ROCKLIN.
Detailed Location:	ATHENS PARK PROJECT SITE. MAPPED TO POOLS WHERE BRANCHINECTA CYSTS WERE FOUND.
Ecological:	30 ACRE PROPERTY PROPOSED FOR ROAD IMPROVEMENTS AND COMMERCIAL DEVELOPMENT (AS OF 2007). 2.5 ACRES OF SEASONAL WETLANDS INCLUDING VERNAL POOLS, DITCHES, AND SWALES.
General:	21 OF 117 POOLS SAMPLED 24 NOV 2006; 5 CONTAINED BRANCHINECTA CYSTS. CYSTS PRESUMED B. LYNCHI GIVEN SITE LOCATION AND HABITAT TYPE, BUT HATCHING AND REARING WOULD BE NEEDED FOR A POSITIVE ID.
Owner/Manager:	PVT

Lepidurus packardi **Element Code:** ICBRA10010

vernal pool tadpole shrimp

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S3S4
	Other:	IUCN_EN-Endangered			
Habitat:	**General:**	INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.			
	Micro:	POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.			

Occurrence No.	24	**Map Index:**	32457	**EO Index:**	1900	**Element Last Seen:**	1995-02-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1995-02-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-02-24

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.76950 / -121.32354	**Accuracy:**	1/5 mile
UTM:	Zone-10 N4292533 E645642	**Elevation (ft):**	130
PLSS:	T11N, R06E, Sec. 29, SE (M)	**Acres:**	0.0

Location: BETWEEN KASEBERG CREEK & SOUTH BRANCH PLEASANT GROVE CREEK; ABOUT 0.6 MILE SW OF FOOTHILLS BLVD AT PLEASANT GROVE BLVD.

Detailed Location: 1993: EXACT DETECTION LOCATION UNKNOWN; SOMEWHERE IN TRS SEC 29. 1995: MAPPED TO LOCATION GIVEN FOR POOL C2 ON MAP IN SUGNET REPORTS; SPECIMEN LOCALITY GIVEN AS "NW 1/4 OF SW 1/4 SECTION 28, T11N R06E."

Ecological: 1993: MANMADE VERNAL POOL. 1995: HARDPAN VERNAL POOL IN ANNUAL NON-NATIVE GRASSLAND ON WETLAND COMPENSATION/MITIGATION PRESERVE. AIR PHOTOS SINCE THE TIME OF SURVEY SHOW DEVELOPMENT IN VICINITY.

General: FOUND IN 1 POOL ON 4 FEB 1993. FOUND IN 1 OF 14 BASINS SAMPLED FEB-MAR 1995; 3 COLLECTED (CASIZ #103128).

Owner/Manager: PVT-SARES REGIS GROUP

Occurrence No.	329	**Map Index:**	94802	**EO Index:**	95905	**Element Last Seen:**	2002-03-23
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	2002-03-23
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-01-12

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.86040 / -121.30314	**Accuracy:**	1/10 mile
UTM:	Zone-10 N4302653 E647226	**Elevation (ft):**	140
PLSS:	T12N, R06E, Sec. 28, SE (M)	**Acres:**	0.0

Location: ALONG INDUSTRIAL AVE (=LINCOLN BLVD), ABOUT 0.3 MILE SSW OF THE LINCOLN BYPASS (=HWY 65) OVERPASS, SSW OF LINCOLN.

Detailed Location: MAPPED TO GIVEN COORDINATES; MAPPED NON-SPECIFICALLY BECAUSE IT SEEMS LIKELY THAT THE CYST FOUND MAY HAVE BEEN TRANSPORTED FROM A NEARBY WETLAND.

Ecological: SEASONAL WETLAND ALONG ROADSIDE DISTURBED BY EXCAVATION OF A TELECOMMUNICATION LINE; PREVIOUSLY FILLED WITH RUNOFF FROM ADJACENT WETLAND COMPLEX AND NEARBY STREAM. SURROUNDING LAND BEING DEVELOPED FOR HOUSING.

General: 1 CYST IDENTIFIED FROM SOIL SAMPLED ON 23 MAR 2002.

Owner/Manager: UNKNOWN

Hydrochara rickseckeri

Element Code: IICOL5V010

Ricksecker's water scavenger beetle

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2?
	State:	None		**State:**	S2?
	Other:				
Habitat:	**General:**	AQUATIC.			
	Micro:				

Occurrence No.	11	**Map Index:** 60753	**EO Index:** 60789	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2005-03-30

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.85443 / -121.28928	**Accuracy:**	4/5 mile
UTM:	Zone-10 N4302013 E648441	**Elevation (ft):**	140
PLSS:	T12N, R06E, Sec. 27 (M)	**Acres:**	0.0

Location: TWELVE BRIDGES PRESERVE, SOUTH OF LINCOLN.

Detailed Location: PRESERVE IS WEST AND SOUTH OF TWELVE BRIDGES HOUSING DEVELOPMENTS; MAPPED FROM APPROXIMATE LOCATION OF TWELVE BRIDGES ROAD.

Ecological:

General: ROGERS SAYS THAT THE POOL THE BEETLE WAS COLLECTED IN WAS DESTROYED WHEN THE DEVELOPMENT WAS BUILT, BUT THAT THE SPECIES ALSO OCCURS IN THE ADJACENT PRESERVE.

Owner/Manager: UNKNOWN

Balsamorhiza macrolepis

Element Code: PDAST11061

big-scale balsamroot

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive, USFS_S-Sensitive			
Habitat:	**General:**	CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND.			
	Micro:	SOMETIMES ON SERPENTINE. 35-1465 M.			

Occurrence No.	9	**Map Index:** 32045	**EO Index:** 3757	**Element Last Seen:**	1958-07-07
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1958-07-07
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2013-08-13

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.79393 / -121.30792	**Accuracy:**	specific area
UTM:	Zone-10 N4295269 E646948	**Elevation (ft):**	125
PLSS:	T11N, R06E, Sec. 21, E (M)	**Acres:**	98.3

Location: UNCULTIVATED STRIP ALONG RAILROAD AND US HIGHWAY 99E, 3.2 MILES NORTH OF ROSEVILLE.

Detailed Location: US HWY 99E WAS REPLACED BY CA HWY 65. HWY 65 WAS BUILT PARALLEL TO THE ROUTE OF HWY 99E, ABOUT 0.4 MILE EAST OF THE RAILROAD. MAPPED BY CNDDB NON-SPECIFICALLY ALONG INDUSTRIAL AVE AND THE RAILROAD TRACKS AS A BEST GUESS.

Ecological: OPEN VALLEY PLAIN.

General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS A 1957 CRAMPTON COLLECTION FROM 3.2 MILES NORTH OF ROSEVILLE ALONG HWY 99E. 1957 & 1958 FULLER COLLECTIONS FROM 2 MILES NORTH OF ROSEVILLE ALONG HWY 99E ALSO ATTRIBUTED HERE. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Downingia pusilla

Element Code: PDCAM060C0

dwarf downingia

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	GU
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 2B.2			
Habitat:	**General:**	VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.			
	Micro:	VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-490 M.			

Occurrence No.	33	**Map Index:**	11696	**EO Index:**	17398	**Element Last Seen:**	1985-04-19
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	1985-04-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1989-08-11

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.82711 / -121.28884	**Accuracy:**	1/5 mile
UTM:	Zone-10 N4298982 E648536	**Elevation (ft):**	145
PLSS:	T11N, R06E, Sec. 03, SE (M)	**Acres:**	0.0

Location:	0.75 MILE SOUTH OF THE INTERSECTION OF HIGHWAY 65 AND PLEASANT GROVE ROAD, EAST OF HIGHWAY 65.
Detailed Location:	
Ecological:	VERNAL POOL ON CLAYPAN SUBSTRATE. ASSOCIATED WITH DOWNINGIA BICORNUTA, D. ORNATISSIMA, ALLOCARYA STIPITATA MICRANTHA.
General:	MORE THAN 30 PLANTS OBSERVED IN 1985.
Owner/Manager:	PVT, CALTRANS

Occurrence No.	37	**Map Index:**	11676	**EO Index:**	17396	**Element Last Seen:**	1987-04-15
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1997-06-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1997-08-11

Quad Summary:	Roseville (3812173)
County Summary:	Placer

Lat/Long:	38.78878 / -121.29828	**Accuracy:**	1/5 mile
UTM:	Zone-10 N4294713 E647796	**Elevation (ft):**	135
PLSS:	T11N, R06E, Sec. 22, NW (M)	**Acres:**	0.0

Location:	NORTH OF ROSEVILLE, EAST OF HIGHWAY 65, 2500 FEET EAST OF HIGHWAY 65 / HIGHWAY 65 BYPASS JUNCTION.
Detailed Location:	
Ecological:	SHALLOW VERNAL POOLS ON COMETA-FIDDYMENT SOILS COMPLEX. ASSOCIATED WITH ALLOCARYA STIPITATA MICRANTHA, CRASULA AQUATICA, DOWNINGIA ORNATISSIMA, AND GRATIOLA EBRACTEATA.
General:	MORE THAN 7000 PLANTS IN THREE VERNAL POOLS IN 1987. SITE WAS GRADED WHEN VISITED IN 1997. PLANTS PRESUMED EXTIRPATED.
Owner/Manager:	UNKNOWN

Occurrence No.	60	**Map Index:**	26041	**EO Index:**	5230	**Element Last Seen:**	1990-04-14
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	1990-04-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1994-08-08

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.85815 / -121.30393	**Accuracy:**	specific area
UTM:	Zone-10 N4302402 E647162	**Elevation (ft):**	130
PLSS:	T12N, R06E, Sec. 28, SE (M)	**Acres:**	10.1

Location: BETWEEN HIGHWAY 65 AND INDUSTRIAL BLVD NORTH OF ORCHARD CREEK, 2.2 MILES SOUTH OF LINCOLN.

Detailed Location: MAPPED ABOUT 0.6 AIR MILE SSW OF THE LINCOLN RODEO GROUNDS. WITHIN THE NE 1/4 OF THE SE 1/4 OF SECTION 28 AND THE NW 1/4 OF THE SW 1/4 OF SECTION 27.

Ecological: NORTHERN CLAYPAN VERNAL POOLS ON SAN JOAQUIN SOIL SERIES AND NORTHERN VOLCANIC MUDFLOW VERNAL POOLS ON EXCHEQUER SERIES SOILS. ASSOCIATED WITH PLAGIOBOTHRYS STIPITATUS, DOWNINGIA BICORNUTA, LASTHENIA FREMONTII, NAVARRETIA LEUCOCEPHALA, ETC.

General: MORE THAN 1000 PLANTS OBSERVED IN 1989. 237 PLANTS OBSERVED IN 1990. SITE HAS MANY LARGE POOLS, SWALES AND VERNAL FLATS. SAN JOAQUIN SERIES AND MUDFLOW POOLS BOTH PRESENT. AREA SHOULD BE EVALUATED FOR REGIONAL POOL PRESERVE.

Owner/Manager: PVT

Occurrence No.	99	**Map Index:**	43407	**EO Index:**	43407	**Element Last Seen:**	2000-04-12
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2000-04-12
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2011-09-14

Quad Summary: Roseville (3812173), Pleasant Grove (3812174)

County Summary: Placer

Lat/Long:	38.78170 / -121.37450	**Accuracy:**	specific area
UTM:	Zone-10 N4293806 E641190	**Elevation (ft):**	100
PLSS:	T11N, R05E, Sec. 24, SW (M)	**Acres:**	3.8

Location: ABOUT 1 MILE SOUTHWEST OF CONFLUENCE OF KASEBERG CREEK AND PLEASANT GROVE CREEK, NORTHWEST OF ROSEVILLE.

Detailed Location: TWO POOLS MAPPED BY CNDDB; JUST NORTH OF PHILIP ROAD ABOUT 0.9 MILE WEST OF FIDDYMENT ROAD. POOLS ARE WITHIN THE SW 1/4 SW 1/4 SECTION 24.

Ecological: VERNAL POOLS DOMINATED BY PLAGIOBOTHRYS STIPITATUS, POGOGYNE ZIZYPHOROIDES, PSILOCARPHUS BREVISSIMUS, NAVARRETIA LEUCOCEPHALA, AND HORDEUM MURINUM SSP. GOSSONEANUM.

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 2000. 2010 AERIAL PHOTO SHOWS DEVELOPMENT AT SOUTHERN POOL; SOUTHERN COLONY IS PROBABLY EXTIRPATED.

Owner/Manager: PVT

Occurrence No.	110	**Map Index:** 50379	**EO Index:**	50379	**Element Last Seen:**	2002-05-03
Occ. Rank:	Excellent		**Presence:**	Presumed Extant	**Site Last Seen:**	2002-05-03
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2011-09-14

Quad Summary: Roseville (3812173)
County Summary: Placer

Lat/Long:	38.85082 / -121.32974	**Accuracy:**	80 meters
UTM:	Zone-10 N4301547 E644938	**Elevation (ft):**	118
PLSS:	T12N, R06E, Sec. 32, NE (M)	**Acres:**	0.0

Location: NORTH SIDE OF ORCHARD CREEK, 3 MILES SW OF LINCOLN, 1.4 MILES NW OF INDUSTRIAL AVE AT ATHENS AVE, NORTH OF ROSEVILLE.
Detailed Location: MAPPED WITHIN THE NW 1/4 OF THE NE 1/4 OF SECTION 32.
Ecological: LARGE VERNAL POOLS WITH DOWNINGIA BICORNUTA, LASTHENIA FREMONTII, PSILOCARPHUS BREVISSIMUS, GRATIOLA EBRACTEATA, AND PLAGIOBOTHRYS STIPITATUS. LEGENERE LIMOSA ALSO PRESENT.
General: FEWER THAN 100 PLANTS OBSERVED IN 2002 IN TWO POOLS, LIKELY TO OCCUR IN OTHER ADJACENT POOLS AS WELL. WITHIN CONSERVATION BANK.
Owner/Manager: PVT-WILDLANDS INC

Legenere limosa

Element Code: PDCAM0C010

legenere

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.1, BLM_S-Sensitive			
Habitat:	**General:**	VERNAL POOLS.			
	Micro:	IN BEDS OF VERNAL POOLS. 1-880 M.			

Occurrence No.	11	**Map Index:** 11680	**EO Index:**	28357	**Element Last Seen:**	1984-04-XX
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	1997-06-18
Occ. Type:	Natural/Native occurrence		**Trend:**	Decreasing	**Record Last Updated:**	1997-08-11

Quad Summary: Roseville (3812173)
County Summary: Placer

Lat/Long:	38.81155 / -121.29521	**Accuracy:**	specific area
UTM:	Zone-10 N4297245 E648016	**Elevation (ft):**	120
PLSS:	T11N, R06E, Sec. 10, SW (M)	**Acres:**	58.7

Location: N TRIBUTARY OF PLEASANT GROVE CREEK, N OF PLEASANT GROVE CREEK, S OF PLACER BLVD, E OF HWY 65.
Detailed Location:
Ecological: VERNAL POOL AREA ON FLOODPLAIN OF INTERMITTENT STREAM.
General: ABOUT 200 PLANTS IN 1984. NONE FOUND IN 1997 (TOO LATE IN SEASON). THE NORTHERN POOLS WHICH WERE MAPPED HERE IN 1984 APPEAR TO BE EXTIRPATED. S POOLS UNDISTURBED IN 1997.
Owner/Manager: PVT

Occurrence No.	14	**Map Index:**	11739	**EO Index:**	17380	**Element Last Seen:**	1984-04-05
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1997-06-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1997-08-11

Quad Summary: Roseville (3812173)
County Summary: Placer

Lat/Long:	38.81156 / -121.26800	**Accuracy:**	1/5 mile
UTM:	Zone-10 N4297290 E650379	**Elevation (ft):**	150
PLSS:	T11N, R06E, Sec. 11, SE (M)	**Acres:**	0.0

Location: FLOODPLAIN OF PLEASANT GROVE CREEK, APPROX 2.2 AIR MILES E OF JCT PLACER BLVD & SPRR TRACKS.
Detailed Location: WHEN VISITED IN 1997, WHAT APPEARS TO BE DEDICATED OPEN SPACE WAS SEEN JUST TO THE EAST OF MAPPED LOCATION FOR THIS SITE. FUTURE SURVEYS SHOULD TARGET THIS AREA.
Ecological: VERNAL POOL AREA IN FLOODPLAIN OF INTERMITTENT STREAM. ASSOCIATED WITH RANUNCULUS BONARIENSIS TRISEPALUS.
General: ABOUT 100 PLANTS IN 1984. WINDSHIELD SURVEY CONDUCTED IN 1997 TO CONFIRM PRESENCE OR ABSENCE OF HABITAT; IF MAPS ARE ACCURATE, THIS SITE IS NOW UNDER THE PAVEMENT AT DEVON DR, FARRIER RD & RACHEL CT IN THE STANFORD RANCH SUBDIVISION.
Owner/Manager: PVT

Occurrence No.	58	**Map Index:**	48978	**EO Index:**	48978	**Element Last Seen:**	2002-05-03
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2002-05-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-04-29

Quad Summary: Roseville (3812173)
County Summary: Placer

Lat/Long:	38.85079 / -121.32824	**Accuracy:**	specific area
UTM:	Zone-10 N4301546 E645068	**Elevation (ft):**	118
PLSS:	T12N, R06E, Sec. 32, NE (M)	**Acres:**	7.3

Location: NORTH SIDE OF ORCHARD CREEK, 1.4 MILES NW OF INTERSECTION OF INDUSTRIAL AND ATHENS AVE, 3 MILES SOUTHWEST OF LINCOLN.
Detailed Location: MAPPED WITHIN THE NW 1/4 OF THE NE 1/4 OF SECTION 32.
Ecological: SCATTERED MARGINS OF LARGE VERNAL POOL WITH PLAGIOBOTHRYS UNDULATUS, P. STIPITATUS, LASTHENIA FREMONTII, L. GLABERRIMA, DOWNINGIA BICORNUTA, NAVARRETIA LEUCOCEPHALA, AND CALLITRICHE MARGINATA.
General: IN 2002 HUNDREDS OF PLANTS OBSERVED IN FOUR POOLS; LIKELY TO OCCUR IN OTHER ADJACENT POOLS.
Owner/Manager: PVT-WILDLANDS INC

Chloropyron molle ssp. hispidum **Element Code:** PDSCR0J0D1

hispid salty bird's-beak

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2T2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.1, BLM_S-Sensitive			
Habitat:	**General:**	MEADOWS AND SEEPS, PLAYAS, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	IN DAMP ALKALINE SOILS, ESPECIALLY IN ALKALINE MEADOWS AND ALKALI SINKS WITH DISTICHLIS. 1-155 M.			

Occurrence No.	11	**Map Index:** 11763	**EO Index:**	17846	**Element Last Seen:**	1997-06-18
Occ. Rank:	Good		**Presence:**	Presumed Extant	**Site Last Seen:**	1997-06-18
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2011-08-04

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.81335 / -121.26006	**Accuracy:**	specific area
UTM:	Zone-10 N4297502 E651064	**Elevation (ft):**	150
PLSS:	T11N, R06E, Sec. 12, SW (M)	**Acres:**	25.4

Location: APPROXIMATELY 4 MILES NE OF ROSEVILLE.

Detailed Location: WITHIN STANFORD RANCH ALKALI SEEP PRESERVE, SPRING VALLEY. SITE IS NEAR PARK DRIVE AND STANFORD RANCH ROAD INTERSECTION. IN THE SW 1/4 SECTION 12. NEAR 3 SEEPS.

Ecological: SPRING FED ALKALI MEADOW WITH DISTICHLIS SPICATA, SCIRPUS OLNEYI, FRANKENIA GRANDIFOLIA VAR. CAMPESTRIS, CRESSA TRUXILLENSIS, MONERMA CYLINDRICA, AND LIPPIA NODIFLORA. AREA SURROUNDED BY ALAMO VARIANT CLAY, BUT SOIL AT SITE IS UNCLASSIFIED.

General: OVER 10,000 PLANTS SEEN IN 1982, 2000-5000 SEEN IN 1989, AND ~2500 IN 1991. ACCORDING TO DAINS, DECLINE IN POP PROBABLY DUE TO WEATHER, NOT MANAGEMENT. SITE FENCED, HABITAT LOOKED GOOD IN LATE SEASON (JUNE) 1997 WINDSHIELD SURVEY.

Owner/Manager: PVT

Juncus leiospermus var. leiospermus

Element Code: PMJUN011L2

Red Bluff dwarf rush

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2T2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.1, BLM_S-Sensitive, USFS_S-Sensitive			
Habitat:	**General:**	CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, VERNAL POOLS, MEADOWS AND SEEPS.			
	Micro:	VERNALLY MESIC SITES. SOMETIMES ON EDGES OF VERNAL POOLS. 30-1025 M.			

Occurrence No.	10	**Map Index:** 11642	**EO Index:**	22188	**Element Last Seen:** 1982-04-28
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:** 1997-06-18
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 2003-04-08

Quad Summary: Roseville (3812173)

County Summary: Placer

Lat/Long:	38.80377 / -121.31189	**Accuracy:**	1/5 mile
UTM:	Zone-10 N4296354 E646583	**Elevation (ft):**	110
PLSS:	T11N, R06E, Sec. 16, NE (M)	**Acres:**	0.0

Location: APPROX 0.5 MI N OF SCOW RD INDUSTRIAL BLVD, ROSEVILLE.

Detailed Location: WEST OF RR TRACKS, SOUTH OF INDUSTRIAL WASTE PONDS AND EAST OF A POWERLINE.

Ecological: MARGINS OF VERNAL POOLS, LARGELY ON KILAGA LOAM SOILS.

General: NO PLANTS SEEN IN 1997 WINDSHIELD SURVEY; HABITAT APPEARED INTACT. WITHAM CONSIDERS THIS SITE TO BE ERROUNEOUS; IT IS WELL OUTSIDE THE REPORTED RANGE OF THIS SPECIES. IT MAY BE VAR. AHARTII OR A MISIDENTIFICATION. NEEDS FIELDWORK.

Owner/Manager: PVT

Attachment G: USFWS IPAC

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
FEDERAL BUILDING, 2800 COTTAGE WAY, ROOM W-2605
SACRAMENTO, CA 95825
PHONE: (916)414-6600 FAX: (916)414-6713

Consultation Code: 08ESMF00-2017-SLI-0784 January 11, 2017
Event Code: 08ESMF00-2017-E-01721
Project Name: Panattoni Foothills Blvd Commercial/Industrial

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2)

of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Panattoni Foothills Blvd Commercial/Industrial

Official Species List

Provided by:

Sacramento Fish and Wildlife Office
FEDERAL BUILDING
2800 COTTAGE WAY, ROOM W-2605
SACRAMENTO, CA 95825
(916) 414-6600

Consultation Code: 08ESMF00-2017-SLI-0784
Event Code: 08ESMF00-2017-E-01721

Project Type: FILL

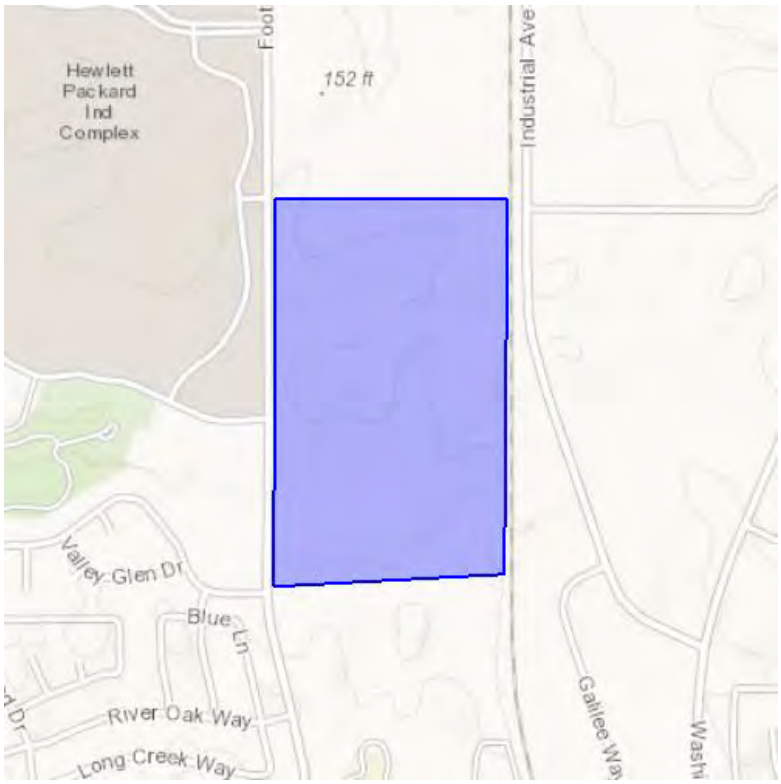
Project Name: Panattoni Foothills Blvd Commercial/Industrial
Project Description: Build to suit commercial/industrial

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

United States Department of Interior
Fish and Wildlife Service

Project name: Panattoni Foothills Blvd Commercial/Industrial

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-121.31358861923219 38.78515071050138, -121.30828857421875 38.78515071050138, -121.30837440490724 38.7784766193869, -121.31361007690431 38.77827588516623, -121.31358861923219 38.78515071050138)))

Project Counties: Placer, CA

United States Department of Interior
Fish and Wildlife Service

Project name: Panattoni Foothills Blvd Commercial/Industrial

Endangered Species Act Species List

There are a total of 8 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	**Status**	**Has Critical Habitat**	**Condition(s)**
California red-legged frog *(Rana draytonii)* Population: Wherever found	Threatened	Final designated	
Crustaceans			
Conservancy fairy shrimp *(Branchinecta conservatio)* Population: Wherever found	Endangered	Final designated	
Vernal Pool fairy shrimp *(Branchinecta lynchi)* Population: Wherever found	Threatened	Final designated	
Vernal Pool tadpole shrimp *(Lepidurus packardi)* Population: Wherever found	Endangered	Final designated	
Fishes			
Delta smelt *(Hypomesus transpacificus)* Population: Wherever found	Threatened	Final designated	
steelhead *(Oncorhynchus (=salmo)*	Threatened	Final designated	

United States Department of Interior
Fish and Wildlife Service

Project name: Panattoni Foothills Blvd Commercial/Industrial

mykiss) Population: Northern California DPS			
Insects			
Valley Elderberry Longhorn beetle *(Desmocerus californicus dimorphus)* Population: Wherever found	Threatened	Final designated	
Reptiles			
Giant Garter snake *(Thamnophis gigas)* Population: Wherever found	Threatened		

United States Department of Interior
Fish and Wildlife Service

Project name: Panattoni Foothills Blvd Commercial/Industrial

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Attachment H: Nesting Bird Survey

Attachment 2

BARNETT ENVIRONMENTAL

Environmental Consulting,
Regulatory Compliance and
Aerial Photographic Services

5214 El Cemonte Avenue
Davis, CA 95618-4418
Tel/Fax: 530.758.9235
Cell: 530.902.9670

bdbarnet@sbcglobal.net
bruce@barnettenvironmental.com
barnettenvironmental.com
flickr.com/photos/bioflyer

April 20, 2017

Development Services, City of Roseville Planning Division
311 Vernon Street
Roseville, CA 95678

ATTN: Wayne Wiley, Associate Planner

Subject: Preconstruction Raptor & Migratory Bird Nesting Survey @ Panattoni Development Company's Foothills Blvd Commercial Site in Roseville, CA

Dear Mr. Wiley,

At the request of Mr. Brent Collins of the Panattoni Development Company, Barnett Environmental conducted weekly raptor and migratory bird nesting surveys – between March 14 and April 17, 2017 – in anticipation of construction of this commercial project.

The objective of these weekly surveys was to identify existing nest structures on and within a 500-foot radius around the planned development area. We photographed (see Appendix 1) and examined each nest to determine whether it currently supported active breeding. We removed nests not currently supporting eggs or otherwise occupied by a breeding pair.

We encountered a total of 12 nest structures on the site (see Figure 1) – 6 corvid (blue jay, crow, magpie or similar), 5 passerine, and 1 hummingbird. None of these nests contained eggs at the time(s) of the survey(s), though four of the nests did show some signs of active refurbishment in anticipation of breeding. We subsequently removed all of these nests and will re-visit the site weekly to ensure no subsequent occupation of the development area by nesting birds.

We found no other nesting birds on or within a 500' radius of the project site during this survey.

Based on these survey results, I see no potential disturbance to nesting raptors or migratory birds by the proposed commercial construction and therefore propose no special mitigation for this resource.

Please do not hesitate to contact me with any questions or to otherwise discuss the results of these surveys.

Thank you for the opportunity to work with you on this project.

Sincerely

Bruce D. Barnett

Bruce D. Barnett, Ph.D.
Owner/Principal

Attachment 2

Vincinity Map

N

Legend

Nesting Site

Development Boundary

0 250 500

Feet

Scale - 1:2,400
1" = 200' @ 11 x 17 Sheet Size

Data Source: Barnett Environmental
Image Source:Google Earth, 04/05/2014
Projected Coordinate System: NAD 1983 State Plane CA II

Figure 1: Nesting Bird Survey

Panattoni, Foothills Blvd Commercial - Roseville CA

BARNETT ENVIRONMENTAL

Environmental Consulting,
Regulatory Compliance and
Aerial Photographic Services

5214 El Cemonte Avenue
Davis, CA 95618-4418
Tel/Fax: 530.758.9235
Cell: 530.902.9670

bdbarnet@sbcglobal.net
bruce@barnettenvironmental.com
barnettenvironmental.com
flickr.com/photos/bioflyer

APPENDIX 1
NEST PHOTOGRAPHS

Photo 1: Corvid nest ~8 feet off the ground in cottonwood in southeast corner of project site. Not occupied and no sign of use @ time of survey. Removed on 3/14/17.

Photo 2: Corvid nest ~7 feet off the ground in cottonwood tree in southeast corner of project site. Not occupied – no signs of use. Removed on 3/23/17.

Photo 3: Passerine nest ~ 2 feet off the ground in coyote bush in eastern portion of the project site. Not occupied – no signs of use. Removed on 3/28/17.

Photo 4: Hummingbird nest ~5 feet off the ground in cottonwood tree along western boundary of project site, near entrance. Not occupied – no eggs, but signs of recent refurbishment in anticipation of breeding. Removed on 4/4/17.

Photo 5: Corvid nest ~4 feet off ground in cottonwood tree along eastern boundary of project site. Not occupied – no eggs, but signs of recent refurbishment in anticipation of breeding. Removed on 4/4/17.

Photo 6: Corvid nest ~5 feet off ground in cottonwood tree in southern portion of site. No eggs or signs of recent/current use. Removed on 4/4/17.

Photo 7: Passerine nest ~3.5 feet off ground in cottonwood tree in southern portion of project site. Not occupied – no eggs or signs of recent use. Removed on 4/4/17.

Photo 8: Corvid nest ~2.5 feet off ground in coyote bush in northwestern corner of project site. Not occupied - no eggs or signs of recent use. Removed on 4/10/17.

Photo 9: Passerine nest ~6.5 feet off ground in cottonwood tree along eastern boundary of project site. Not occupied – no eggs or signs of recent use. Removed on 4/10/17.

Photo 10: Passerine nest ~2.5 feet off ground in coyote bush in eastern portion of project site. Not occupied - no eggs, but some indication of recent refurbishment in anticipation of breeding. Removed on 4/10/17.

Photo 11: Corvid nest ~5 feet off ground in cottonwood in southeastern corner of project site. Not occupied – no eggs, but some sign of recent refurbishment in anticipation of breeding. Removed on 4/10/17.

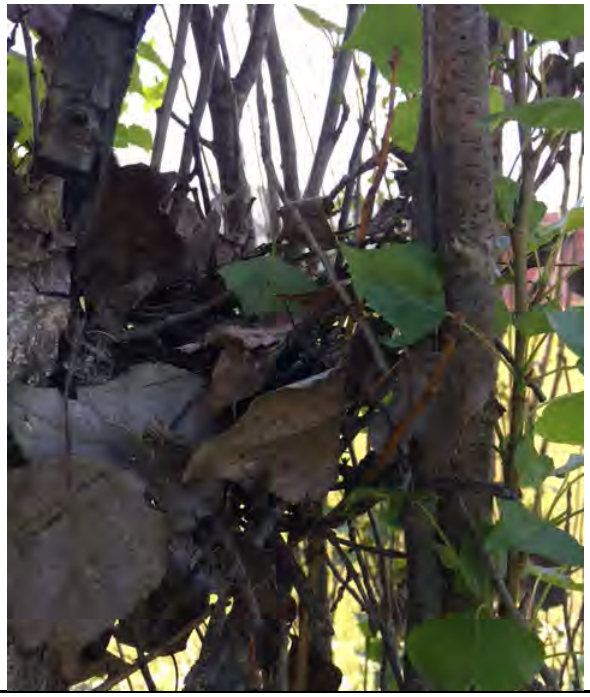


Photo 12: Passerine nest ~4.5 feet off ground in cottonwood in southeastern corner of project site. Not occupied – no eggs or signs of recent use. Removed on 4/10/17.

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT – PLANNING DIVISION
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATION MONITORING AND REPORTING PROGRAM

Project Title/File Number:	NIPA PCL 50 – Roseville 80 Major Project Permit / File Number PL19-0363
Project Location:	7901 Foothills Boulevard, Roseville, Placer County, CA APNs 017-232-031, 017-232-028, 017-232-030, 017-232-029
Project Description:	The project consists of seven industrial buildings on an approximately 80-acre site. The industrial buildings include three that are constructed or are under construction and four proposed buildings that have not yet been permitted within a master planned area. The master plan area will be constructed in phases. Site improvements include associated parking, internal drive aisles, detention basins, and landscaping. The project entitlements include a Major Project Permit Stage 1 that will include Buildings 1-7 and a Major Project Permit Stage 2 that will include Buildings 4-7.
Environmental Document	Mitigated Negative Declaration
Project Applicant:	Sheetal Bhatt, Kimley Horn
Property Owner:	Roseville 80 Land, LLC; Roseville 80 Bldg 2, LLC; and Southall Group Holdings, LLC
Lead Agency Contact Person:	Charity Gold, Associate Planner. (916) 774-5247

Section 21081.6 of the California Public Resources Code requires public agencies to "adopt a reporting and monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." This Mitigation Monitoring and Reporting Program has been adopted for the purpose of avoiding environmental impacts

MONITORING PROCESS: Existing monitoring mechanisms are in place that assist the City of Roseville in meeting the intent of CEQA. These existing monitoring mechanisms eliminate the need to develop new monitoring processes for each mitigation measure. These mechanisms include grading plan review and approval, improvement/building plan review and approval and on-site inspections by City Departments. Given that these monitoring processes are requirements of the project, they are not included in the mitigation monitoring program.

It shall be the responsibility of the project applicant/owner to provide written notification to the City using the Mitigation Verification Cover Sheet and Forms, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The City will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program. Any non-compliance will be reported by the City to the applicant/owner, and it shall be the project applicant's/owner's responsibility to rectify the situation by bringing the project into compliance. The purpose of this program is to ensure diligent and good faith compliance with the Mitigation Measures which have been adopted as part of the project.

TABLE OF MITIGATION MEASURES

Mitigation Measure	Implementation	Timing	Reviewing Party	Documents to be Submitted to City	Staff Use Only
BIO-1 Wetland Avoidance Measures: In order to avoid direct impacts to the seasonal wetland and wetland swale these features shall be completely avoided and the measures below shall be implemented and included on grading and improvement plans. No grading or earth moving activities shall occur within the setbacks identified below until all regulatory permits have been acquired as detailed in Mitigation Measure BIO 5. • Setbacks of at least 10 feet from the wetlands will be set to demarcate where no development will occur. • No grading, site construction, or other disturbance within 10 feet of any aquatic feature will occur at any time. Disturbance within, but more than 10 feet from, the above-mentioned setbacks will not occur until silt fencing, fiber rolls, or other similar BMP is installed at least 10 feet away and along the perimeter of the encroached feature. • Graded areas will be covered with straw, mats, natural wood chips with no artificial dyes or preservatives, or other erosion control measure within 72 hours. • No nutrients, pesticides, fuel, or other potential pollutants will be used within 50 feet of any aquatic resource. • No machinery will operate closer than 15 feet from an aquatic resource. Required grading between 10 and 15 feet from the resource will be conducted using only hand tools. • Machinery operating between 15 and 25 feet from an intermittent drainage, or between 25 and 50 feet from a perennial drainage, will be checked daily for fuel or oil discharge and moved outside these setbacks if discharge is found. • No grading will occur within aquatic resources setbacks for after 14 days following a storm event or 14 days before the next anticipated storm event. • During construction, the construction crew shall conduct daily clean-ups efforts to rid the area of trash and debris. • A qualified biologist will monitor all construction to ensure that no resource violations related to the U.S. Clean Water Act (CWA), the California Porter Cologne Act (PCA), or California Fish and Game Code (FGC) occur.	This condition shall be reflected in all construction and building plans, and construction site workers shall be advised by the site manager of this measure. The Applicants shall obtain appropriate permits from USACE and USFWS to ensure that there is no net loss of wetlands. The Applicant(s) shall coordinate with USFWS to modify as necessary any mitigation plans in an effort to attain mitigation success.	Show avoidance and add as note on Improvement Plans and Building Plans.	Planning, Engineering, and Building	None	
BIO-2 Pre-Construction Survey for Special Status Plant Species: Prior to grading or improvement plan approval a qualified botanist shall conduct a botanical survey for Special Status Plant Species within habitats on the site that may include special status plant species with the potential to occur on the site. It should be noted that weather conditions during any given survey year may require surveys to be conducted earlier or later in the typical blooming period in order to conduct the survey during the appropriate weather conditions for the survey year. This timing may result in the need to conduct more than one round of plant surveys to adequately survey for all potentially occurring special-status plant species. The results of these surveys should be documented in a letter report to the City of Roseville. If no special-status plants are observed during the recommended botanical	Results of preconstruction surveys shall be submitted prior to the issuance of a grading permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans. The applicants shall prepare annual reports on the status and success of mitigation and shall submit these reports to USFWS and CDFG. The applicants shall coordinate with USFWS and CDFG to modify as necessary any mitigation plans in an effort to attain mitigation success.	Add as note on Improvement Plans and Building Plans.	Engineering and Building	Survey results.	

surveys, no additional measures are recommended. If any of the non-listed special-status plants are identified within areas of potential construction disturbance, the plants and/or the seedbank should be transplanted to suitable habitat near the project site since the entire site is slated for development. A qualified biologist should prepare an avoidance and mitigation plan detailing protection and avoidance measures, transplanting procedures, success criteria, and long-term monitoring protocols. In addition, a pre-construction worker awareness training should be conducted alerting workers to the presence of and protections for special-status plants in the vicinity of the work area. If any State-listed plants occur within the project footprint, an Incidental Take Permit (ITP) would be required from the CDFW if total avoidance is not achievable.					
BIO-3 Pre-construction Nesting Survey: Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code, have the potential to nest within the trees on and adjacent to the site. Ground-disturbing activities and/or vegetation clearing operations, including pruning or removal of trees and shrubs, shall be completed between September 1 to February 14, if feasible. If ground-disturbing activities and/or vegetation removal begins during the nesting season (February 15 to August 31), the developer shall have a qualified biologist conduct a pre-construction survey for active nests within 300 feet of the Project Site. The pre-construction survey will be conducted within 14 days prior to commencement of ground-disturbing activities and/or vegetation removal. The biologist shall provide a brief written report (including the date, time of survey, survey method, name of surveryor, and survey results) to City Planning prior to any ground-disturbing activity or vegetation removal. If the pre-construction survey shows that there is no evidence of active nests, no additional measures are required. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional pre-construction survey shall be required. If any active nests are located within the vicinity of the proposed project the qualified biologist shall delineate an appropriate buffer zone, subject to approval of City Planning and in consultation with any other appropriate agencies, with construction tape or pin flags and maintain the buffer zone until the end of the breeding season or the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and 250 feet for raptor nests. If active nests are found onsite, a qualified biologist shall monitor nests weekly during construction to ensure activities are not causing nesting disturbance.	Results of preconstruction surveys shall be submitted prior to the issuance of a grading permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans. The applicants shall prepare annual reports on the status and success of mitigation and shall submit these reports to USFWS and CDFG. The applicants shall coordinate with USFWS and CDFG to modify as necessary any mitigation plans in an effort to attain mitigation success.	Add as note on Improvement Plans and Building Plans.	Engineering and Building	Survey Results	
BIO-4 No Net Loss of Wetlands: Prior to grading or improvement plan approval for the second stage of the MPP, which includes completion of the parking lot resulting in the loss of wetland habitat, the applicant shall obtain all applicable regulatory permits from the U.S. Army Corps of Engineers and the California Regional Water Quality Control Board. The CWA Section 404 permit process (including Section 7 Consultation under Federal Endangered Species Act [FESA]) is the standard method for developing mitigation for projects that affect wetlands and vernal pool species such as special-status plants, vernal pool crustaceans, and Western spadefoot. Through this process, project Applicants shall be required to obtain the necessary permits and approvals to implement their Proposed Project while remaining in compliance	The Applicants shall obtain appropriate permits from USACE and USFWS to ensure that there is no net loss of wetlands. The Applicant(s) shall coordinate with USFWS to modify as necessary any mitigation plans in an effort to attain mitigation success.	Prior to issuance of grading permit which would directly affect wetlands.	The City's Environmental Coordinator shall confirm that a Section 404 Permit has been issued and appropriate mitigation has been implemented for the proposed development areas. The Developer's biological monitor shall ensure that onsite wetlands are preserved	Permit Compliance	

with CWA and FESA. If a 404 permit is not obtained, the City shall not issue a grading permit for the Proposed Project. The obligation to obtain the 404 permit shall ensure no net loss to federally protected wetlands. After obtaining such a permit, however, the Applicant shall demonstrate to the City's Planning Director that they have also achieved no net loss of wetlands.			and maintained consistent with the Section 404 Permit and applicable management plan.		
CUL-1 Inadvertent Discoveries: The following measure is intended to address inadvertent discoveries of potential tribal cultural resources (TCR's), archaeological, or cultural resources during a project's ground disturbing activities. If any TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. The appropriate tribal representatives from culturally affiliated tribes shall be immediately notified. Work at the discovery location cannot resume until it is determined, in consultation with culturally affiliated tribes, that the find is not a TCR, or that the find is a TCR and all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, has been satisfied. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project redesign. The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary.	This condition shall be reflected in all construction and building plans, and construction site workers shall be advised by the site manager of this measure.	*Construction*: Measure applies if resources are discovered during construction. Add as note on Improvement Plans and Building Plans.	Engineering and Building	None	
TCR-1 Native American Tribal Monitoring: The following mitigation measure is intended to minimize impacts to existing or previously undiscovered Tribal Cultural Resources (TCRs) at the earliest possible time during project-related earthmoving activities. Prior to approval of grading or improvement plans the applicant shall provide to the City documentation of an agreement between the developer and UAIC showing the following: 1. UAIC shall provide documentation, to the satisfaction of the developer, showing that the tribal monitor meets the developer's job-site safety requirements. 2. Consulting tribes shall be contacted at least two weeks prior to project ground-disturbing activities in order to retain the services of a paid Tribal Monitor/s. The duration of the monitoring and construction schedule shall be determined at this time. 3. In order to track the status of mitigation measure implementation, field-monitoring activities will be documented on a Tribal Monitor log. The total time commitment of the Tribal Monitor will vary depending on the intensity and location of construction and the sensitivity of the area, including the number of finds. 4. A paid Tribal Monitor/s from traditionally and culturally affiliated Native American Tribes will monitor the vegetation grubbing, stripping, grading, or other ground-disturbing activities in the project area. The Tribal Monitor/s shall wear the appropriate safety equipment.	This condition shall be reflected in all construction and building plans, and construction site workers shall be advised by the site manager of this measure.	*Construction*: Measure applies if resources are discovered during construction. Add as note on Improvement Plans and Building Plans.	Engineering and Building	None	

5. Native American Representatives and Tribal Monitors act as representative of their Tribal government and have the authority to identify sites or objects of cultural value to Native Americans and recommend appropriate treatment of such sites or objects. 6. Native American Monitors or their representatives have the authority to request that work be temporarily stopped, diverted, or slowed within 100 feet of the direct impact area if sites or objects of significance are identified. Only a Native American Monitor or Representative from a culturally affiliated tribe can recommend appropriate treatment and final disposition of TCRs.					

Attachment 3

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File #	NIPA PCL 50 – Roseville 80 Major Project Permit / File Number PL19-0363
Project Address	7901 Foothills Boulevard, Roseville, Placer County, CA
Property Owner	Roseville 80 Land, LLC; Roseville 80 Bldg 2, LLC; and Southall Group Holdings, LLC
Planning Division Contact	Charity Gold, Associate Planner. (916) 774-5247

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete

I HAVE ATTACHED THE FOLLOWING REQUIRED ITEMS:

☐ Table of Applicable Mitigation Measures

☐ Mitigation Verification Form(s)

☐ Specific supporting documentation required by measure(s), if applicable (e.g. biologist's report)

I hereby certify under penalty of perjury under the laws of the State of California that I am the property owner or an agent of the property owner and am authorized to submit this Mitigation Verification Form. I also certify that the above-listed mitigation measures have been completed in the manner required, and that all of the information in this submittal is true and correct, to the best of my knowledge:

Signature and Date	Print Name	Contact Number

Attachment 3

MITIGATION VERIFICATION FORM

Mitigation Measure

Description of Monitoring and Verification Work Performed. The following information is a required part of the description: dates, personnel names or titles, and the stage/phase of construction work. Additional notes sheets may be attached, if necessary, or the below may simply reference a separate attachment that provides the required information.

Attachment 3

INSTRUCTIONS

COVER SHEET:

A Cover Sheet for the project/development is prepared by City staff, with the top portion filled out. Each time Mitigation Verification Forms(s) are being submitted, a Cover Sheet completed by the Developer, Contractor, or Designee is required. An example of a completed summary table is provided below. The signature on the Cover Sheet must be *original wet ink*.

EXAMPLE MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File #	New Coffee Shop, PL15-0000
Project Address	10 Justashort Street
Property Owner	Jane Owner
Planning Division Contact	Joe Planner, Associate Planner, (916) 774-####

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete
MM-3	Copy of survey report signed by biologist	5/10/2016
MM-4	All information included in Mitigation Verification Form	5/12/2016
MM-5	E-mail from Air District approving Dust Control Plan	5/05/2016

MITIGATION VERIFICATION FORM:

A Mitigation Verification Form is provided by City staff, along with the Cover Sheet and Table of Applicable Mitigation Measures. A form is filled in and submitted for each mitigation measure by the Developer, Contractor, or Designee. The form needs only the mitigation number to be filled in, along with the Description of Monitoring and Verification Work Performed. Multiple forms may be submitted simultaneously, under one cover sheet. It is also permissible to submit a form for each part of a measure, on separate dates. For instance, in the example measure MM-4 in the table above, the actual mitigation requires informing construction workers *and* retaining a qualified archeologist if resources are uncovered. Thus, a developer may submit a form in May certifying that construction workers have been informed, and also submit a second copy of the form in July because resources were discovered and additional actions had to be undertaken.

Each mitigation measure specifies the type of supporting documentation required; this must be submitted in order for the City to accept the mitigation as complete. An example of a completed Mitigation Verification Form is provided below.

EXAMPLE
MITIGATION VERIFICATION FORM

Mitigation Measure MM3

Description of Monitoring and Verification Work Performed. The following information is a required part of the description: dates, personnel names or titles, and the stage/phase of construction work. Additional notes sheets may be attached, if necessary, or the below may simply reference a separate attachment that provides the required information.

The mitigation measure text is included on the Improvement Plans General Notes page (Improvement Plan EN15-0001). On May 4, 2016, prior to any ground-disturbing activities (the pre-construction phase), a site meeting was held. At this meeting, workers on the site were informed of the potential to unearth remains, and were instructed to cease work and notify their supervisor immediately if any resources were observed.