FINAL
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

TTM 20528 Pioneer Tract Project

State Clearinghouse No. 2023100144

Lead Agency:

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JN 195426

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ATTACHMENTS

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1.0 INTRODUCTION

The Tentative Tract Map (TTM) 20528 Pioneer Tract Project (project) would allow for the development of 117 two-story motor court homes distributed along two new public streets ("Street A" and "Street B") on a 14.62-acre site. Individual lot sizes would range from 1,837 square feet to 3,337 square feet. The project would include nine lettered lots including a 0.5-acre stormwater detention basin (Lot I), a 1.57-acre public open space lot (Lot F), and 40,720 square feet of landscaping and private open space (Lots A, B ,C, D, E, G and H). Access to the site would be provided via two entry points: one from West Pioneer Avenue and one from West Domestic Avenue. Project entitlements include approval of a Specific Plan Amendment, General Plan Amendment, Commission Review and Approval and Tentative Tract Map.

The Initial Study/Mitigated Negative Declaration (IS/MND) (State Clearinghouse No. 2023100144) was made available for public review and comment pursuant to CEQA Guidelines Section 15073. The public review commenced on October 4, 2023 and concluded on November 2, 2023. The IS/MND and supporting attachments were available for review by the general public at:

https://www.cityofredlands.org/post/environmental-documents

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2.0 RESPONSE TO COMMENTS

The TTM 20528 Pioneer Tract Project Initial Study/Mitigated Negative Declaration (IS/MND) (State Clearinghouse No. 2023100144) was made available for public review and comment pursuant to CEQA Guidelines Section 15073. The public review commenced on October 4, 2023 and concluded on November 2, 2023. No comment letters were received on the IS/MND during the project's public review period.

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3.0 MITIGATION MONITORING AND REPORTING PROGRAM

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring plan. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring plan must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, Table 1, *Mitigation Monitoring and Reporting Checklist*, has been prepared for the TTM 20528 Pioneer Tract Project (the "project"). This Checklist is intended to provide verification that all applicable Conditions of Approval relative to significant environmental impacts are monitored and reported. Monitoring will include: 1) verification that each mitigation measure has been implemented; 2) recordation of the actions taken to implement each mitigation; and 3) retention of records in the City of Redlands TTM 20528 Pioneer Tract Project file.

This Mitigation Monitoring and Reporting Program (MMRP) delineates responsibilities for monitoring the project, but also allows the City flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented. This includes the review of all monitoring reports, enforcement actions, and document disposition, unless otherwise noted in the Mitigation Monitoring and Reporting Checklist (Table 1). If an adopted mitigation measure or standard condition is not being properly implemented, the designated monitoring personnel shall require corrective actions to ensure adequate implementation.

Reporting consists of establishing a record that a mitigation measure is being implemented, and generally involves the following steps:

- The City distributes reporting forms to the appropriate entities for verification of compliance.
- Departments/agencies with reporting responsibilities will review the Initial Study/Mitigated Negative Declaration, which provides general background information on the reasons for including specified mitigation measures.
- Problems or exceptions to compliance will be addressed to the City as appropriate.
- Periodic meetings may be held during project implementation to report on compliance of mitigation measures.
- Responsible parties provide the City with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.
- The City prepares a reporting form periodically during the construction phase and an annual report summarizing all project mitigation monitoring efforts.

- Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the MMRP, if required, would be made in accordance with CEQA and would be permitted after further review and approval by the City. Such changes could include reassignment of monitoring and reporting responsibilities, plan redesign to make any appropriate improvements, and/or modification, substitution or deletion of mitigation measures subject to conditions described in CEQA Guidelines Section 15162. No change will be permitted unless the MMRP continues to satisfy the requirements of Public Resources Code Section 21081.6.

Table 1
Mitigation Monitoring and Reporting Checklist

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
BIOLOGICAL RESOURCES							
BIO-1	**Pre-Construction Survey for Nesting Birds.** Ground-disturbing activities shall be conducted during the non-breeding season for birds (approximately September 1 through January 31) to avoid violations of the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code § § 3503, 3503.5 and 3513. If grading or construction activities are scheduled to occur during the bird breeding season (February 1 through August 31), a pre-construction survey for nesting birds shall be conducted by a qualified Designated Biologist who is experienced in the identification of avian species and conduction nesting bird surveys using appropriate survey methodology. The nest survey shall include the project site and any adjacent areas (i.e., construction site entrances and/or staging areas) where the project activities have the potential to cause nest failure. The pre-construction survey shall be conducted no more than three days prior to the start of ground-disturbing activities within the bird breeding season at the appropriate time of day/night, and during appropriate weather conditions. If no nesting birds are observed during the survey, site preparation and construction activities may begin. If nesting birds are found to be present, avoidance or minimization measures	Project Applicant/ Qualified Designated Biologist	Qualified Designated Biologist/ Redlands Planning Division	Within Three Days Prior to the Start of Ground-Disturbing Activities/ During Construction			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
	shall be undertaken to avoid potential project-related impacts. If a nest is suspected, but not confirmed, the Designated Biologist shall establish a disturbance-free buffer until additional surveys can be completed, or until the location can be inferred based on observations confirm that a nest does not exist or is inactive. If a nest is observed, but thought to be inactive, the Designated Biologist shall monitor the nest for one hour (four hours for raptors during the non-breeding season) prior to approaching the nest to determine status. The Designated Biologist shall use their best professional judgement regarding the monitoring period and whether approaching the nest is appropriate. If an active avian nest confirmed, the Designated Biologist shall immediately establish a conservative avoidance buffer surrounding the nest based on their best professional judgement and experience. The Designated Biologist shall monitor the nest at the onset of project activities, and at the onset of any changes in such project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the Designated Biologist determines that such project activities may be causing an adverse reaction, the Designated Biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles						

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
	are surviving independent from the nest). The on-site qualified biologist will review and verify compliance with these nesting avoidance buffers and will verify the nesting effort has finished. Work can resume within these avoidance areas when no other active nests are found. Upon completion of the survey and nesting bird monitoring, a report shall be prepared and submitted to the City for mitigation monitoring compliance record keeping.						
BIO-2	**Pre-Construction Surveys for Burrowing Owl.** The project applicant shall retain a qualified Biologist to perform a pre-construction burrowing owl survey to determine whether burrowing owls are present within 30 days prior to construction activities, according to the California Department of Fish and Wildlife (CDFW) 2012 guidelines. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. Survey for occupied burrows shall be completed within all construction areas and within 300 feet from the proposed project impact area (where possible and appropriate based on locations of barren or ruderal habitats). If burrowing owls are detected during the pre-construction survey, the City shall consult with the CDFW and United States Fish and Wildlife Service (USFWS) to develop and implement a Burrowing Owl Mitigation Plan that includes mitigation measures outlined in CDFW (2012) guidelines and a Worker Environmental Awareness Program (WEAP).	Project Applicant/ Qualified Biologist	Qualified Biologist/ Redlands Planning Division	Within 30 Days Prior to the Start of Construction Activities			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
BIO-3	**Pre-Construction Surveys for Special-Status Reptiles.** Prior to the issuance of a grading permit, the project applicant shall provide evidence that a qualified designated biologist has been retained to perform a pre-construction survey of the entire project impact area, including any staging/laydown areas, for Southern California legless lizard and San Diegan tiger whiptail. • If special-status reptiles are observed during construction activities, all work within 50 feet of the animal(s) will be stopped. At no time shall work occur within 50 feet of the animal without the Biological Monitor present. Any special-status wildlife species detected within the project impact area, including any staging/laydown areas, shall be allowed to move away on their own and shall not be captured or handled without authorization from the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS). • Avoidance of Entrapment: To prevent inadvertent entrapment of special-status reptiles during construction, all excavated, steep-walled holes or trenches may need to be covered at the close of each working day with plywood or other suitable material or provided with	Project Applicant/ Qualified Biologist	Qualified Biologist/ Redlands Planning Division	Prior to Issuance of Grading Permit/ During Construction Activities			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
	one or more escape ramps constructed of earth fill or wooden planks. The project applicant shall retain a qualified biologist to regularly inspect open trenches during the construction phase. • Environmentally Sensitive Area Fencing: Areas that support sensitive habitats or reptile species shall be temporarily fenced to protect them from construction activities and traffic. The project applicant may need to retain a qualified designated biologist to monitor Environmentally Sensitive Areas during the construction phase. • Worker Environmental Awareness Program: A Worker Environmental Awareness Program (WEAP) training shall be implemented by a qualified designated biologist to educate construction workers about the presence of special-status plant and reptile species on and near the project site and shall be administered to construction personnel prior to the initiation of ground-disturbing or vegetation/habitat altering activities.						
CULTURAL RESOURCES							
CUL-1	**Native American Treatment Agreement**. Prior to the issuance of grading permits, the applicant shall enter into a Tribal Monitoring Agreement with the Consulting Tribe(s) ~~Morongo Band of Mission~~	Project Applicant/ Consulting Tribe(s) Tribal Monitor	Consulting Tribe(s)Tribal Monitor/ Redlands Planning Division	Prior to the Issuance of Grading Permits/			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
	~~Indians~~ for the project. The Tribal Monitor shall be on-site during all ground-disturbing activities (including, but not limited to, clearing, grubbing, tree and bush removal, grading, trenching, fence post placement and removal, construction excavation, excavation for all utility and irrigation lines, and landscaping phases of any kind). The Tribal Monitor shall have the authority to temporarily divert, redirect, or halt the ground-disturbing activities to allow identification, evaluation, and potential recovery of cultural resources.			During Ground Disturbing Activities			
CUL-2	**Retention of Archaeologist**. Prior to any ground-disturbing activities (including, but not limited to, clearing, grubbing, tree and bush removal, grading, trenching, fence post replacement and removal, construction excavation, excavation for all utility and irrigation lines, and landscaping phases of any kind), and prior to the issuance of grading permits, the Applicant shall retain a qualified archaeologist who meets the U.S. Secretary of the Interior Standards (SOI). The archaeologist shall be present during all ground-disturbing activities to identify any known or suspected archaeological and/or cultural resources. The archaeologist will conduct a Cultural Resource Sensitivity Training, in conjunction with the Tribe[s] Tribal Historic Preservation Officer (THPO), and/or designated Tribal Representative. The training session will focus on the archaeological and tribal cultural resources that may be encountered during ground-disturbing activities as well as the procedures to be followed in such an event.	Project Applicant/ Qualified Archaeologist	Qualified Archaeologist/ Redlands Planning Division	Prior to Ground Disturbing Activities/ During Ground Disturbing Activities			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
CUL-3	**Cultural Resource Management Plan**. Prior to any ground-disturbing activities the project archaeologist shall develop a Cultural Resource Management Plan (CRMP) and/or Archaeological Monitoring and Treatment Plan (AMTP) to address the details, timing, and responsibilities of all archaeological and cultural resource activities that occur on the project site. This Plan shall be written in consultation with the consulting Tribe[s] and shall include the following: approved Mitigation Measures (MM)/Conditions of Approval (COA), contact information for all pertinent parties, parties' responsibilities, procedures for each MM or COA, and an overview of the project schedule.	Project Applicant/ Qualified Archaeologist	Qualified Archaeologist/ Redlands Planning Division	Prior to Ground Disturbing Activities			
CUL-4	**Pre-Grade Meeting**. The retained qualified archeologist and Consulting Tribe[s] representative shall attend the pre-grade meeting with the grading contractors to explain and coordinate the requirements of the monitoring plan.	Project Applicant/ Qualified Archaeologist/ Consulting Tribe(s) Representative	Qualified Archaeologist/ Consulting Tribe(s) Representative/ Redlands Planning Division	Prior to Ground Disturbing Activities			
CUL-5	**On-site Monitoring**. During all ground-disturbing activities the qualified archaeologist and the Native American monitor shall be on-site full-time. The frequency of inspections shall depend on the rate of excavation, the materials excavated, and any discoveries of Tribal Cultural Resources as defined in California Public Resources Code Section 21074. Archaeological and Native American monitoring will be discontinued when the depth of grading and the soil conditions no longer retain the potential to contain cultural deposits. The qualified archaeologist, in consultation with the Native American monitor, shall be responsible	Project Applicant/ Qualified Archaeologist/ Native American Monitor	Qualified Archaeologist/ Native American Monitor/ Redlands Planning Division	During Ground Disturbing Activities			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
	for determining the duration and frequency of monitoring.						
CUL-6	**Inadvertent Discovery of Cultural Resources.** In the event that previously unidentified cultural resources are unearthed during construction, the qualified archaeologist and the Native American monitor shall have the authority to temporarily divert and/or temporarily halt ground disturbance operations in the area of discovery to allow for the evaluation of potentially significant cultural resources. Isolates and clearly non-significant deposits shall be minimally documented in the field and collected so the monitored grading can proceed. If a potentially significant cultural resource(s) is discovered, work shall stop within a 60-foot perimeter of the discovery and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. All work shall be diverted away from the vicinity of the find, so that the find can be evaluated by the qualified archaeologist and Tribal Monitor[s]. The archaeologist shall notify the Lead Agency and consulting Tribe[s] of said discovery. The qualified archaeologist, in consultation with the Lead Agency, the consulting Tribe[s], and the Native American monitor, shall determine the significance of the discovered resource. A recommendation for the treatment and disposition of the Tribal Cultural Resource shall be made by the qualified archaeologist in consultation with the Tribe[s] and the Native American monitor[s] and be submitted to the Lead Agency for review and approval. Below are the possible treatments and	Contractor/ Qualified Archaeologist/ Native American Monitor	Qualified Archaeologist/ Native American Monitor/ Redlands Planning Division	During Construction			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
	dispositions of significant cultural resources in order of CEQA preference: A. Full avoidance. B. If avoidance is not feasible, Preservation in place. C. If Preservation in place is not feasible, all items shall be reburied in an area away from any future impacts and reside in a permanent conservation easement or Deed Restriction. D. If all other options are proven to be infeasible, data recovery through excavation and then curation in a Curation Facility that meets the Federal Curation Standards (CFR 79.1)						
CUL-7	**Inadvertent Discovery of Human Remains.** The Consulting Tribe(s) ~~Morongo Band of Mission Indians~~ requests the following specific conditions to be imposed in order to protect Native American human remains and/or cremations. No photographs are to be taken except by the coroner, with written approval by the consulting Tribe[s]. A. Should human remains and/or cremations be encountered on the surface or during any and all ground-disturbing activities (i.e., clearing, grubbing, tree and bush removal, grading, trenching, fence post placement and removal, construction excavation, excavation for all water supply, electrical,	Construction Contractor	Redlands Planning Division	During Ground Disturbing Activities			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
	and irrigation lines, and landscaping phases of any kind), work in the immediate vicinity of the discovery shall immediately stop within a 100-foot perimeter of the discovery. The area shall be protected; project personnel/observers will be restricted. The County Coroner is to be contacted within 24 hours of discovery. The County Coroner has 48 hours to make his/her determination pursuant to State and Safety Code §7050.5. and Public Resources Code (PRC) § 5097.98. B. In the event that the human remains and/or cremations are identified as Native American, the Coroner shall notify the Native American Heritage Commission within 24 hours of determination pursuant to subdivision (c) of HSC §7050.5. C. The Native American Heritage Commission shall immediately notify the person or persons it believes to be the Most Likely Descendant (MLD). The MLD has 48 hours, upon being granted access to the Project site, to inspect the site of discovery and make his/her recommendation for final treatment and disposition, with appropriate dignity, of						

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
	the remains and all associated grave goods pursuant to PRC §5097.98. D. If the Consulting Tribe(s) have ~~Morongo Band of Mission Indians has~~ been named the Most Likely Descendant (MLD), the Tribe may wish to rebury the human remains and/or cremation and sacred items in their place of discovery with no further disturbance where they will reside in perpetuity. The place(s) of reburial will not be disclosed by any party and is exempt from the California Public Records Act (California Government Code § 6254[r]). Reburial location of human remains and/or cremations will be determined by the Tribe's Most Likely Descendant (MLD), the landowner, and the City Planning Department.						
HAZARDS AND HAZARDOUS MATERIALS							
HAZ-1	**Soil Management Plan.** Prior to issuance of a grading permit, a Soil Management Plan (SMP) shall be prepared by a qualified environmental professional with Phase II/Site Characterization experience. The SMP shall be approved by the City and made available by the project Applicant to the contractor and the City Engineer for use during grading activities. The SMP shall include guidelines for safety measures and soil management in the event that soils are to be disturbed, and for handling soil during any planned earthwork activities. The SMP shall also include a	Project Applicant/ Qualified Environmental Professional with Phase II/Site Characterization Experience	City of Redlands Engineer	Prior to Issuance of Grading Permits			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
	decision framework and specific risk management measures for managing soil, including any soil import/export activities, in a manner protective of human health and consistent with applicable regulatory requirements. As part of this SMP, all excavation activities shall be documented daily using digital photography. In addition, the sides and the bottom of the excavation areas of concern shall be appropriately logged on scaled paper. Observed materials, including an estimate of the quantity observed, and PID and dust monitor readings shall be recorded on the Daily Field Record and/or the Direct Reading Log. If the results of the stockpile samples show no contamination, or detected concentrations of chemicals within acceptable regulatory limits for residential uses, then the soil may be redistributed within the excavation. If soil is deemed contaminated, then it shall be disposed of off-site at an approved landfill facility. Should any soils be imported or exported at an off-site location, a Phase II/Site Characterization Specialist shall verify that all imported/exported soils are not contaminated with hazardous materials above regulatory thresholds. If import/export soils are determined to be contaminated above regulatory thresholds, the Phase II/Site Characterization Specialist would recommend proper handling, use, and/or disposal of these soils.						

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
HAZ-2	**Removal of Organochloride Pesticides (OCP) Contaminated Soils**. Prior to site grading activities, the project Applicant shall submit documentation as proof, to the City Engineer, that the OCP-impacted soils at the project site have been excavated and disposed of at a licensed facility with confirmation sampling to show that all remaining soil OCP concentrations are below applicable regulatory screening thresholds for residential uses. The excavation, transport, and disposal of all OCP-impacted soils from the project site shall occur in accordance with applicable Federal, State, and/or local regulations. In no event shall the project Applicant proceed with site grading activities at any location on the site where OCP contamination is found to be present above regulatory thresholds for residential use.	Project Applicant	City of Redlands Engineer	Prior to Site Grading Activities			
TRANSPORTATION							
TRA-1	**Traffic Management Plan.** Prior to issuance of grading permits, the project applicant shall prepare a Traffic Management Plan (TMP) for approval by the City of Redlands Traffic Engineer. The TMP shall include measures to minimize potential safety impacts during the short-term construction process if partial or full lane closures are required. The TMP shall specify that one direction of travel in each direction on adjacent roadways (West Pioneer Avenue and West Domestic Avenue) must always be maintained during project construction activities. If full lane closures are required and one direction of travel in each direction cannot be maintained, the TMP shall identify planned detours. The TMP shall include measures such as construction signage,	Project Applicant	City of Redlands Traffic Engineer	Prior to Issuance of Grading Permits			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Verification of Compliance		
					Initials	Date	Remarks
	limitations on timing for lane closures to avoid peak hours, temporary striping plans, and use of construction flagperson(s) to direct traffic during heavy equipment use. The TMP shall be incorporated into project specifications for verification prior to final plan approval.						

4.0 ERRATA

Changes to the Draft Initial Study/Mitigated Negative Declaration (IS/MND) are noted below. A double-underline indicates additions to the text; ~~strikethrough~~ indicates deletions to the text. Changes are listed by page and, where appropriate, by paragraph.

These errata address minor revisions to the Draft IS/MND, which circulated from October 4, 2023 through November 2, 2023. The changes to the Draft IS/MND do not affect the overall conclusions of the environmental document. These clarifications and modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft IS/MND.

SECTION 2.0, PROJECT DESCRIPTION

Page 2-1, Section 2.2, Environmental Setting, General Plan Land Use Designation and Zoning

The project site has a land use designation of Commercial/Industrial in the City of Redlands General Plan, and a zoning designation of Science Research Park within the East Valley Corridor Specific Plan (EV-SRP). The project would require a General Plan Amendment to change the site's designation to Medium Density Residential, which allows for densities of 8 to 15 dwelling units per acre (du/ac). The project would also require a ~~Zone Change to Specific Plan No. 64 (Bergamot Specific Plan), and a~~ Specific Plan Amendment to incorporate the project site in the Bergamot Specific Plan boundary. The Bergamot Specific Plan was adopted by the City on October 5, 2021. It was developed to produce a cohesive, unified development sensitive to the project site and surrounding area through the integration of special buffer treatments, architectural theming, placement of structures, and the integration of passive and active open space and recreational uses.[1]

Page 2-4, Section 2.5, Agreements, Permits, and Approvals

The City, as Lead Agency, has discretionary authority over the proposed project, which requires the following discretionary approvals:

- CEQA Clearance;
- ~~Zone Change;~~
- Specific Plan Amendment;
- General Plan Amendment;
- Tentative Tract Map;
- Water Quality Management Plan; and
- National Pollutant Discharge Elimination System (NPDES) Permit under the Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB).

SECTION 4.3, AIR QUALITY

Page 4-10, Last Paragraph

The project site has a General Plan land use designation of Commercial/Industrial, and a zoning designation of Industrial (EV-SRP). The project would require a General Plan Amendment to change the site's designation to Medium

[1] City of Redlands, *Bergamot Specific Plan*, adopted October 5, 2021.

Density Residential, which allows for densities of 8 to 15 dwelling units per acre (du/ac). The project would also require a ~~Zone Change to Specific Plan No. 64 (Bergamot Specific Plan); and a~~ Specific Plan Amendment to incorporate the project site in the Bergamot Specific Plan boundary. Additionally, the East Valley Corridor Specific Plan would also be amended to remove the project site from its Plan Boundary. The project would allow for the development of 117-unit two-story motor court home units on approximately 14.62 gross acres (11.45 net acres), representing a density of approximately 8 du/ac.[2]

Although the project would require a General Plan Amendment~~, Zone Change,~~ and Specific Plan Amendments, the project as analyzed aligns with the City of Redlands General Plan by fostering urban development and land use patterns that are consistent with the City's long-term vision for sustainable growth and efficient land utilization. By integrating the project site into the Bergamot Specific Plan, the project embraces the City's established planning framework and promotes a balanced blend of land uses that adhere to the overarching goals and policies of the City of Redlands General Plan. The proposed development type is also complementary to proposed residential uses to the north. Therefore, as the density of the project would be within the allowable density range of 8 to 15 du/ac within the Medium Density Residential zoning designation with the General Plan Amendment, the project would not conflict with the General Plan in this regard. Therefore, the project is consistent with the site's General Plan land use designation and zoning with the approval of the General Plan Amendment ~~and Zone Change~~.

SECTION 4.11, LAND USE AND PLANNING

Page 4-71, Response 4.11(b)

Less Than Significant Impact. The project site has a General Plan land use designation of Commercial/Industrial, and a zoning designation of Industrial (EV-SRP). The project would require a General Plan Amendment to change the site's designation to Medium Density Residential, which allows for densities of 8 to 15 dwelling units per acre (du/ac). The project would also require a ~~Zone Change to Specific Plan No. 64 (Bergamot Specific Plan), and a~~ Specific Plan Amendment to incorporate the project site in the Bergamot Specific Plan boundary. The Bergamot Specific Plan was adopted by the City on October 5, 2021. It was developed to produce a cohesive, unified development sensitive to the project site and surrounding area through the integration of special buffer treatments, architectural theming, placement of structure, and the integration of passive and active open space and recreational uses.[3]

The proposed project, involving a ~~Zone Change to Specific Plan No. 64 (Bergamot Specific Plan) and a~~ Specific Plan Amendment to include the project site within the Bergamot Specific Plan boundary, aligns with the City of Redlands General Plan. This alignment is achieved by fostering urban development and land use patterns that are consistent with the City's long-term vision for sustainable growth and efficient land utilization, as outlined in the General Plan. By integrating the project site into the Bergamot Specific Plan, the project embraces the City's established planning framework and promotes a balanced blend of land uses that adhere to the overarching goals and policies of the City of Redlands General Plan.

The project as proposed would allow for development of 117 two-story motor court homes distributed along two new public streets ("Street A" and "Street B") on the 14.62-acre site; refer to Exhibit 3, *Conceptual Site Plan*. Proposed density would be approximately 8 du/ac.

With City approval of the GPA ~~and rezone~~, the proposed use of the subject site to support motor court homes would be consistent with the General Plan, Bergamot Specific Plan, and Municipal Code. Further, as noted, the project would require a Specific Plan Amendment to add the project site into the Bergamot Specific Plan area. The proposed use of

[2] Density is calculated by dividing gross acreage (14.62 acres) from proposed number of units (117).

[3] City of Redlands, *Bergamot Specific Plan*, https://www.cityofredlands.org/sites/main/files/file-attachments/bergamot-specific_plan.pdf?1646188068, adopted October 5, 2021.

motor homes would be consistent with intended development for the Specific Plan area, which includes development of an estimated 120 single-family motor court homes within Neighborhood Three. Design measures identified as part of the Specific Plan (i.e., buffer treatments, architectural theming, placement of structure, and the integration of passive and active open space and recreational uses) would further ensure that the proposed motor home uses are compatible with applicable land use plans and policies.[4]

SECTION 4.5, CULTURAL RESOURCES

Page 4-28, Mitigation Measures

CUL-1 Native American Treatment Agreement. Prior to the issuance of grading permits, the applicant shall enter into a Tribal Monitoring Agreement with the Consulting Tribe(s) ~~Morongo Band of Mission Indians~~ for the project. The Tribal Monitor shall be on-site during all ground-disturbing activities (including, but not limited to, clearing, grubbing, tree and bush removal, grading, trenching, fence post placement and removal, construction excavation, excavation for all utility and irrigation lines, and landscaping phases of any kind). The Tribal Monitor shall have the authority to temporarily divert, redirect, or halt the ground-disturbing activities to allow identification, evaluation, and potential recovery of cultural resources.

Page 4-29, Mitigation Measures

CUL-7 Inadvertent Discovery of Human Remains. The Consulting Tribe(s) ~~Morongo Band of Mission Indians~~ request~~s~~ the following specific conditions to be imposed in order to protect Native American human remains and/or cremations. No photographs are to be taken except by the coroner, with written approval by the consulting Tribe[s].

A. Should human remains and/or cremations be encountered on the surface or during any and all ground-disturbing activities (i.e., clearing, grubbing, tree and bush removal, grading, trenching, fence post placement and removal, construction excavation, excavation for all water supply, electrical, and irrigation lines, and landscaping phases of any kind), work in the immediate vicinity of the discovery shall immediately stop within a 100-foot perimeter of the discovery. The area shall be protected; project personnel/observers will be restricted. The County Coroner is to be contacted within 24 hours of discovery. The County Coroner has 48 hours to make his/her determination pursuant to State and Safety Code §7050.5. and Public Resources Code (PRC) § 5097.98.
B. In the event that the human remains and/or cremations are identified as Native American, the Coroner shall notify the Native American Heritage Commission within 24 hours of determination pursuant to subdivision (c) of HSC §7050.5.
C. The Native American Heritage Commission shall immediately notify the person or persons it believes to be the Most Likely Descendant (MLD). The MLD has 48 hours, upon being granted access to the Project site, to inspect the site of discovery and make his/her recommendation for final treatment and disposition, with appropriate dignity, of the remains and all associated grave goods pursuant to PRC §5097.98.
D. If the Consulting Tribe(s) have ~~Morongo Band of Mission Indians has~~ been named the Most Likely Descendant (MLD), the Tribe may wish to rebury the human remains and/or cremation and sacred items in their place of discovery with no further disturbance where they will reside in perpetuity. The place(s) of reburial will not be disclosed by any party and is exempt from the California Public Records Act (California

[4] City of Redlands, *Bergamot Specific Plan*, https://www.cityofredlands.org/sites/main/files/file-attachments/bergamot-specific_plan.pdf?1646188068, adopted October 5, 2021.

Government Code § 6254[r]). Reburial location of human remains and/or cremations will be determined by the Tribe's Most Likely Descendant (MLD), the landowner, and the City Planning Department.

SECTION 4.19, UTILITIES AND SERVICE SYSTEMS

Page 4-109, Response 4.17(b)

According to the 2020 Urban Water Management Plan (UWMP), the City has four (4) sources of water to provide to its service area: purchased imported water from the State Water Project; groundwater from the Bunker Hill Subbasin and the Yucaipa Subbasin; surface water from the Mill Creek and Santa Ana River watersheds; and recycled water.[5] The 2020 UWMP indicates adequate water supply are anticipated to be available under a single dry-year supply and demand scenario, and multiple dry-year supply and demand scenarios through 2045. The UWMP water supply predictions is based on existing General Plan designations and accounts for increased demand as growth within the City occurs. The project site has a General Plan land use designation of Commercial/Industrial, and a zoning designation of Industrial (EV-SRP). The project would require a General Plan Amendment to change the site's designation to Medium Density Residential, which allows for densities of 8 to 15 dwelling units per acre (du/ac). The project would also require a ~~Zone Change to Specific Plan No. 64 (Bergamot Specific Plan), and a~~ Specific Plan Amendment to incorporate the project site in the Bergamot Specific Plan boundary. Although the project involves a land use change, the proposed project would not induce substantial unplanned population growth; refer to Section 4.11, *Land Use and Planning*, and Section 4.14, *Population and Housing*. Further, payment of standard water connection fees and ongoing user fees would ensure that the project's impacts on existing water facilities are adequately offset.

APPENDICES

Appendix C, Biological Resources Assessment, Cover Page

The Biological Resources Assessment has been revised to remove the following text from the front cover:

> ~~THIS REPORT CONTAINS SENSITIVE INFORMATION RELATING TO BIOLOGICAL RESOURCES AND IS NOT INTENDED FOR PUBLIC DISTRIBUTION PURSUANT TO PUB. RESOURCES CODE, SECTION 21082.3(C)(2).~~

No other revisions were made to the report; refer to Final IS/MND Attachment A, *Revised Biological Resources Assessment*.

Appendix D, Cultural Resources Report, Cover Page

The Cultural Resources Report has been revised to remove the following text from the front cover:

> ~~THIS REPORT CONTAINS SENSITIVE INFORMATION RELATING TO CULTURAL RESOURCES AND IS NOT INTENDED FOR PUBLIC DISTRIBUTION PURSUANT TO PUBLIC RESOURCES CODE, SECTION 21082.3(C)(2)..~~

No other revisions were made to the report; refer to Final IS/MND Attachment B, *Revised Cultural Resources Report*.

[5] Water Systems Consulting, Inc., *2020 IRUWMP, Part 2 Chapter 4, Redlands Urban Water Management Plan*, June 30, 2021.

Attachment A
Revised Biological Resources Assessment

FIRSTCARBONSOLUTIONS™

Biological Resources Assessment
and San Bernardino Merriam's Kangaroo Rat Habitat Assessment
Song and Emm Properties Project
City of Redlands, San Bernardino County, California

Project Applicant:
MLC Holdings, Inc.
5 Peters Canyon Road, Suite 310
Irvine, CA 92606

Contact: Johanna Crooker, Director of Entitlements

Prepared by:
FirstCarbon Solutions
967 Kendall Drive, #A-537
San Bernardino, CA 92407

Contact: Jason Brandman, Vice President/Director

Date: June 21, 2023

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Table of Contents

List of Exhibits

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SECTION 1: INTRODUCTION

This Biological Resources Assessment (BRA) and San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*) Habitat Assessment was prepared by FirstCarbon Solutions (FCS) for a proposed residential development located on West Pioneer Avenue in Redlands, California (proposed project). The purpose of the BRA is to (1) document existing and potentially occurring biological resources on the project site and adjacent areas; (2) analyze potential project-related impacts on regulated biological resources; (3) summarize relevant local, State, and federal regulations; and (4) recommend appropriate measures to mitigate potential impacts on biological resources to less than significant levels.

1.1 - Project Location and Setting

The 14.6 gross acre project site is located at 1160 West Pioneer Avenue in the City of Redlands, in San Bernardino County, California (Exhibit 1). The project site consists of two adjacent properties, the Song Property (Assessor's Parcel Number [APN] 016-706-101) and the Emm Property (APN 016-706-103), which are currently vacant and bounded by West Pioneer Avenue to the south, Citrus Valley High School to the east, undeveloped lands to the north, and State Route (SR) 210 to the west (Exhibit 2). The project site is located within the *Redlands, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 1 South, Range 3 West, Section 16 (Latitude 34° 4' 48" North; Longitude 117° 11' 55" West). The project site is situated on an alluvial terrace that drains into the Santa Ana River, which is located approximately 0.5 mile to the north.

1.2 - Project Description

The proposed project would include development of approximately 117 motor court homes on the 14.6-acre project site at a density of 8.1 units per acre (Exhibit 3).

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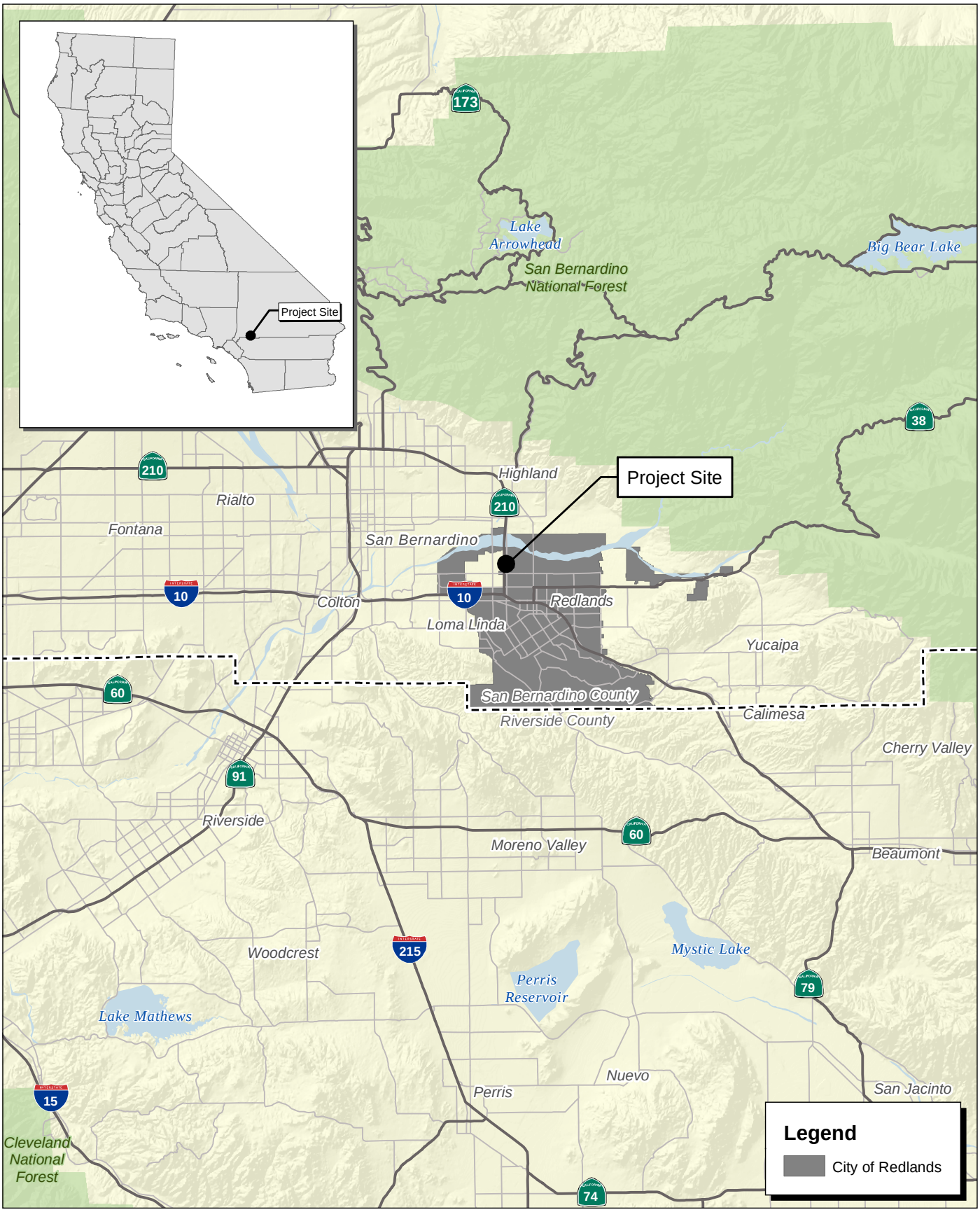

Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

FIRSTCARBON SOLUTIONS™

5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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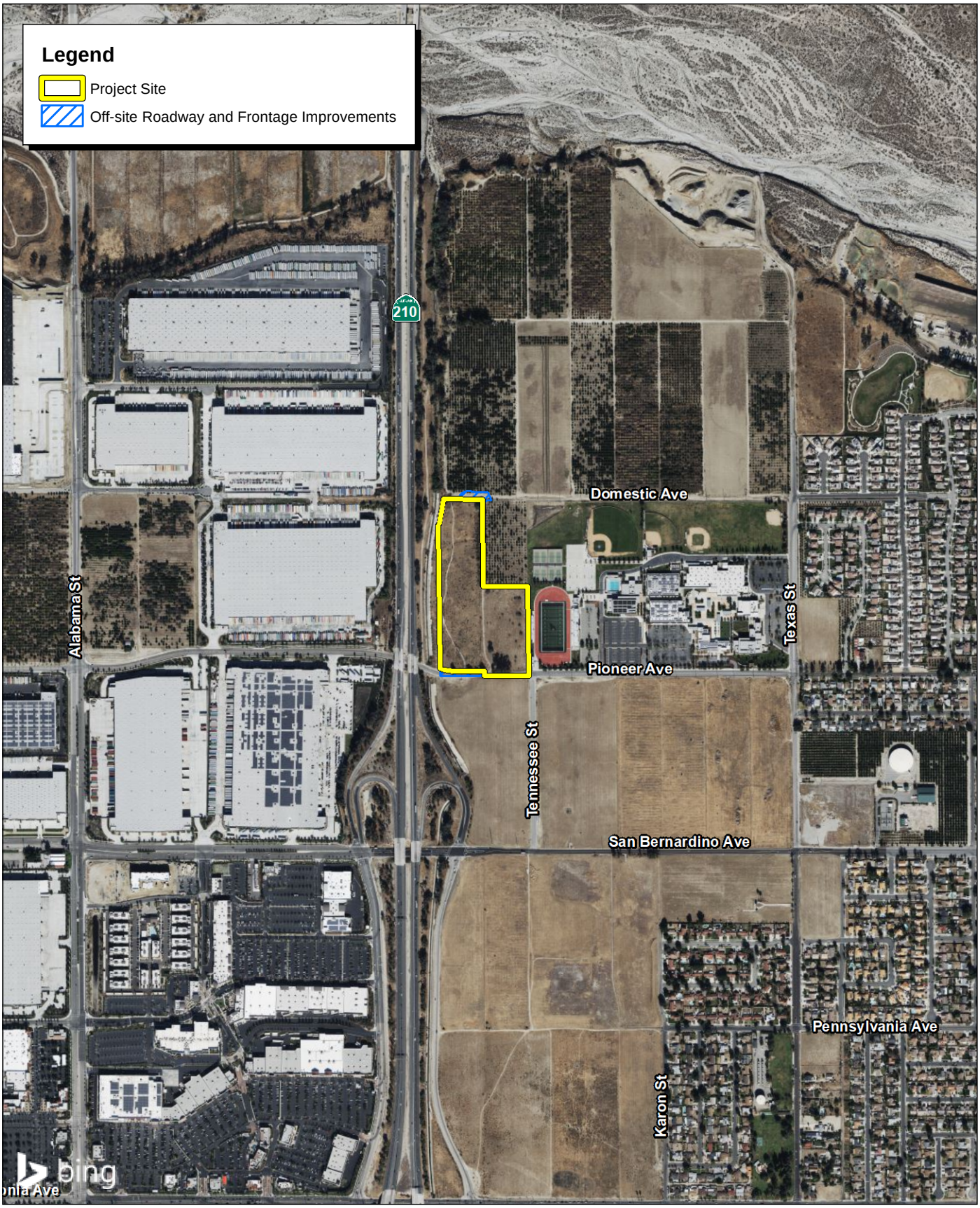

Source: Bing Aerial Imagery. Huitt-Zollars, 08/2022.

FIRSTCARBON SOLUTIONS™

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Feet

Exhibit 2
Local Vicinity Map

49400030 • 08/2022 | 2_local_vicinity.mxd

MLC HOLDINGS, INC.
SONG AND EMM PROPERTIES PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

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Source: MLC Holdings, Inc., May 2022.

FIRSTCARBON SOLUTIONS™

Exhibit 3
Site Plan

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SECTION 2: REGULATORY SETTING

2.1 - Federal

2.1.1 - Endangered Species Act

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

2.1.2 - Migratory Bird Treaty Act

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

2.1.3 - Bald and Golden Eagle Protection Act

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

2.1.4 - Clean Water Act

Section 404

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

Section 401

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

2.2 - State

2.2.1 - CEQA Guidelines

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

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan.

2.2.2 - California Endangered Species Act

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

authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

2.2.3 - California Fish and Game Code

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

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

In addition to formal listing under the Endangered Species Act and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a "Species of Special Concern." The CDFW maintains lists of "Species of Special Concern" that serve as species "watch lists." Species with this status may have limited distributions or limited populations and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

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

Fish and Game Code Sections 3500—5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

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

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

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

2.2.4 - California Porter-Cologne Water Quality Control Act

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

2.2.5 - California Native Plant Society Rare Plant Rankings

The CNPS maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Following are the definitions of the CNPS ranks:

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

Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet CEQA standards and thresholds for impact considerations.[1]

2.3 - Regional and Local

The proposed project does not lie within the boundaries of any adopted Habitat Conservation Plan (HCP) Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan.[1]

2.3.1 - City of Redlands

The City of Redlands General Plan 2035 (City of Redlands 2017) establishes long-range development policies to guide City departments, the Planning Commission, and City Council in their decision-making. The General Plan outlines principles and actions pertaining to natural resources and guidance for location, design, and quality of development to protect important wildlife, plants, and their associated habitats:

Principle 6-P.1 Develop a balanced and integrated open space system that reflects a variety of considerations, including resource conservation, production of agriculture, recreation, aesthetics, and community identity.

Principle 6-P.5 Encourage the preservation of natural habitat areas as open space.

Principle 6-P.6 Promote access to and views of conservation areas in a manner consistent with good land resource stewardship.

Action 6-A.1 Preserve as open space those areas that contain unique habitats, natural resources, and visual amenities such as citrus groves, hillsides, canyons, and waterways. These areas provide natural contrast with the urban cityscape.

Action 6-A.7 Work with San Bernardino County, neighboring cities, conservation organizations, and landowners to maintain and enhance the trails, roadways, and lands within the Emerald Necklace, and to ensure that sensitive resources in these areas are not disturbed or degraded.

[1] California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. Sacramento, CA. January.

Action 6-A.8 Provide sufficient resources for the maintenance of trails and conservation areas through both volunteer and City mechanisms.

Principle 6-P.7 Protect environmentally sensitive lands, wildlife habitats, and rare, threatened, or endangered plant and animal communities.

Principle 6-P.8 Minimize disruption of wildlife and valued habitat throughout the Planning Area and emphasize that open space is for more than just human use, but also serves as habitat for biological resources.

Principle 6-P.9 Preserve, protect, and enhance wildlife corridors, including natural watercourses, connecting the San Bernardino National Forest, Santa Ana River Wash, Crafton Hills, San Timoteo and Live Oak Canyons, the Badlands, and other open space areas.

Action 6-A.11 Require a biological assessment of any proposed project site within the Planning Area where species that are State or federally listed as rare, threatened, or endangered are identified as potentially present.

Action 6-A.12 Require that proposed projects adjacent to, surrounding, or containing wetlands, riparian corridors, or wildlife corridors be subject to a site-specific analysis that will determine the appropriate size and configuration of a buffer zone.

Action 6-A.13 Utilize conservation easements and preserves as means to conserve natural habitats.

Action 6-A.14 Construct freeway and arterial street undercrossings or overpasses where necessary to establish and preserve identified wildlife corridors.

Action 6-A.20 Work with State and County agencies in developing recovery and restoration plans after natural or man-made disasters to restore natural landscapes, habitats, and functioning ecosystems. As part of the recovery and restoration plans, include evaluation processes and implementation actions. Where appropriate, incorporate the use of native species.

Action 6-A.21 Ensure that future activities in the Santa Ana River Wash are consistent with the habitat conservation policies of the Upper Santa Ana River Land Management Habitat Conservation Plan (Wash Plan).

Redlands City Code

Chapter 12.52 of the Redlands City Code outlines the City's Tree Protection Guidelines. These guidelines are applicable to the following categories of trees as defined by this chapter of the City Code:

Public Tree A tree located in a public place or area under ownership or control of the City, including, but without limitation, City streets, parkways, open space, and park lands.

Specimen Tree Any public tree meeting the criteria established by resolution of the City Council by species and size of tree which is thereby presumed to possess distinctive form, size or age and to be an outstanding specimen of a desirable species and to warrant the protections of this chapter.

Landmark Tree A public tree designated as a historic resource under Chapter 2.62 of this code as a tree of historic or cultural significance and of importance to the community due to any of the following factors: it is one of the largest or oldest public trees of the species located in the City, it has historical significance due to an association with a historic building, site, street, person or event, or it is a significant outstanding feature of a neighborhood.

Native Tree Any tree, identified by a certified arborist as native to the local area, with a trunk more than eight inches (8”) in diameter at a height of four and one-half feet (4 ½’) above natural grade that is identified on a list of native trees approved by the City Council.

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SECTION 3: METHODS

3.1 - Literature and Database Reviews

This literature review provides a baseline from which to evaluate potential project impacts on biological resources on the project site and in the surrounding area.

3.1.1 - Existing Documentation

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

3.1.2 - Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current USGS 7.5-minute topographic quadrangle map(s)and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity.[2] Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the United States Environmental Protection Agency (EPA) Watershed Assessment, Tracking, and Environmental Results System (WATERS).[3] Aerial photographs provided a perspective of the current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

3.1.3 - Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.[4] These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to establish whether the soil conditions on-site are suitable for any special-status plant species.

3.1.4 - Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the project vicinity based on a search of the USFWS Information for

[2] United States Geological Survey (USGS). 2021. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed March 2023.

[3] United States Environmental Protection Agency (EPA). 2021. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed March 2023.

[4] Natural Resources Conservation Service (NRCS). 2021. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed March 2023.

Planning and Consultation (IPaC) database,[5] the California Natural Diversity Database (CNDDB), and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California.[6,7] The CNDDB search focused on species records within 10 miles of the project site. The CNPSEI search focused on records from the *Redlands, California,* USGS 7.5-minute Topographic Quadrangle Map and the eight surrounding quadrangles. The CNDDB Biogeographic Information and Observation System (BIOS 5) was used to determine distances between species occurrences and the project site.[8]

The potential for occurrence on the project site was assessed for each of the special-status species identified in the database searches. The potential for occurrence was assessed based on conditions on the project site, habitat requirements of special-status species, and number of recent (< 20 years old) occurrences in the project vicinity.

3.1.5 - Jurisdictional Waters and Wetlands

Prior to conducting the reconnaissance-level survey, an FCS Biologist reviewed EPA WATERS and aerial photography to identify potential natural drainage features and water bodies.[9] In general, all surface drainage features identified as blue-line streams on USGS maps and linear patches of vegetation are expected to exhibit evidence of flows and are considered potentially subject to State and federal regulatory authority as waters of the United States and/or State. A preliminary assessment was conducted to determine the location of any existing drainages and limits of project-related grading activities to aid in determining whether a formal delineation of waters of the United States or State is necessary.

3.2 - Field Surveys

3.2.1 - General Biological Survey

Senior Biologist Matthew South and Biologist Lucas South conducted a survey on March 9, 2023. The objective of the general survey was to ascertain general site conditions and identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species. During this survey, the Biologist walked and drove the project site and characterized and mapped vegetation communities, identified and recorded plants and wildlife observed on-site, and recorded evidence of wildlife habitats, including wildlife corridors, nests, dens, or burrows. Special-status or unusual biological resources identified during the literature review were ground-truthed during the field survey for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

[5] United States Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed March 2023.
[6] California Department of Fish and Wildlife (CDFW). 2021. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed March 2023.
[7] California Native Plant Society (CNPS). 2021. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed March 2023.
[8] California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed March 2023.
[9] United States Environmental Protection Agency (EPA). 2021. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed March 2023.

Vegetation Communities and Plants

Common plant species observed during the general biological survey were identified by visual characteristics and morphology in the field and recorded in a field notebook and on field maps. Uncommon and fewer familiar plants were identified with the use of taxonomical guides, including Jepson eFlora and Calflora.[10,11] Taxonomic nomenclature used in this study follows The Jepson Manual: Vascular Plants of California.[12] Common plant names, when not available from The Jepson Manual, were taken from other regionally specific references. Vegetation community types and boundaries were noted on aerial photos, verified through field observation, and digitized using ESRI ArcGIS software® ArcMap 10.0. By incorporating collected field data and interpreting aerial photography, a map of habitat types, land cover types, and other biological resources within the project site was prepared. Vegetation community and land cover types used to help classify habitat types are based on the Manual of California Vegetation (MCV) and cross-referenced with the CDFW Natural Communities List.[13,14]

Wildlife

Wildlife species detected during the general biological survey by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the project site.[15] Appropriate field guides were used to assist in species identification during surveys, such as Peterson, Reid, and Stebbins.[16,17,18] Online resources such as eBird and California Herps were also consulted, as necessary. [19,20]

Wildlife Movement Corridors

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

The project site was evaluated for evidence of a wildlife movement corridor during the general biological survey. The scope of the biological resource assessment did not include a formal wildlife movement corridor study utilizing track plates, camera stations, scent stations, or snares. Rather, the

[10] Jepson Flora Project (eds.) 2021. Jepson eFlora, https://ucjeps.berkeley.edu/eflora/. Accessed on March 22, 2022.
[11] Calflora. 2020. Calflora: Information on California plants for education, research, and conservation. Website: http://www.calflora.org/. Accessed on March 2023.
[12] Baldwin, B., et al. 2012. The Jepson Manual: Vascular Plants of California. Berkeley: University of California Press. County of San Bernardino (Bernardino)(amended 2015).
[13] Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento. 1300 pp.
[14] California Department of Fish and Wildlife (CDFW). 2021. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities. Accessed March 2023.
[15] California Department of Fish and Wildlife (CDFW). 2021. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed March 2023.
[16] Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4th Edition. Boston: Houghton Mifflin Harcourt.
[17] Reid, F. 2006. A Field Guide to Mammals of North America, Fourth Edition. Boston: Houghton Mifflin Harcourt.
[18] Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.
[19] eBird. 2021. Online bird occurrence database. Website: http://ebird.org/content/ebird/. Accessed March 2023.
[20] California Herps. 2021. A Guide to the Amphibians and Reptiles of California. Website: http://www.californiaherps.com/Accessed March 2023.

focus of this study was to determine whether a change in land use at the project site could have significant impacts on the regional movement of wildlife. Conclusions are based on the information compiled during the literature review, including aerial photographs, USGS topographic maps, and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity.

3.2.2 - San Bernardino Merriam's Kangaroo Rat Field Habitat Assessment

During the general biological survey of the project site, the FCS Biologist searched the project site and 500-foot buffer area for the presence of vegetation communities that could breeding and/or foraging habitat for San Bernardino Merriam's kangaroo rat, including Riversidian alluvial fan sage scrub, and ruderal and annual grassland habitats with open vegetation and bare areas. The Biologist also evaluated the condition and suitability of existing wildlife habitats and searched the project site for evidence of kangaroo rats, including burrows, tracks, and scat.

SECTION 4: RESULTS

This section summarizes the results of the literature search and general biological reconnaissance survey. The results of the sensitive biological resources database reviews and an analysis for the potential for occurrence of these resources on the project site are presented in Section 5. An analysis of project requirements for CEQA consistency is presented in Section 6.

4.1 - Literature Review

4.1.1 - Environmental Setting

The Song Property and the Emm Property to the east are currently vacant. Both parcels show signs of previous human use including recent disking and dumping. Former home foundations were also present on the Song Property. The project site is surrounded by urban development and SR-210 to the west, active construction (fully graded) and the Santa Ana River to the north, vacant land to the south and southeast and Citrus Valley High School to the east.

Soils

The Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) mapped one soil type (Ramona sandy loam, 0 to 2 percent slopes) on the project site and two soil types (Ramona sandy loam, 0 to 2 percent slopes and Pachappa fine sandy loam, 0 to 2 percent slopes) within the off-site road improvements area (Exhibit 4). The Ramona series soils are brown, slightly and medium acid, sandy loams and fine sandy loams. The Pachappa series soils consist of well drained (minimal) Noncalcic Brown soils developed from moderately coarse textured alluvium.

4.2 - Biological Surveys

FCS Biologists conducted the general biological survey of the project site on August 5, 2022, between approximately 9:00 a.m. to 10:30 a.m. Weather conditions during the field surveys were sunny and clear, with temperatures ranging from 79 to 80°F (degrees Fahrenheit), and wind speeds between 0 and 3 miles per hour (mph). Vegetation Communities and Land Use

The project site consists of undeveloped lands that were recently disked and vegetated in ruderal species at the time of the survey. Adjacent lands within 500 feet of the project site included ruderal habitat and urban/developed lands (Exhibit 5). Photographs of the vegetation communities on-site are presented in Appendix B. Detailed descriptions of vegetation communities and land cover types are provided below.

Ruderal/Disturbed

Ruderal/disturbed habitat is classified as areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Typically, if any vegetation is present, it is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance or show signs of past or present animal usage that precludes them from

providing viable natural habitat for uses other than dispersal. Examples of disturbed land include areas that have been graded, land that is repeatedly cleared for fuel management purposes and/or experienced repeated use that prevents natural revegetation (i.e., dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle (OHV) trails, and old home-sites.

Ruderal/disturbed habitat occurs over the entire project site and on adjacent, undeveloped lands. Most areas exhibiting ruderal habitat were recently disked for weed abatement activities. The soil surface is predominantly bare in the recently disked areas, but the southwestern portion of the Song Property and areas bordering Pioneer Avenue were not disked and exhibited relatively dense ruderal vegetation. Plant species observed in ruderal areas included prickly Russian thistle (*Kali tragus*), common fiddleneck (*Amsinckia intermedia*), puncturevine (*Tribulus terrestris*), London rocket (*Sisymbrium irio*), shortpod mustard (*Hirschfedlia incana*), telegraph weed (*Heterotheca grandiflora*), and Canada horseweed (*Erigeron canadensis*), red brome (*Bromus rubens*), and ripgut brome (*Bromus diandrus*).

Urban/Developed

Urban developments are characterized by a combination of developed and hardscaped areas and manicured vegetation, including street/shade trees, lawns, and shrubs, and little or no exposed soil substrates. Irrigation and fertilization allow for tropical and other non-native and ornamental species to flourish in urban areas. Trees are often grown in a spaced pattern with an open understory, and lawns are typically one species maintained at a continuous, uniform height. Shrubs are grown as spaced individuals or in tight rows that are hedged. These conditions provide habitat to a low diversity of wildlife that are tolerant of human-modified environments.

Urban/developed lands in the 500-foot buffer around the project site include Citrus Valley High School to the east and SR-210 and industrial warehouses to the west of the project.

Trees

Scattered trees and shrubs were observed in ruderal areas on-site, including black elderberry (*Sambucus nigra*), tree tobacco (*Nicotiana glauca*), tree of heaven (*Ailanthus altissima*), and lemon-scented gum (*Corymbia citriodora*). On the Emm Property, a small group of black elderberry trees is present on the eastern side of the parcel. Several scattered elderberry trees were also observed on the Song Property, including some that had been disked over but survived the disturbance. Several of the black elderberry trees, which grow as multi-trunked trees, appeared to have combined trunk measurements exceeding 8 inches diameter at breast height (DBH; approximately 4.5 feet above the ground surface). A row of lemon-scented gum trees is located along Pioneer Avenue on the southern border of the Song Property.

4.2.1 - Wildlife

Despite the highly modified environment on and adjacent to the project site, the vegetation community and land cover types there provide habitat for numerous wildlife species capable of tolerating those conditions. Even the anthropogenic features on the project site (buildings, shipping containers, stored equipment, and concrete foundations) could provide habitat for numerous

wildlife species. Wildlife activity during the general biological reconnaissance survey was moderate and consisted primarily of avian and mammalian species. Evidence of other species was evident in tracks, scat, and other signs, as well as information provided by the current site occupant. The following discussions regarding the wildlife species observed within the project site are organized by taxonomic group. Each discussion contains representative examples of a particular taxonomic group either observed or expected to occur on-site. No special-status wildlife species were observed during the survey.

Amphibians and Fish

No amphibian or fish species were observed on-site during the general biological reconnaissance survey. Because of arid climate in the region, amphibians are uncommon and typically limited to areas where sufficient sources of water are present. A channelized drainage feature paralleling SR-210 conveys water runoff to the Santa Ana River, but it does not likely hold water for sufficient periods that would allow for occurrence of fish or amphibians. A basin associated with the Citrus Valley High School grounds may hold water during storm events but would likely not support breeding habitat for amphibians. With no apparent open water sources on-site or in the vicinity, amphibians and fish are not expected to occur on-site or within a 500-foot buffer.

Birds

Avian activity was moderate during the field survey. FCS Biologists identified common native and non-native species, including mourning dove (*Zenaida macroura*), Eurasian collared dove (*Streptopelia decaocto*), rock pigeon (*Columba livia*), Anna's hummingbird (*Calypte anna*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), horned lark (*Eremophila alpestris*), bushtit (*Psaltriparus minimus*), black phoebe (*Sayornis nigricans*), European starling (*Sturnus vulgaris*), northern mockingbird (*Mimus polyglottos*), California towhee (*Melozone crissalis*), house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and western meadowlark (*Sternella neglecta*). Birds may find nesting platforms throughout the project site on bare ground, in grasses, shrubs, and trees, and in similar habitats and on buildings within 500 feet of the project.

Invertebrates

Three butterflies, painted lady (*Vanessa cardui*), common buckeye (*Junonia coenia*), and cabbage white (*Pieris rapae*), were observed on-site, as were European honeybees (*Apis mellifera*), houseflies (*Musca domestica*), oblique streaktail (*Allograpta obliqua*), California harvester ant (*Pogonomyrmex californicus*), and blue dasher (*Pachydiplax longipennis*). Other invertebrates that likely occur at the site year-round or during seasonal pulses include several species of beetles, flies, ants, bees, wasps, moths and butterflies, and spiders and tarantulas, among others.

Mammals

Two mammalian species were observed on-site during the general biological field survey, including California ground squirrel (*Otospermophilus beecheyi*) and desert cottontail (*Sylvilagus audubonii*). Burrows, scat, and tracks of other mammals were evident on-site, including coyote (*Canis latrans*), and valley pocket gophers (*Thomomys bottae*). Other mammalian species that may be present on the project site include Virginia opossum (*Didelphis virginiana*), California myotis (*Myotis*

californicus), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), western harvest mouse (*Reithrodontomys megalotis*), black rat (*Rattus rattus*), and house mouse (*Mus musculus*).

Reptiles

Two reptiles, western side-blotched lizard (*Uta stansburiana elegans*) and Great Basin fence lizard (*Sceloporus occidentalis longipes*), were observed on the project site. Other common reptiles that may occur on-site include San Diego gophersnake (*Pituophis catenifer annectens*) and California kingsnake (*Lampropeltis californiae*). Wildlife Movement Corridors

A channelized drainage located west of the project site but within its 500-foot buffer likely provides a movement corridor for a number of terrestrial wildlife species, including Virginia opossum, coyote, raccoon, striped skunk, several rodent species, and several lizard species, including San Diegan tiger whiptail. The channelized drainage provides a connection and movement corridor between the Santa Ana River Wash to the north and the parcel supporting ruderal vegetation located directly southwest of the project site. The channelized drainage supports native riparian woodland species and eucalyptus trees that provide cover for dispersing wildlife species. The bank of the channelized drainage and portions of the terrace area adjacent to and up to approximately 30 feet of the edge of the bank likely also function as a part of the wildlife movement corridor. The channelized drainage bank and the adjoining terrace may be particularly useful for wildlife movements in areas where homeless encampments within the channelized drainage may limit the movement of some wildlife species. The project site itself does not serve as a wildlife movement corridor.

4.2.2 - San Bernardino Merriam's Kangaroo Rat Habitat Assessment

San Bernardino Merriam's kangaroo rat occurs on alluvial floodplains of the Santa Ana River and its tributaries and adjacent upland habitats in the San Bernardino, Menifee, and San Jacinto Valleys in San Bernardino and Riverside Counties. The Santa Ana River supports suitable habitat and one of the largest extant populations of the species.[21] Critical habitat for the species was designated in the Santa Ana River Wash by the USFWS. San Bernardino Merriam's kangaroo rat prefers early (pioneer) and intermediate successional stages of Riversidian alluvial fan sage scrub, a plant community with coastal sage scrub and chaparral elements on alluvial terraces and braided river channels in Southern California.[22] The species excavates burrows in loose, sandy soils, usually near or beneath shrubs. The species may also occur in abandoned agricultural fields and orchards, but usually only when such habitats are adjacent to suitable natural habitats. San Bernardino Merriam's kangaroo rat abundance is greatest in areas of sandy soils with low-to-moderate perennial vegetative cover (less than 30 percent to 50 percent) and minimal density of non-native annual grass cover.[23,24] Presence of San Bernardino Merriam's kangaroo rat is negatively correlated with dense stands of non-native

[21] McKernan, R.L. 1997. The status and known distribution of the San Bernardino kangaroo rat (*Dipodomys merriami parvus*): field surveys conducted between 1987 and 1996. Prepared for the United States Fish and Wildlife Service, Carlsbad, California.
[22] McKernan, R.L. 1997. The status and known distribution of the San Bernardino kangaroo rat (Dipodomys merriami parvus): field surveys conducted between 1987 and 1996. Prepared for the United States Fish and Wildlife Service, Carlsbad, California.
[23] Ibid.
[24] MEC Analytical Systems, Inc. 2000. Final report of findings for the San Bernardino kangaroo rat and Habitat relationships 1999 field study for the Santa Ana River alluvial fan, San Bernardino County, California. Report prepared for the United States Army Corps of Engineers, Los Angeles District.

grasses and areas dominated by surface boulders and rocks, and positively correlated with sandy soils, sparse vegetation cover, and presence of scalebroom (*Lepidospartum squamatum*).[25,26]

Habitat conditions on the project site, including the open, ruderal, grassland-like habitat appear to be marginally suitable for San Bernardino Merriam's kangaroo rat occupancy. Portions of the Song Property may have been used for planting of citrus orchards during historical times, and building ruins located on the Emm Property indicates it was previously occupied and used by humans. In recent years regular disking of the project site has maintained an open habitat that is preferred by San Bernardino Merriam's kangaroo rats, allowing them to recolonize the site after the removal of orchards and abandonment of residential/agricultural use of the site. The channelized drainage west of the project site provides a potential wildlife movement corridor that could allow access of the site by San Bernardino Merriam's kangaroo rats from the Santa Ana River, where a large population of the species is known to occur north of the project site.[27]

[25] Root, B. 2008. 2005-2007 San Bernardino Kangaroo Rat Mark-Recapture Survey Analyses from the Woolly Star Preserve Area, San Bernardino County, California. Report prepared for the United States Army Corps of Engineers, Los Angeles District. 87 pp.

[26] Root, B. 2008. 2006-2007 San Bernardino Kangaroo Rat Occupancy Survey Analyses from the Woolly Star Preserve Area, San Bernardino County, California. Prepared for the United States Army Corps of Engineers. United States Fish and Wildlife Service. December. 153 pp.

[27] McKernan, R.L. 1997. The status and known distribution of the San Bernardino kangaroo rat (*Dipodomys merriami parvus*): field surveys conducted between 1987 and 1996. Prepared for the United States Fish and Wildlife Service, Carlsbad, California.

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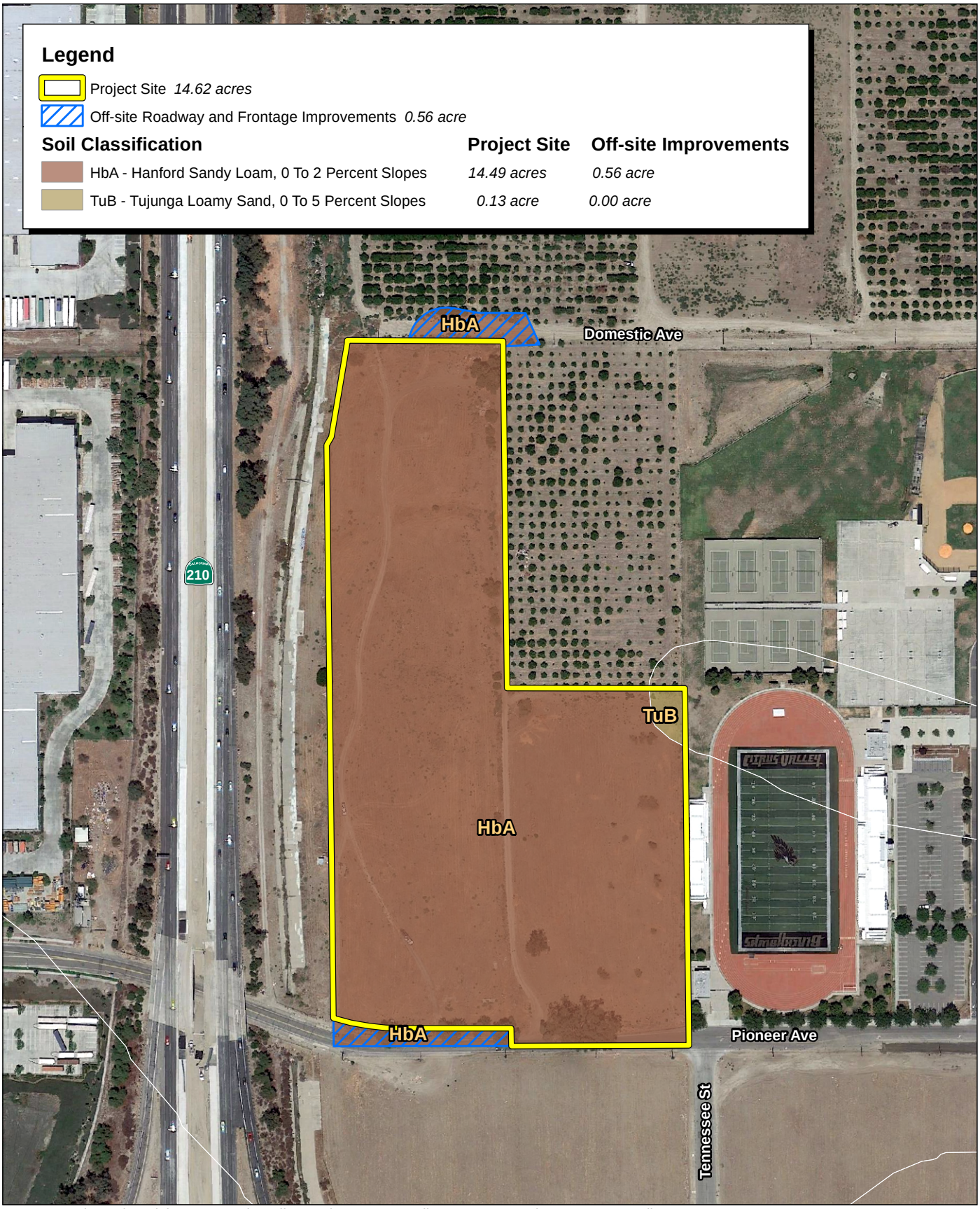

Source: Google Earth Aerial Imagery. Huitt-Zollars, 08/2022. USDA Soils Data Mart, Southwest San Bernardino.

FIRSTCARBON SOLUTIONS™

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Feet

Exhibit 4
Soils Map

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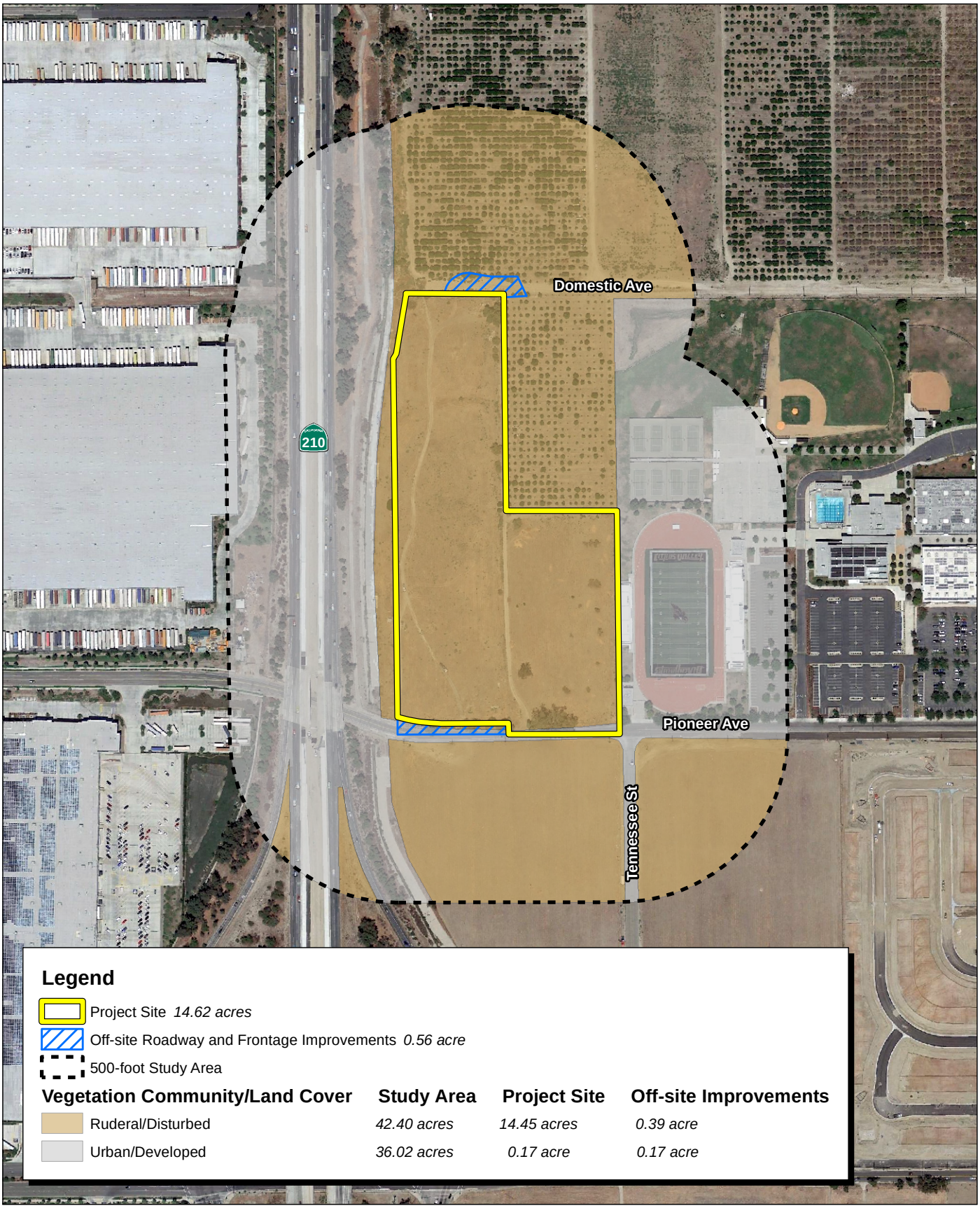

Source: Google Earth Aerial Imagery. Huitt-Zollars, 08/2022.

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Exhibit 5
Vegetation Community/Land Cover

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SECTION 5: SENSITIVE BIOLOGICAL RESOURCES DATABASE REVIEWS

The following section discusses the results of the database reviews for sensitive biological resources and an analysis of the potential for these resources to occur within the project site based on existing biological conditions on and adjacent to the site.

5.1 - Sensitive Natural Communities

Sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The CDFW maintains a list of natural communities which attempts to classify vegetation types found within the State of California and rank them based on rarity. Communities ranked S1-S3 are considered sensitive natural communities.[28] The CNDDB identified three sensitive natural communities that are known to occur within 5 miles of the project site: Southern Mixed Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Riversidian Alluvial Fan Sage Scrub. Seven sensitive natural communities, including Canyon Live Oak Ravine Forest, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub have been recorded in the CNDDB between 5 and 10 miles from the project site.[29] These communities are not present on or adjacent to the project site.

5.2 - Special-status Plant Species

According to the CNDDB, 19 special-status plant species have been recorded within 5 miles of the project site and an additional 14 species have been recorded between 5 and 10 miles from the project site.[30,31] An additional 50 species were identified on the 9-quadrangle CNPSEI search, and one additional species was identified in the USFWS IPaC review (Appendix C, Table 1). Table 1 in Appendix C includes the species' status, required habitat, and a summary analysis of the potential for each of these species to occur on the project site. Special-status plant species that were determined to have low or no potential to occur on-site appear in the table with justification for their exclusion from further discussion. The potential for occurrence of a species was based on presence of suitable habitats, soil types, and occurrences recorded by the CNPSEI and CNDDB.[32,33] Previous and significant surface disturbances evident throughout the project site and the presence and abundance of several non-native, invasive, annual plant species there have likely lowered the potential for persistence and occurrence of populations of many special-status plant species.

[28] California Department of Fish and Wildlife (CDFW). 2021. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities. Accessed March 2023.

[29] California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed March 2023.

[30] Ibid.

[31] California Department of Fish and Wildlife (CDFW). 2021. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed March 2023.

[32] California Native Plant Society (CNPS). 2021. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed March 2023.

[33] California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed March 2023.

5.2.1 - Potential for Occurrence of Special-status Plants

The project site is significantly disturbed and is surrounded by urbanized development and undeveloped lands that have been repeatedly disturbed (disked). Because of the conditions on and adjacent to the project site, all special-status plants that occur in the region were assessed as having no potential for occurrence (Appendix C, Table 1). Thus, special-status plants are not expected to occur on the project site and are not discussed further.

5.3 - Special-status Wildlife Species

Forty-two special-status wildlife species were identified as occurring within 5 miles of the project site as recorded in the CNDDB and an additional 14 species were identified in the USFWS IPaC review (Appendix C, Table 2).[34,35,36] Table 2 in Appendix C includes the species' status, required habitat types and features, and potential to occur within the project site. The table also includes special-status wildlife species that have been determined to have low or no potential to occur on-site, primarily based on the absence of suitable habitat and the lack of recorded occurrence in the project vicinity, along with other justification(s) for their exclusion from further discussion. Special-status wildlife species with moderate to high potential to occur on-site are analyzed further below. The potential for wildlife to occur on the project site was based on presence of suitable habitats and occurrences recorded in the CNDDB.

5.3.1 - Potential for Occurrence of Special-status Wildlife

The project site contains suitable habitat conditions that provide at least a moderate potential for the following special-status wildlife species to occur on-site:

Species evaluated with a **moderate** potential to occur include:

- San Diegan tiger whiptail
- Southern California legless lizard *(Anniella stebbinsi*)
- Cooper's hawk (*Accipiter cooperii*)
- burrowing owl (*Athene cunicularia*)
- California horned lark
- San Bernardino Merriam's kangaroo rat

All other species were assessed as having no or low potential to occur because the project site is outside of the known distributional range of the species or did not support suitable habitat (Appendix C, Table 2). Those species with moderate or high potential to occur on-site are discussed below.

[34] California Department of Fish and Wildlife (CDFW). 2021. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed March 2023.
[35] California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed March 2023.
[36] United States Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed March 2023.

Moderate Potential

San Diegan tiger whiptail

The San Diegan tiger whiptail typically occurs in arid scrublands with sparse vegetation. This whiptail can also be found within forests, woodlands, chaparral and riparian areas. It feeds on small invertebrates, especially spiders, scorpions, centipedes, termites, and other small lizards. This species was observed on a parcel adjacent to the project site during a biological survey by FCS in 2020. There are three recent records (from 2014, 2015, and 2016) within 5 miles of the project site. One observation was in an area that supported remnant Riversidean fan sage scrub and annual grassland habitat near the channelized drainage. The channelized drainage feature is located just west of the current project site, therefore, there is moderate potential for this species to occur on-site.

Southern California legless lizard

The Southern California legless lizard is found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. Much of the coastal dune habitat it lives in has been destroyed by coastal development. Suitable habitat for this species may be present in ruderal habitats on and adjacent to the project site. There are six recent and two historical records within 5 miles of the project site, and 11 recent and six historical records between 5 and 10 miles from the project site. The regular and recent disking of the project site likely make the area less suitable for occurrence of this species.

Cooper's hawk

The Cooper's hawk is a California Species of Special Concern that inhabits forested or wooded riparian areas throughout California. The species capture prey (typically mid-sized birds) from cover or while flying quickly through dense vegetation, relying on surprise. There is suitable foraging and nesting habitat for this species in the ornamental trees on and adjacent to the project site. There is one historical record within 5 miles of the project site. There is moderate potential for this species to occur on-site as a forager or nester.

Burrowing owl

The burrowing owl is an owl in the family Strigidae. Burrowing owls occur in open, dry, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. This species utilizes, modifies, and nests in burrows created by other species, most notably those of the California ground squirrel, but also those excavated by coyotes, desert kit foxes, desert tortoises, American badgers, and other burrowing mammals. Burrowing owl populations are threatened by habitat loss, pesticide use, and ground squirrel eradication programs, which limit suitable burrowing habitat. This species is considered a Special Species of Concern (SSC) by the CDFW and a Bird of Conservation Concern (BCC) by the USFWS. Nesting burrows of this species are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species.

The project site contains suitable open habitat with low-growing vegetation. There were numerous California ground squirrel burrows observed on the project site and adjacent properties. There are 11 recent records within 5 miles of the project site and 40 recent records between 5 and 10 miles

from the project site (Exhibit 6).[37] There is moderate potential for this species to occur on-site as a breeder, winter resident, and/or for post-breeding dispersal.

California Horned Lark

California horned lark is designated as a California Species of Special Concern. This species is a common to abundant year-round resident that inhabits a variety of open habitats, such as grasslands and other open habitats with low, sparse vegetation, and typically where trees and large shrubs are absent. California horned lark nest on the ground, building grass-lined nests in a cup-shaped depression on open ground. This species is very gregarious and often forms large flocks that forage and roost together after the breeding season. California horned lark eats insects, snails, and spiders during breeding season and grass and forb seeds and other plant matter outside of the breeding season. There is one historical record within 5 miles of the project site. (Exhibit 6).[38] The open areas on and adjacent to the project site may provide suitable foraging and nesting habitat for this species, and there is moderate potential for this species to occur there.

Loggerhead Shrike

The loggerhead shrike is a passerine bird in the family Laniidae. This species inhabits open country with short vegetation and well-spaced shrubs or low trees, particularly those with spines or thorns. They frequent agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses, and cemeteries. Loggerhead shrikes were once widely distributed across southern Canada, the contiguous United States and Mexico; however, their populations have declined significantly since the 1960s. They are considered a SSC by the CDFW and a BCC by the USFWS. Their nests are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species. There is one historical record within 5 miles of the project site. There is moderate potential for this species to forage and nest on the project site.

San Bernardino Merriam's Kangaroo Rat

The San Bernardino kangaroo rat (SBKR) is one of three subspecies of the Merriam's kangaroo rat. The Merriam's kangaroo rat is a widespread species that can be found from the inland valleys to the deserts of Southern California. The subspecies known as the San Bernardino kangaroo rat, however, is confined to inland valley scrub communities, and more particularly, to scrub communities occurring along rivers, streams and drainages. Most of these systems have been historically altered as a result of flood control efforts and the increased use of river resources, including mining, off-road vehicle use and road and housing development. This increased use of river resources has resulted in a reduction in both the amount and quality of habitat available for the San Bernardino Merriam's kangaroo rat. Marginally suitable habitat for this species is present on-site. There are 11 recent records (between 2004 and 2017) and two historical records (1989 and 1997) of San Bernardino Merriam's kangaroo rat within 5 miles of the project site and seven recent records (between 2003 and 2017) and one historical record (1990) between 5 and 10 miles from the project site. Most

[37] California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed March 2023.
[38] Ibid.

records were recorded in Riversidean alluvial fan sage scrub habitat, and one record from 2004 was in a recently disked agricultural field.

Our Biologists conducted an SBKR survey and habitat assessment on March 9, 2023, to determine both the quality of habitat for SBKR and to assess the parcels for current SBKR use by conducting a burrow survey.[39] Burrows were not observed in most of the site due to the recently tilled soil, which would remove any existing burrows. Burrows were observed on the northeastern edge of the review site in a narrow 10-foot by 100-foot tract of undisturbed ground, half covered with forbs and concrete debris. These burrows were not SBKR burrows because they were either too small or too large and did not have signs of SBKR use. The small burrows were approximately 1.5-2 inches in diameter, and are too small to be used or made by SBKR. The larger burrows were 5.5-6 inches or greater in size and had often an oblong or non-circle entrance. These larger burrows were active with California ground squirrel that were observed frequently along this berm. No burrows were observed in the densely vegetated portions of the berm or in the tilled areas. Each of the burrows were inspected for signs of use by SBKR (tail drags or scat) and showed no signs of SBKR activity.

SBKR habitat has been characterized as areas with a sandy substrate and with a low to moderate perennial vegetative cover absent a dense cover of non-native, annual grasses. SBKR prefers areas with smaller shrubs sparsely spaced and bare sandy ground between the shrubs. The project site lacks the frequent alluvial action that creates SBKRs preferred conditions found in the active floodplain to the north of the review area, and the area lacks the typical plant cover characteristics of SBKR habitat. The tilled areas would not be considered SBKR habitat due to the lack of vegetation and disturbance that altered the soils and plants. The few untilled areas are covered in dense ruderal plants, which do not support SBKR, and in areas where the plant density is sparser, the burrows were not of the size or shape of SBKR. Because of the tilled bare soil, lack of typical plant species and composition, and the position of the site away from any alluvial action of the river, the site lacks habitat for SBKR.

5.3.2 - Nesting Birds

The project site contains numerous surfaces, structures, and vegetation that could provide suitable nesting habitat for bird species protected under the MBTA and the Fish and Game Code. These species include Cooper's hawk, burrowing owl, California horned lark, loggerhead shrike, and other native avian species. Construction activities could disturb nesting and breeding birds in trees and shrubs within and around the construction site. Potential impacts on special-status and migratory birds that could result from construction and operation of the proposed project include destruction of eggs or occupied nests, mortality of young, and abandonment of nests with eggs or young birds prior to fledging.

5.4 - Potentially Jurisdictional Waters and Wetlands

The project site does not contain any potentially jurisdictional waters or wetlands within its boundaries; therefore, a formal Jurisdictional Delineation is not required. However, it should be

[39] South Environmental. 2023. San Bernardino Kangaroo Rat Habitat Assessment and Survey, Song and Emm Properties Project, City of Redlands, San Bernardino County, California, March 9, 2023.

noted that the concrete drainage channel located immediately to the west of the Song Property may be a jurisdictional water of the United States and water of the State (i.e., a State and federal protected water resource), owing to its connection to the Santa Ana River.

5.5 - Protected Trees

Several trees on-site may meet criteria for protection under Chapter 12.52 of the Redlands City Code. Several of the native black elderberry trees on-site appeared to exhibit combined trunk diameters that exceed 8-inches at 4.5 feet above the ground surface. Additionally, the row of lemon-scented gum trees along Pioneer Avenue may be located in a public right-of-way, which would qualify them as public trees. Black elderberry trees with cumulative trunk diameters of 8 inches or greater and any lemon-scented gum trees in a public right-of way may be subject to protection under Redlands City Code Chapter 12.52.

Exhibit 6: Special-status Species Occurrences in the Project Vicinity

This exhibit contains sensitive information relating to Biological Resources and is not intended for public distribution pursuant to Public Resources Code Section 21082.3(C)(2). A copy of confidential Exhibit 6 is on file with FirstCarbon Solutions and is available to qualified professionals upon request.

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SECTION 6: IMPACT ANALYSIS AND RECOMMENDATIONS

The following discussion addresses potential project impacts on regulated biological resources, including special-status species, and recommends measures to avoid and/or mitigate impacts to a less than significant level under CEQA. These impacts and others are analyzed and addressed with proposed Mitigation Measures (MMs) that would avoid or lessen them.

6.1 - Special-status Wildlife Species

Burrowing owl, a California Species of Special Concern, was assessed as having a moderate potential to occur on the project site. To prevent potential project impacts on burrowing owl that may utilize the project site, the following mitigation measures are recommended.

Mitigation Measure

MM BIO-1 Pre-Construction Surveys for Burrowing Owl (including avoidance if found)

- **Burrowing Owl Pre-construction Survey:** The project applicant shall retain a qualified Biologist to perform a pre-construction burrowing owl survey to determine whether burrowing owls are present within 30 days prior to construction activities, according to the California Department of Fish and Wildlife (CDFW) 2012 guidelines. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. Survey for occupied burrows shall be completed within all construction areas and within 300 feet from the proposed project impact area (where possible and appropriate based on locations of barren or ruderal habitats). At least 15 days prior to the expected start of any project-related ground disturbance activities, or restart of activities, the City shall provide a burrowing owl survey report with mapping exhibits to the CDFW. If no burrowing owls are detected during the pre-construction survey, no further action is necessary.
- **Agency Consultation, Mitigation, and Avoidance:** If burrowing owls are detected during the pre-construction survey, the City shall consult with the CDFW and United States Fish and Wildlife Service (USFWS) to develop and implement a Burrowing Owl Mitigation Plan that includes mitigation measures outlined in CDFW (2012) guidelines and a Worker Environmental Awareness Program (WEAP).

There is moderate potential for two special-status lizards, San Diegan tiger whiptail and Southern California legless lizard, to occur within the project site.

MM BIO-2 Pre-Construction Surveys for Special-status Reptiles (including avoidance if found)

- **Pre-construction Survey:** Prior to the issuance of a grading permit, the project applicant shall provide evidence that a qualified Biologist has been retained to perform a pre-construction survey of the entire project impact area, including any staging/laydown areas, for Southern California legless lizard and San Diegan tiger

whiptail no more than 7 days prior to initiating project activities.
If special-status wildlife species are observed during construction activities, all work within 50 feet of the animal(s) will be stopped. At no time shall work occur within 50 feet of the animal without the Biological Monitor present. Any special-status wildlife species detected within the project impact area, including any staging/laydown areas, shall be allowed to move away on their own and shall not be captured or handled without authorization from the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS).

- **Avoidance of Entrapment:** To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches may need to be covered at the close of each working day with plywood or other suitable material or provided with one or more escape ramps constructed of earth fill or wooden planks. The project applicant shall retain a qualified Biologist to regularly inspect open trenches during the construction phase.
- **Environmentally Sensitive Area Fencing:** Areas that support sensitive habitats or species shall be temporarily fenced to protect them from construction activities and traffic. The project applicant may need to retain a qualified Biologist to monitor Environmentally Sensitive Areas during the construction phase.
- **Worker Environmental Awareness Program:** A Worker Environmental Awareness Program (WEAP) training shall be implemented to educate construction workers about the presence of special-status plant and wildlife species on and near the project site and shall be administered to construction personnel prior to the initiation of ground-disturbing or vegetation/habitat altering activities.

San Bernardino Merriam's Kangaroo Rat

The project site lacks habitat for SBKR due to the tilled nature, lack of typical plant species and composition, and the position outside of alluvial action of the river. The small mammal burrows at the site were determined to be made by other species and lacked the characteristics of SBKR burrows. Furthermore, no SBKR individuals were observed and there were no signs of SBKR activity in the vicinity of the burrows (e.g., tail drag marks, scat). Therefore, SBKR is considered absent from the site. The exclusionary fencing surrounding the site will ensure that no SBKR will be able to populate the site in the future and it will remain free of SBKR.

Nesting Birds

Birds protected under the MBTA or California Fish and Game Code are considered sensitive during the active nesting period. The project site contains several large and medium sized trees which could provide suitable habitat for nesting birds including special-status species such as Cooper's hawk and loggerhead shrike. The project site also contains open ruderal habitat that could provide suitable habitat for ground-nesting birds such as California horned lark and burrowing owl. Construction activities that occur during the avian nesting season (generally February 1 to August 31) could disturb nesting sites for bird species protected under the MBTA or the Fish and Game Code. The removal of trees during the nesting season could result in direct harm to nesting birds, while noise, light and other man-made disturbances may cause nesting birds to abandon their nests. The project applicant shall implement the following mitigation measures to ensure that project impacts on nesting birds are less than significant:

- **Seasonal Avoidance:** If feasible, tree removal and vegetation clearing should be limited to the non-nesting season (September 1 through January 31).
- **Pre-construction Nesting Bird Surveys:** If the project requires trees to be removed during the nesting season (February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for migratory birds on the project site, including a 300-foot survey buffer, no more than 3 days prior to the start of ground-disturbing activities. If construction is delayed or suspended for more than 3 days after the survey, the area shall be resurveyed to re-confirm the presence/absence of any active nests.
- **Monitoring of Active Nests:** If an active nest is located during pre-construction surveys, the USFWS and/or the CDFW (as appropriate) will be notified regarding the status of the nest. Furthermore, construction activities will be restricted as necessary to avoid disturbance of the nest until it is abandoned, or the Biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 300 feet around an active raptor nest and 50-foot radius around an active non-raptor passerine bird nest) or alteration of the construction schedule.
- A qualified Biologist will delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and or flagging tape. The buffer zone will be maintained around the active nest site(s) until the young have fledged and are foraging independently.

Potentially Jurisdictional Features

Project construction activities on the western side of the Song Property could cause sediment to enter the channelized drainage and result in indirect impacts to the drainage channel and water quality downstream, potentially including through spills and stormwater runoff during construction. Therefore, implementation of water quality protection Best Management Practices (BMPs) are recommended. These shall include the following:

- Construction General Permit from the RWQCB.
- Stormwater planning documents consistent with the requirements of the RWQCB (e.g., a Storm Water Pollution Prevention Plan [SWPPP] that complies with current National Pollution Discharge Effluent Standards [NPDES]).
- BMPs to control the pollutants in stormwater runoff (e.g., silt fencing, straw wattles, etc.).

Protected Trees

The project site supports several native black elderberry trees with combined trunk diameters that exceed 8 inches, and lemon-scented gum trees in a public right-of-way, which may be regulated by Chapter 12.52 of the City Code of Redlands. If any of these trees would be removed during development of the project, the applicant shall be required to obtain a tree removal permit from the City of Redlands prior to their removal. As part of the application for a removal permit and as mitigation to reduce potential impacts to less than significant, the project applicant shall provide a report prepared by a certified arborist that determines which trees present on-site would be protected under the City Code and provides recommendations for their removal and replacement.

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Appendix A:
Professional Qualifications

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Email: julianacsouth@gmail.com
Mobile: 314-805-5566

EDUCATION

B.S., Physics and Astronomy, University of Rochester, 2022

B.A., Religious Studies, University of Rochester, 2022

SKILLS

-Scientific collection and management of field data

-Technical Writing

-Python for data analysis and data visualization

-Experimental conception and design

-Grant writing and coordination of award usage

Lucas South

BIOLOGIST

Lucas South is a current environmental professional and recent graduate from the University of Rochester, with a Bachelor of Science in Astrophysics. During their degree they gained extensive lab experience in experimental data collection and technical writing (3 years), winning 3 grants for their work in granular physics. More recently they have endeavored to apply their skills to the area of biological monitoring and conservation. They have experience in avian biological monitoring for a major environmental consulting firm during which they conducted field biological research in the Midwestern region. Most recently, Lucas has spent time collecting field data on mortalities of avian and bat species at wind energy farms.

Mr. South's educational background in physics and planetary science has led to an interest in researching more on environmental impacts on earth, especially in the context of continuing climate change. Their professional experience in biological monitoring has created a specific interest in avian species. They also seek to apply skills of data analytical techniques with Python and technical writing toward facilitating different research projects centered around the conservation of critical natural resources.

EXPERTISE

- **Biological Monitoring.** Mr. South has experience monitoring utilities and energy farms for living and deceased avian species.
- **Bird and Bat Identification.** Mr. South has experience in identifying migratory and resident bird and bat species throughout the Midwestern region, including identification of endangered species.
- **Data Acquisition.** Mr. South has experience with data acquisition systems that utilize GIS, as well as laboratory data management systems.
- **Data Management and Analysis.** Mr. South has significant expertise in conducting statistical analyses on data through the Python programming language, including the creation and usage of large data structures.
- **Scientific Writing.** Mr. South has expertise in writing scientific reports, presentations, and grant proposals, having contributed to 3 journal publications, and acquired 3 grants.

SELECT PROJECT EXPERIENCE

MidAmerican Wind Project WEST (2022) - As a Biological Field Technician for Western EcoSystems Technology Inc., Lucas's responsibilities were to provide quality data collection and to support their technician team. Duties included:

- Conducting biological monitoring and research on avian species and bats, both migratory and resident
- Maintaining strict data quality requirements while utilizing specialized field GIS equipment
- Conducting searcher efficiency and carcass persistence tests
- Coordinating with a team of avian biologists to confirm identifications and manage endangered species find responses
- Effectively communicating and coordinating with field team and wind farm managers to maintain field safety standards

Lead Research Assistant, Asteroid Environments Laboratory (2019-2022) - As a project leader in Dr. Quillen's astrophysics laboratory at the University of Rochester, Lucas's responsibilities were to design data taking procedures and strategically implement grant funding. Duties included:

- Creating scientific reports and presentations to communicate results of laboratory experiments
- Writing grant proposals and managing acquired funding to complete experimental goals while working with 8-10 collaborators
- Designing physics experiments that utilized an accelerometer array to obtain 150+ data sets
- Analyzing physical data using the Python language and creating data visualization tools, as well as creating theoretical models for data comparison

Publications

- ***Boulder Stranding in Ejecta Launched by an Impact Generated Seismic Pulse***, Wright, E., Quillen, A. C., South, L., Nelson, R. C., Sánchez, P., Martini, L., Schwartz, S. R., Nakajima, M., Asphaug, E., 2020, Icarus, 337, 113424.
- ***Ricochets on Asteroids: Experimental Study of Low Velocity Impacts into Granular Media***, Wright, E., Quillen, A. C., South, L., Nelson, R. C., Sánchez, P., Siu, J., Askari, H., Nakajima, M., Schwartz, S. R., 2020, Icarus, 351, 113963.
- ***Propagation and Attenuation of Pulses Driven by Low Velocity Normal Impacts in Granular Media,*** Quillen, A. C., Neiderbach, M., Suo, B., South, L., Wright, E., Skerrett, N., Sánchez, P., Cúñez, F. D., Miklavcic, P., Askari, H., 2022, Icarus, 115139.

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Matthew South

PRINCIPAL BIOLOGIST

Matthew South founded South Environmental in 2018. He is a certified wildlife biologist and certified arborist with 17 years of professional experience providing natural resources consulting services for a wide variety of clients that include residential, commercial, government, utility, infrastructure, research, and non-profit projects. For the last 13 years, Mr. South has been an environmental consultant in southern California acting as a Wildlife Biologist and Geographic Information System (GIS) Analyst. In early 2018 he started South Environmental and has since been supporting clients in Los Angeles, San Bernardino, and Riverside Counties.

Mr. South's background in ecology has led to a passion for conservation planning and resources assessments for the purpose of preservation and management. The integration of the latest technologies such as advanced GIS systems, mobile computing, and drone sensing allows him to innovate new data collection, analysis, and collaboration tools for the environmental sciences that produce more accurate data and better-informed resource managers.

EXPERTISE

- **Conservation and Management Planning.** Mr. South's has extensive experience preparing mitigation and monitoring plans, habitat conservation plans, and technical biological resources management plans that are compliant with federal, state, and local regulations. Mr. South is the only active NRCS TSP for Fish and Wildlife Plans Certified in California.
- **Biological Resources Assessment.** Mr. South has completed dozens of biological resources assessments throughout southern California.
- **Rare Plants and Arborist Services.** Mr. South has surveyed and assessed thousands of native and landscaped trees in southern California. He is a certified arborist with 5-years of tree survey experience working closely with some of the most experienced arborists in California. In addition, he has performed hundreds of hours of rare plant surveys and habitat assessments.
- **Wetland & Jurisdictional Delineations.** Mr. South has conducted dozens of jurisdictional and wetland delineations per the guidelines and methods from the US Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and the state Regional Water Quality Control Boards (RWQCB).
- **GIS.** Mr. South is an expert at spatial data collection and analysis using ESRI mobile and desktop software products and Trimble hardware.

EDUCATION

B.S., Wildlife Ecology, University of Wisconsin-Madison, 2004

CERTIFICATIONS

Certified Wildlife Biologist, The Wildlife Society 2014

ISA Certified Arborist (WE-12564A) 2019

Certified Technical Service Provider (TSP) for Fish and Wildlife Management Plans, USDA NRCS 2017

Authorized Desert Tortoise Biologist – Numerous BOs

Unmanned Aircraft System Pilot Certification, FAA #4177603

TRAINING

Wetland Delineation Training Course – The Wetland Institute (2014)

Southwest Willow Flycatcher Workshop, 2017

USGS Desert Tortoise Health Assessment and Tissue Collection Techniques Training, 2009

SELECT PROJECT EXPERIENCE

Southern California Edison (SCE) As-Needed Natural and Cultural Resources Services (2021-ongoing). As a subconsultant on this contract for multiple Primes (SWCA, EI, Rincon, Cardno, and ERM), South Environmental has focused its biological resources services on wetland delineations and permitting efforts for SCE throughout all its regions. From single pole delineations in roadside ditches to several hundred poles through miles of wet meadows in the Sierras, the projects vary in size and complexity as well as location. Primarily, delineations have been in the Sierras with the largest and most complex projects in Inyo and Mono Counties and several in Kern and Tulare. A few of the specific projects include

- Pickle Meadow: Aquatic Resources Delineation Report and Permitting for 300-poles located in a wet meadow behind Bridgeport Reservoir.
- Kern River: Wetland Delineation and Permitting for 15 pole replacements in Kernville.
- June Lake to Tom's Place: Wetland Delineation and Permitting for 40 poles spread through Inyo and Mono Counties.
- Cajon Wash: Jurisdictional Delineation and SBKR Assessment and Permitting for 10 pole replacements and realignment for a capital project located in SBKR Critical Habitat.
- Pipes Wash: Delineation and Permitting for 25-poles that are within Pipes Wash, a large ephemeral wash in the San Bernardino desert.

Southern California Gas (SCG) As-Needed Natural and Cultural Resources Services (2022-ongoing). As a subconsultant on this contract Mr. South has overseen the assessment numerous resources from single point locations to many miles of pipelines. More recently he has begun to conduct biological assessment in the coastal zone in Santa Barbara County as well as endangered species Biological Assessments (BAs) in support of Coastal Development Permits for SCG. Wetland delineation and permitting, biological resources assessments, and resources surveys and monitoring are services that Mr. South both provides personally and oversees a team of specialists that support the environmental impacts analysis and permitting for SCG.

California Department of Water Resources (DWR) As-Needed Environmental Compliance Services (2012-2018). As part of this contract while employed at another firm, Mr. South prepared conservation and biological resources planning documents as well as oversaw the implementation and compliance components of these documents. Most notably, Mr. South was the lead avian biologist for the billion-dollar Perris Dam Remediation Project where he prepared Avian Protection and Avoidance Plan, Feral Hog Management Plan, negotiated environmental mitigation and compensation with both the USFWS and CDFW biologists, conducted protocol surveys for endangered species such as least Bell's vireo, and oversaw the compliance monitoring efforts for the entire 5-years of project construction.

Los Angeles County Flood Control District and Department of Public Works As-Needed Environmental Compliance Services (2014-2018). As part of this contract while employed at another firm, Mr. South conducted dozens of biological resources assessments, focused surveys for special-status species, and monitored compliance for a wide variety of water infrastructure project. Notably, Mr. South was the lead biologist for the Eaton Dam Maintenance Projects and for a variety of vegetation management programs within sensitive waterways.

Appendix B:
Site Photographs

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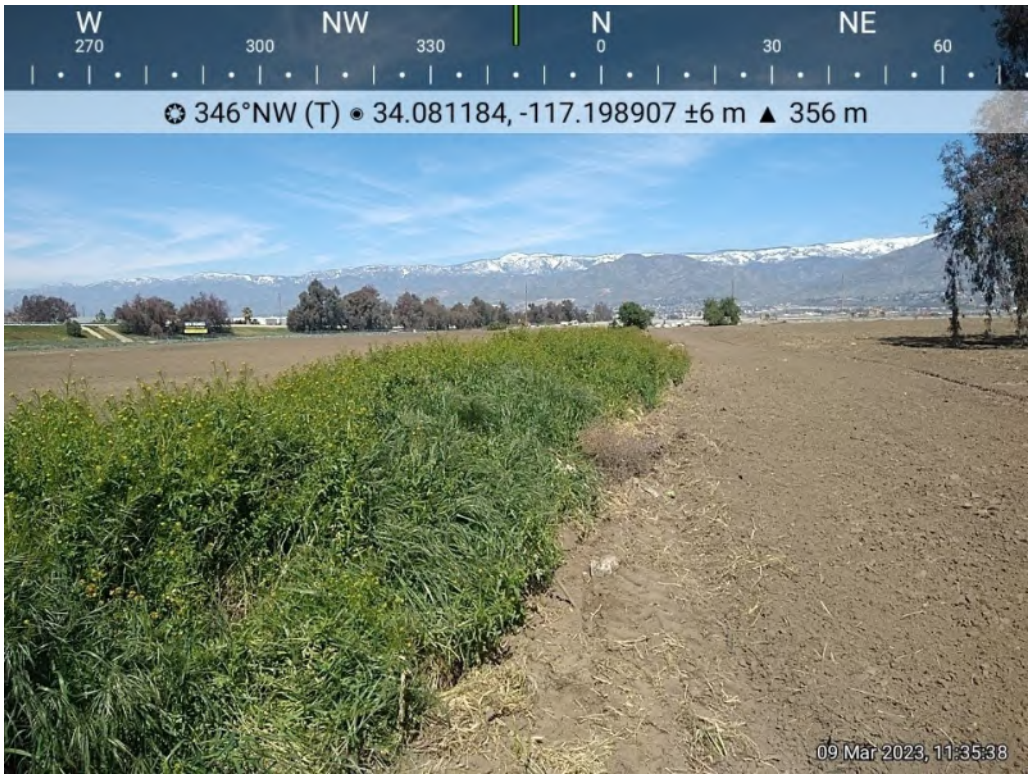
Photograph 1: View of site entrance via the gate on Pioneer Avenue.

Photograph 2: View of recently tilled soil and chain-link fence of site adjacent to Pioneer Avenue.

Photograph 3: View of utility poles and chain-link fence on the site adjacent to Highway 210.



Photograph 4: Untilled strip of land containing ruderal plants and forbs.

Photograph 5: Interior of the parcel featuring tilled soil and elderberry plants.

Photograph 6: Interior of the parcel featuring an out of use asphalt road.

Photograph 7: Small tract of untilled land on the northeast side of the parcel, supporting several burrows.

Photograph 8: An example of a burrow in the parcel, too large for SBKR and active with California ground squirrel activity.

Appendix C:
Special-status Species Tables

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Table 1: Special–status Plant Species Evaluated

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Dicots					
Abronia villosa var. aurita chaparral sand–verbena	—	—	1B.1	Annual herb found in chaparral, coastal scrub, and desert dunes in sandy habitats. Elevation: 75–1600 m Bloom period: March–September	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Acanthoscyphus parishii var. parishii Parish's oxytheca	—	—	4.2	Annual herb found chaparral and lower montane coniferous forest. Can grow in gravelly or sandy places. Elevation: 1220–2600 m Bloom period: June–September	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Ambrosia pumila San Diego Ambrosia	—	—	1B.1	Perennial rhizomatous herb found in chaparral, coastal scrub, valley and foothill grassland, vernal pools. Elevation: 20–415 m Bloom period: April–October	**None.** Suitable habitat for this species is not present on or adjacent to the project site, and the soils on the project site have been subjected to numerous disturbances that would prevent its occurrence.
Androsace elongata ssp. acuta California androsace	—	—	4.2	Annual herb that occurs in chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, and valley and foothill grassland. Elevation: 150–1305 m Bloom period: March–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Arenaria paludicola marsh sandwort	FE	SE	1B.1	Perennial stoloniferous herb found in marshes and swamps (freshwater or brackish). Elevation: 3–170 m Bloom period: May–August	**None.** There is no suitable habitat for this species on the project site. There is one historical record within 5 miles of the project site.
Artemisia palmeri San Diego sagewort	—	—	4.2	Annual herb found chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, and valley and foothill grassland. Elevation: 150–1305 m Bloom period: March–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Astragalus hornii var. *hornii* Horn's milk–vetch	—	—	1B.1	Occurs on salty flats, alkali sinks, lake shores, and riparian habitats. Elevation: 60–300 m Blooming period: May–October	**None.** Project site is outside of the known elevational range of the species, and there is no suitable habitat on the project site. There is one historical record within 5 miles of the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Astragalus pachypus var. jaegeri Jaeger's milk–vetch	—	—	1B.1	Perennial shrub found in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Can grow in rocky or sandy places. Elevation: 365–975 m Bloom period: December–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Atriplex coronata var. notatior San Jacinto Valley crownscale	FE	—	1B.1	Annual herb found in playas, valley and foothill grassland, and vernal pools in alkaline soils. Elevation: 139–500 m Bloom period: April–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Atriplex serenana var. davidsonii Davidson's saltscale	—	—	1B.2	Annual herb found in coastal bluff scrub and coastal scrub in alkaline soils. Elevation: 10–200 m Bloom period: April–October	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Berberis nevinii Nevin's barberry	FE	SE	1B.1	Occurs on steep, north–facing slopes or in low grade sandy washes in chaparral, cismontane woodland, coastal sage and Riversidean alluvial fan sage scrub, and riparian scrub habitats. Elevation: 290–1575 m Blooming period: March–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are one recent and two historical records within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.
Castilleja cinerea ash–gray paintbrush	FT	—	1B.2	Perennial herb found in Mojavean desert scrub, meadows and seeps, pebble plain, pinyon and juniper woodland, and upper montane coniferous forest. Elevation: 1800–2960 m Bloom period: June–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Castilleja lasiorhyncha San Bernardino Mountains owl's–clover	—	—	1B.2	Annual herb found in chaparral, meadows and seeps, pebble plain, riparian woodland, and upper montane coniferous forest in mesic soils. Elevation: 1300–2390 m Bloom period: May–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Castilleja montigena Heckard's paintbrush	—	—	4.3	Perennial herb found in lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest. Elevation: 1950–2800 m Bloom period: May–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Caulanthus simulans Payson's jewelflower	—	—	4.2	Annual herb found in chaparral and coastal scrub. Prefers granitic and sandy places. Elevation: 90–2200 m Bloom period: March–May	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Centromadia pungens ssp. *laevis* Smooth tarplant	—	—	1B.1	Occurs in alkali meadow, alkali scrub, and disturbed places in valley and foothill grassland, chenopod scrub, meadows, playas, and riparian woodland habitats. Elevation: 0–640 m Bloom period: April–September	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are three recent and two historical records within 5 miles of the project site, and two recent and two historical records between 5 and 10 miles from the project site.
Chloropyron maritimum ssp. *maritimum* Salt marsh bird's–beak	FE	SE	1B.2	Occurs in coastal salt marsh. Elevation: < 10 m Blooming period: May–October	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Chorizanthe leptotheca Peninsular spineflower	—	—	4.2	Annual herb found chaparral, coastal scrub, and lower montane coniferous forest. Prefers granitic places. Elevation: 300–1900 m Bloom period: May–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Chorizanthe parryi var. *parryi* Parry's spineflower	—	—	1B.1	Occurs on sandy soils in chaparral, coastal sage and Riversidean alluvial fan sage scrub habitats. Elevation: 275–1220 m Blooming period: April–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site, and the soils on the Project site have been subjected to numerous disturbances that would prevent its occurrence. There are five recent and six historical records within 5 miles of the project site, and five recent and four historical records between 5 and 10 miles from the project site.
Chorizanthe xanti var. leucotheca white–bracted spineflower	—	—	1B.2	Mojavean desert scrub, pinyon and juniper woodland, coastal scrub. Often grows on sandy or gravelly places such as alluvial fans. Elevation: 365–1830 m. Blooming period: April – June	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one recent record between 5 and 10 miles from the project site.
Convolvulus simulans small–flowered morning–glory	—	—	4.2	Annual herb found in chaparral, coastal scrub, and valley and foothill grassland. Prefers clay, seeps, and serpentinite. Elevation: 30–740 m Bloom period: March–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Cuscuta obtusiflora var. *glandulosa* Peruvian dodder	—	—	2B.2	Occurs on herbs including *Alternanthera*, *Dalea*, *Lythrum*, *Polygonum*, *Xanthium*. Elevation: +– < 500 m Blooming period: July–October	**None.** Suitable habitat and hosts for this species are not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Deinandra paniculata paniculate tarplant	—	—	4.2	Annual herb found in coastal scrub, valley and foothill grassland, and vernal pools. Prefers vernally mesic soil, but can be found in sandy places. Elevation: 25–940 m Bloom period: April–November	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Diplacus clevelandii Cleveland's bush monkeyflower	—	—	4.2	Perennial rhizomatous herb found in chaparral, cismontane woodland, and lower montane coniferous forest. Tends to grow in disturbed areas, as well as gabbroic places, openings, and rocky places. Elevation: 450–2000 m Bloom period: April–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Dodecahema leptoceras slender–horned spineflower	FE	SE	1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; associates include *Encelia, Dalea, Lepidospartum*, etc. Sandy soils. Elevation: 200–765 m. Blooming period: April–May	**None.** Suitable habitat for this species is not present on or adjacent to the project site, and the soils on the Project site have been subjected to numerous disturbances that would prevent its occurrence. There are one recent (in 2021) and five historical records within 5 miles of the project site, and three historical records between 5 and 10 miles from the project site.
Eriastrum densifolium ssp. *sanctorum* Santa Ana River woollystar	FE	SE	1B.1	Occurs on sandy soils on river floodplains or terraced fluvial deposits in chaparral and coastal sage and Riversidean alluvial fan sage scrub habitats. Elevation: 180–700 m Blooming period: May–September	**None.** Suitable habitat for this species is not present on or adjacent to the project site, and the soils on the Project site have been subjected to numerous disturbances that would prevent its occurrence. There are five recent (most recently in 2021) and three historical records within 5 miles of the project site, and eight recent and three historical records between 5 and 10 miles from the project site.
Eriophyllum lanatum var. obovatum southern Sierra woolly sunflower	—	—	4.3	Perennial herb found in lower montane coniferous forest and upper montane coniferous forest. Prefers loam and sandy places. Elevation: 1114–2500 m Bloom period: Jun–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Erythranthe exigua San Bernardino Mountains monkeyflower	—	—	1B.2	Annual herb found in meadows and seeps, pebble plain, and upper montane coniferous forest. Prefers clay and mesic soils. Elevation: 1800–2315 m Bloom period: May–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Frasera neglecta pine green–gentian	—	—	4.3	Perennial herb found in lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest. Elevation: 1400–2500 m Bloom period: May–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Galium californicum ssp. primum Alvin Meadow bedstraw	—	—	1B.2	Perennial herb chaparral lower montane coniferous forest. Elevation: 1350–1700 m Bloom period: May–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Galium johnstonii Johnston's bedstraw	—	—	4.3	Perennial herb found in chaparral, lower montane coniferous forest, pinyon and juniper woodland, and riparian woodland. Elevation: 1220–2300 m Bloom period: Jun–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Helianthus nuttallii ssp. parishii Los Angeles sunflower	—	—	1A	Dicot perennial (rhizomatous) herb found in marshes and swamps, including coastal salt and freshwater marshes. Elevation: 10–1,675 m. Bloom period: August–October	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Heuchera caespitosa urn–flowered alumroot	—	—	4.3	Perennial rhizomatous herb found in cismontane woodland, lower montane coniferous forest, riparian forest (montane), and upper montane coniferous forest. Prefers rocky habitat. Elevation: 1155–2650 m Bloom period: May–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Heuchera parishii Parish's alumroot	—	—	1B.3	Perennial rhizomatous herb found in alpine boulder and rock field, lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest. Can grow on carbonate, but prefers rocky habitat. Elevation: 1500–3800 m Bloom period: June–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Horkelia cuneata var. puberula mesa horkelia	—	—	1B.1	Perennial herb found in chaparral, coastal scrub, and cismontane woodlands. Elevation: 70–810 m. Bloom period: February–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Hulsea vestita ssp. parryi Parry's sunflower	—	—	4.3	Perennial herb found in lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest. Elevation: 1370–2895 m Bloom period: April–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Ivesia argyrocoma var. argyrocoma silver–haired ivesia	—	—	1B.2	Perennial herb found in meadows and seeps in alkaline soils, pebble plain, and upper montane coniferous forest. Elevation: 1463–2960 m Bloom period: June–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Juglans californica Southern California black walnut	—	—	4.2	Perennial deciduous tree found in chaparral, cismontane woodland, coastal scrub, and riparian woodland. Elevation: 50–900 m Bloom period: March–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Lasthenia glabrata ssp. coulteri Coulter's goldfields	—	—	1B.1	Annual herb found in marshes and swamps, playas, and vernal pools. Elevation: 1–1220 m Bloom period: February–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Lepidium virginicum var. *robinsonii* Robinson's pepper–grass	—	—	4.3	Occurs on dry soils in chaparral and coastal sage and Riversidean alluvial fan sage scrub habitats. Elevation: 1–855 m Blooming period: January–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site, and the soils on the Project site have been subjected to numerous disturbances that would prevent its occurrence. There are two historical records within 5 miles of the project site, and four historical records between 5 and 10 miles from the project site.
Lycium parishii Parish's desert–thorn	—	—	2B.3	Perennial shrub found in coastal scrub and Sonoran Desert scrub. Elevation: 135–1,000 m. Blooming period: March–April	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Malacothamnus parishii Parish's bush–mallow	—	—	1A	The one record for this species is in an area that is now developed and urbanized, but it likely supported Riversidean alluvial fan sage scrub habitat at the time of observation in 1895.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Monardella macrantha ssp. hallii Hall's monardella	—	—	1B.3	Perennial rhizomatous herb found broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland. Elevation: 730–2195 m Blooming period: June–October	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are one recent and two historical records between 5 and 10 miles from the project site.
Monardella pringlei Pringle's monardella	—	—	1A	Annual herb found in sandy soils in coastal scrub. Elevation: 300–400 m. Bloom period: May–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Nama stenocarpa mud nama	—	—	2B.2	Annual/perennial herb found in marshes and swamps. Elevation: 5–500 m Bloom period: January–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Nasturtium gambelii Gambel's water cress	FE	ST	1B.1	Occurs in freshwater and brackish marshes and at the margins of lakes and along streams in or just above the water level. Elevation: 5–330 m Blooming period: April–October	**None.** Project site is outside of the known elevational range of the species, and there is no suitable habitat on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Packera bernardina San Bernardino ragwort	—	—	1B.2	Perennial herb found in meadows and seeps in mesic or alkaline soils, pebble plain, and upper montane coniferous forest. Elevation: 1800–2300 m Bloom period: May–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Perideridia parishii ssp. parishii Parish's yampah	—	—	2B.2	Perennial herb found in lower montane coniferous forest, meadows and seeps, and upper montane coniferous forest. Elevation: 1465–3000 m Blooming period: June–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Phacelia mohavensis Mojave phacelia	—	—	4.3	Annual herb found in cismontane woodland, lower montane coniferous forest, meadows and seeps, and pinyon and juniper woodland. Can grow in gravelly and sandy soils. Elevation: 1400–2500 m Bloom period: April–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Phacelia stellaris Brand's star phacelia	—	—	1B.1	Annual herb found in coastal dunes and coastal scrub. Elevation: 1–400 m Bloom period: March–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Pseudorontium cyathiferum Deep Canyon snapdragon	—	—	2B.3	Annual herb found in Sonoran desert scrub in rocky places. Elevation: 0–800 m Bloom period: February–April	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Quercus engelmannii Engelmann oak	—	—	4.2	Perennial deciduous tree found in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland. Elevation: 50–1300 m Bloom period: March–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Ribes divaricatum var. *parishii* Parish's gooseberry	—	—	1A	Occurs in moist or riparian woodland habitat. Elevation: 60–310 m Blooming period: February–April	**None.** Project site is outside of the known elevational range of the species, and there is no suitable habitat on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Romneya coulteri Coulter's matilija poppy	—	—	4.2	Perennial rhizomatous herb found in chaparral and coastal scrub, often in burned areas. Elevation: 20–1200 m Bloom period: March–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Rupertia rigida Parish's rupertia	—	—	4.3	Perennial herb found in chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, pebble plain, and valley and foothill grassland. Elevation: 700–2500 m Bloom period: June–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Senecio aphanactis chaparral ragwort	—	—	2B.2	Annual herb found in drying alkaline flats in chaparral, cismontane woodland, and coastal scrub. Elevation: 15–800 m. Bloom period: January–April	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There two recent records between 5 and 10 miles from the project site.
Senecio astephanus San Gabriel ragwort	—	—	4.3	Perennial herb found in coastal bluff scrub and chaparral. Prefers rocky places and slopes. Elevation: 400–1500 m Bloom period: May–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Sidalcea hickmanii ssp. parishii Parish's checkerbloom	—	CR	1B.2	Perennial herb found in chaparral, cismontane woodland, and lower montane coniferous forest. Elevation: 1000–2499 m Blooming period: June–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Sidalcea malviflora ssp. *dolosa* Bear Valley checkerbloom	—	—	1B.2	Occurs in meadows and seeps in lower montane coniferous forest, riparian woodland, and upper montane coniferous forest habitats. Elevation: 1500–2300 m Blooming period: May–August	**None.** Project site is outside of the known elevational range of the species, and there is no suitable habitat on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Sidalcea neomexicana Salt spring checkerbloom	—	—	2B.2	Occurs in alkaline springs and marshes. Elevation: < 1500 m Blooming period: March–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two historical records within 5 miles of the project site.
Sidalcea pedata bird–foot checkerbloom	FE	CE	1B.1	Perennial herb found in meadows and seeps and pebble plains. Elevation: 1600–2500 m Blooming period: May–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Sidotheca caryophylloides chickweed oxytheca	—	—	4.3	Annual herb found in lower montane coniferous forest in sandy places. Elevation: 1114–2600 m Bloom period: July–September	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Streptanthus bernardinus Laguna Mountains jewelflower	—	—	4.3	Perennial herb found in chaparral and lower montane coniferous forest. Elevation: 670–2500 m Bloom period: May–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Streptanthus campestris southern jewelflower	—	—	1B.3	Perennial herb found in chaparral, lower montane forest, and pinyon and juniper woodland. Prefers rocky places. Elevation: 900–2300 m Bloom period: May–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Symphyotrichum defoliatum San Bernardino aster	—	—	1B.2	Perennial, rhizomatous herb found in banks of ditches, streams, and springs in cismontane woodlands, coastal scrub, lower montane coniferous forests, meadows and seeps, marshes and swamps, and vernally mesic valley and foothill grasslands. Elevation: 2–2,040 m. Bloom period: July–November	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are three historical records between 5 and 10 miles from the project site.
Trichocoronis wrightii var. wrightii Wright's trichocoronis	—	—	2B.1	Annual herb found meadows and seeps, marshes and swamps, riparian forest, and vernal pools. Prefers alkaline soils. Elevation: 5–435 m Bloom period: May–September	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Ferns					
Asplenium vespertinum western spleenwort	—	—	4.2	Perennial rhizomatous herb found in chaparral, cismontane woodland, and coastal scrub in rocky habitats. Elevation: 180–1000 m. Bloom period: February–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Pelazoneuron puberulum var. sonorensis Sonoran maiden fern	—	—	2B.2	Perennial rhizomatous herb found in meadows and seeps. Elevation: 50–610 m Bloom period: January–September	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Monocots					
Allium howellii var. clokeyi Mt. Pinos onion	—	—	1B.3	Perennial bulbiferous herb found in great basin scrub, meadows and seeps, and pinyon and juniper woodland. Elevation: 1300–1850 m Bloom period: April–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Allium marvinii Yucaipa onion	—	—	1B.2	Perennial bulbiferous herb found in chaparral in clay and in openings. Elevation: 760–1065 m Bloom period: April–May	**None.** Suitable habitat for this species is not present on or adjacent to the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Bouteloua trifida three–awned grama	—	—	2B.3	Perennial herb found in Mojavean desert scrub on carbonate and rocky places. Elevation: 700–2000 m Bloom period: May–September	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Brodiaea filifolia thread–leaved brodiaea	FT	SE	1B.1	Perennial herb (bulb) that occurs in openings on clay soils in chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grasslands, and vernal pool habitats. Elevation: 15–1020 m Bloom period: March–June	**None.** Suitable habitat for this species is not present within the project site. There are two recent records between 5 and 10 miles from the project site.
Calochortus catalinae Catalina mariposa lily	—	—	4.2	Perennial bulbiferous herb found in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Elevation: 15–700 m Bloom period: March–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Calochortus palmeri var. palmeri Palmer's mariposa–lily	—	—	1B.2	Perennial bulbiferous herb found in chaparral, lower montane coniferous forest, and meadows and seeps. Prefers mesic soils. Elevation: 710–2390 m Bloom period: April–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Calochortus plummerae Plummer's mariposa–lily	—	—	4.2	Occurs on rocky and sandy sites, usually of granitic alluvial material, in coastal sage and Riversidean alluvial fan sage scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest habitats. Can be very common after fire. Elevation: 100–1700 m Bloom period: May–July	**None.** Suitable habitat for this species is not present within the project site, and the soils on the project site have been subjected to numerous disturbances that would prevent its occurrence. There are two historical records within 5 miles of the project site, and eight recent and four historical records between 5 and 10 miles from the project site.
Calochortus simulans La Panza mariposa–lily	—	—	1B.3	Perennial bulbiferous herb found in chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland. Prefers granitic and sandy soils but can grow on serpentinite. Elevation: 325–1150 m Bloom period: April–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Carex comosa bristly sedge	—	—	2B.1	Perennial, rhizomatous herb found in coastal prairie, lake margins of marshes and swamps, and valley and foothill grasslands. Elevation: 0–625 m. Bloom period: May–September	**None.** Suitable habitat for this species is not present within the project site. There is one historical record between 5 and 10 miles from the project site.
Fimbristylis thermalis hot springs fimbristylis	—	—	2B.2	Perennial rhizomatous herb found in meadows and seeps. Elevation: 110–1340 m Bloom period: July–September	**None.** Suitable habitat for this species is not present within the project site. There is one recent record between 5 and 10 miles from the project site.
Fritillaria pinetorum pine fritillary	—	—	4.3	Perennial bulbiferous herb found in chaparral, lower montane coniferous forest, pinyon and juniper woodland, subalpine coniferous forest, and upper montane coniferous forest. Can grow in granitic and metamorphic soils. Elevation: 1735–3300 m Bloom period: May–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Hordeum intercedens vernal barley	—	—	3.2	Annual herb found in coastal dunes, coastal scrub, valley and foothill grassland in depressions and saline flats, and vernal pools. Elevation: 5–1000 m Bloom period: March–June	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Imperata brevifolia California satintail	—	—	2B.1	Occurs in wet springs, meadows, streambanks, and floodplains Elevation: < 500 m Bloom period: September–May	**None.** Suitable habitat for this species is not present within the project site. There are one recent and one historical record within 5 miles of the project site.
Juncus duranii Duran's rush	—	—	4.3	Perennial rhizomatous herb found in lower montane coniferous forest, meadows and seeps, and upper montane coniferous forest. Prefers mesic soils. Elevation: 1768–2804 m Bloom period: July–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Lilium humboldtii ssp. ocellatum ocellated Humboldt lily	—	—	4.2	Perennial bulbiferous herb found in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland. Prefers openings. Elevation: 30–1800 m Bloom period: March–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Lilium parryi lemon lily	—	—	1B.2	Perennial bulbiferous herb found in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest. Prefers mesic soils. Elevation: 1220–2745 m Bloom period: July–August	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Muhlenbergia californica California muhly	—	—	4.3	Perennial rhizomatous herb found in chaparral, coastal scrub, lower montane coniferous forest, and meadows and seeps. Prefers mesic soils, seeps, and streambanks. Elevation: 100–2000 m Bloom period: June–September	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Muilla coronata crowned muilla	—	—	4.2	Perennial bulbiferous herb found in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and Pinyon and juniper woodland. Elevation: 670–1960 m Bloom period: March–April	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Piperia leptopetala narrow–petaled rein orchid	—	—	4.3	Perennial herb found in cismontane woodland, lower montane coniferous forest, and upper montane coniferous forest. Elevation: 380–2225 m Bloom period: May–July	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Schoenus nigricans black bog–rush	—	—	2B.2	Perennial herb found in marshes and swamps. Elevation: 150–2000 m Bloom period: August–September	**None.** Suitable habitat for this species is not present within the project site. There is one recent record between 5 and 10 miles from the project site.
Sphenopholis obtusata Prairie wedge grass	—	—	2B.2	Occurs in wet meadows, streambanks, and ponds. Elevation: 240–2870 m Blooming period: April–June	**None.** Suitable habitat for this species is not present within the project site. There is one historical record within 5 miles of the project site.
Yucca brevifolia Joshua tree	—	—	—	Fine, loose, well drained, and/or gravelly soils in Mojavean desert scrub and pinyon and juniper woodland. Elevation: 400–1800 meters Blooming period: February–April	**None.** Suitable habitat for this species is not present on or adjacent to the project site.

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale
	USFWS[1]	CDFW[2]	CNPS[3]		
Code Designations					
[1] Federal Status: 2020 USFWS Listing **ESU** = Evolutionary Significant Unit is a distinctive population. **FE** = Listed as endangered under the FESA. **FT** = Listed as threatened under the FESA. **FC** = Candidate for listing (threatened or endangered) under FESA. **FD** = Delisted in accordance with the FESA. **FPD** = Federally Proposed to be Delisted. **MBTA** = protected by the Migratory Bird Treaty Act **—** = Not federally listed				**[2] State Status: 2020 CDFW Listing** **SE** = Listed as endangered under the CESA. **ST** = Listed as threatened under the CESA. **SSC** = Species of Special Concern as identified by the CDFW. **FP** = Listed as fully protected under FGC. **CFG** = FGC =protected by FGC 3503.5 **CR** = Rare in California. **—** = Not state listed	**[3] CNPS: 2020 CNPS Listing** **Rank 1A** = Plants species that presumed extinct in California. **Rank 1B** = Plant species that are rare, threatened, or endangered in California and elsewhere. **Rank 2** = Plant species that are rare, threatened, or endangered in California, but more common elsewhere. **Rank 3** = Plants about which we need more information—A Review List **Rank 4** = Plants of limited distribution—A Watch List **Blooming period:** Months in parentheses are uncommon.

Notes:
[4] **Habitat Description:** Habitat description adapted from CNDDB and CNPS online inventory or other specified source.
[5] **Potential to Occur and Rationale**: Location of recorded species occurrences determined by geospatial information from BIOS 5 or other specified source.

Sources:

California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed August 17, 2021.

California Department of Fish and Wildlife (CDFW). 2021. CNDDB RareFind 5 California Natural Diversity Database Query for Special–Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed August 17, 2021, 2021.

California Native Plant Society (CNPS). 2021. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed August 17, 2021.

U.S. Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation. Website: https://ecos.fws.gov/ipac/. Accessed August 17, 2021.

Table 2: Special–status Wildlife Species Evaluated

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]
	USFWS[1]	CDFW[2]		
Amphibians				
Batrachoseps gabrieli San Gabriel slender salamander	—	—	Found under rocks, wood, and fern fronds, and on soil at the base of talus slopes.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Rana draytonii California red–legged frog	FT	— SSC	Occurs in mesic forests in valleys and foothills near ponds or streams. May also occur in grasslands and coastal sage and Riversidean alluvial fan sage scrub near aquatic habitat. Breeds in permanent or ephemeral water sources, including lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Near ephemeral wetland habitats, require animal burrows or other moist refuges for estivation when the wetlands are dry.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Rana muscosa Southern mountain yellow–legged frog	FE	FE SSC	Occurs in lakes, ponds, meadow streams, isolated pools, and sunny riverbanks in montane habitat at elevations between 370–3,660 m. Prefers clear, deep pools in streams that range from rocky, steep drainages to those with a gentle gradient, marshy margins, and sod banks.	**None.** Project site is outside of the known elevational range of the species, and there is no suitable habitat on or adjacent to the project site. There is one historical record within 5 miles of the project site, and two recent and one historical records between 5 and 10 miles from the project site.
Spea hammondii Western spadefoot	—	— SSC	Occurs in open areas with sandy or gravelly soils in mixed woodlands, grasslands, coastal sage and Riversidean alluvial fan sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Breeds in ephemeral rain pools that do not contain bullfrogs, fish, or crayfish.	**Low.** Marginally suitable habitat for this species may be present in grassland areas on the project site adjacent to the channelized drainage. There are three recent records within 5 miles of the project site, and nineteen recent and one historical records between 5 and 10 miles from the project site.
Birds				
Accipiter cooperii Cooper's hawk	— MBTA	— WL; FGC	Occurs and nests in deciduous and mixed forests and open woodland habitats. Year–round resident in southern California.	**Moderate.** There is suitable nesting habitat for this species in the ornamental trees on and adjacent to the project site. There is one historical record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]
	USFWS[1]	CDFW[2]		
Aechmophorus occidentalis western grebe	— MBTA	— FGC	Breeds on freshwater lakes and marshes with extensive open water bordered by emergent vegetation. During winter they move to saltwater or brackish bays, estuaries, or sheltered sea coasts and are less frequently found on freshwater lakes or rivers.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Agelaius tricolor Tricolored blackbird	— MTBA	FT SSC; FGC	Occurs and nests in large freshwater marshes with dense stands of hydrophytic vegetation (cattails, bulrushes, etc.). Short–distance migrant.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and one recent record between 5 and 10 miles from the project site.
Aimophila ruficeps canescens Southern California rufous–crowned sparrow	— MTBA	— WL; FGC	Occurs and nests on steep, often rocky hillsides with grass and forb patches in coastal sage and Riversidean alluvial fan sage scrub and sparse mixed chaparral habitats. Year–round resident in southern California.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are five recent records within 5 miles of the project site, and ten recent records between 5 and 10 miles from the project site.
Aquila chrysaetos golden eagle	BGEPA MBTA	— FP; FGC	Forages in areas of rolling foothills, mountainous areas, sage–juniper flats, and desert. Cliff–walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Artemisiospiza belli belli Bell's sage sparrow	— MBTA	— WL; FGC	Breeds in coastal sagebrush, chaparral, and other open, scrubby habitats in Southern California mountains, deserts and valleys.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two recent records between 5 and 10 miles from the project site.
Athene cunicularia Burrowing owl	— MBTA	— SSC; FGC	Occurs and nests in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low–growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel. Short–distance migrant.	**Moderate.** Suitable nesting habitat for this species is present in the form of California ground squirrel colonies within the project site. There are two known records, from 1983 and 2006, within 5 miles of the project site. Both records are associated with airports. There are two recent records between 5 and 10 miles from the project site.
Baeolophus inornatus oak titmouse	— MBTA	— FGC	Occurs in warm, open, dry oak or oak–pine woodlands. Many will use scrub oaks or other brush as long as woodlands are nearby. Nests are built in tree cavities.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Buteo regalis ferruginous hawk	— MBTA	— WL; FGC	Grassland and arid shrublands with an abundance of prey species, such as pocket gophers, black–tailed jackrabbits, and desert cottontails. Will winter near cultivated fields that have an abundance of pocket gophers.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one recent record between 5 and 10 miles from the project site.

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]
	USFWS[1]	CDFW[2]		
Buteo swainsoni Swainson's hawk	— MBTA	FT FGC	Occurs and nests in grasslands with scattered trees, juniper–sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Long–distance migrant.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site. This species is believed to be locally extirpated.
Chamaea fasciata wrentit	— MBTA	— FG	Occurs in chaparral, oak woodlands, and bushland. Nests in 1 m high shrubs.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Coccyzus americanus occidentalis Western yellow–billed cuckoo	FT MTBA	SE FGC	Occurs and nests in riparian forest along the broad lower flood–bottoms of larger river systems. Found in riparian jungles of willow, often mixed with cottonwoods; understory consists of blackberry, nettles, and wild grape. Long–distance migrant.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.
Contopus cooperi Olive–sided flycatcher	— MTBA	— FGC	Breeds in montane and northern coniferous forests, at forest edges and openings, such as meadows and ponds.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Elanus leucurus white–tailed kite	— MTBA	— FP; FGC	Grasslands and open coastal scrub in coastal and valley lowlands; rarely found away from agricultural areas. Inhabits herbaceous, open stages of most habitats mostly in cismontane California. Year–round resident in southern California.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one recent record between 5 and 10 miles from the project site.
Empidonax traillii extimus Southwestern willow flycatcher	FE MTBA	SE FGC	Occurs and nests in dense riparian woodlands. Long–distance migrant.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and one recent record between 5 and 10 miles from the project site.
Eremophila alpestris actia California horned lark	— MTBA	— WL; FGC	Occurs and nests in open areas with sparse vegetation. Year–round resident in southern California.	**Moderate.** Suitable foraging and nesting habitat for this species in the grassland habitat project site. There is one historical record within 5 miles of the project site.
Falco columbarius merlin	— MBTA	— WL; FGC	Nests in open and semi–open areas such as grasslands, open forests, and coastal areas as well as in towns and cities. Merlins often take over crow nests in conifers planted in residential areas, schoolyards, parks, and cemeteries. Merlins winter across the western and southern United States, along the Pacific Coast up to Alaska, where it typically forages in open habitats supporting natural vegetation communities.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one recent record between 5 and 10 miles from the project site.

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]
	USFWS[1]	CDFW[2]		
Geothlypis trichas sinuosa common yellowthroat	— MTBA	— FGC	Occurs in freshwater and salt marshes with nearby willow thickets. Nests in marshy areas that are usually higher off the ground.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Haliaeetus leucocephalus bald eagle	FD; BGEPA MTBA	— FGC	Breeds and winters in forested areas adjacent to large bodies of water. Nests are usually constructed below the crown of a tree, often the highest point where large branches join the bole of a tree.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Icteria virens Yellow–breasted chat	— MTBA	— SSC; FGC	Occurs and nests in riparian thickets of willow and other bushy tangles near watercourses. Long–distance migrant.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.
Icterus bullockii Bullock's oriole	— MTBA	— FGC	Occurs in riparian corridors, open woodland, and scrub forest. Nests are usually suspended on the outer branches of a tree.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Lanius ludovicianus Loggerhead shrike	— MTBA	— SSC; FGC	Occurs and nests in broken woodlands, savannah, pinyon–juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**Moderate.** Suitable foraging and nesting habitat for this species may be present in the form of grasslands and ornamental trees within project site. There is one historical record within 5 miles of the project site.
Laterallus jamaicensis coturniculus California black rail	— MTBA	ST FP; FGC	Occurs and nests in freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Passerculus sandwichensis Belding's savannah sparrow	— MTBA	— FGC	Occurs in coastal salt marshes and other wetland edges. Nests in pickleweed salt marsh vegetation.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Picoides nuttallii Nuttall's woodpecker	— MTBA	— FGC	Occurs in oak woodlands, but also found in riparian woodlands.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Polioptila californica californica Coastal California gnatcatcher	FT MTBA	— SSC; FGC	Occurs and nests in arid washes, on mesas, and slopes in coastal sage scrub below 2500 ft. Year–round resident in California.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two recent and one historical records within 5 miles of the project site, and eight historical records between 5 and 10 miles from the project site.

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]
	USFWS[1]	CDFW[2]		
Selasphorus sasin Allen's hummingbird	— MBTA	— FGC	Breeds in moist coastal areas, scrub, chaparral, and forests. Winters in forest edge and scrub clearings with flowers.	**Low.** Marginal foraging and nesting habitat for this species occurs on and adjacent to the project site in ornamental vegetation.
Setophaga petechia Yellow warbler	— MTBA	— SSC; FGC	Occurs and nests in willow shrubs and thickets, cottonwoods, sycamores, ash, and alders, predominantly in riparian habitats. Long–distance migrant.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and two recent records between 5 and 10 miles from the project site.
Spinus lawrencei Lawrence's goldfinch	— MBTA	— FGC	Inhabits and nests in arid, open woodlands and oak trees in chaparral.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Spizella atrogularis black–chinned sparrow	— MBTA	— FGC	Occurs in arid brushlands on rugged mountain slopes from sea level to almost 2,700 m. Winters in habitat similar to but downslope from breeding areas, with other populations inhabiting desert grasslands.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Toxostoma redivivum California thrasher	— MBTA	— FGC	Occurs in chaparral and nests in dense shrubs.	**None.** Suitable habitat for this species is not present on or adjacent to the project site.
Vireo bellii pusillus Least Bell's vireo	FE MTBA	SE FGC	Occurs and nests in low riparian habitat in the vicinity of water or in dry river bottoms. Long–distance migrant.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are four recent and two historical records within 5 miles of the project site, and six recent and two historical records between 5 and 10 miles from the project site.
Fish				
Catostomus santaanae Santa Ana sucker	FT	—	Endemic to Los Angeles basin south coastal streams. Are habitat generalists, but prefer sand–rubble–boulder bottoms, cool, clear water, and algae.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two recent and one historical records between 5 and 10 miles from the project site.
Gila orcuttii arroyo chub	—	— SSC	Native to the streams and rivers of the Los Angeles plain in Southern California. Arroyo chub are adapted to survive in streams that fluctuate between large winter storm flows, and low summer flows, and the low dissolved oxygen and wide temperature fluctuations. Feeds on plants such as algae and water fern, as well as insects and mollusks.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two historical records between 5 and 10 miles from the project site.

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]
	USFWS[1]	CDFW[2]		
Oncorhynchus mykiss irideus pop. 10 Steelhead–southern California DPS	FE	—	Occurs in Pacific coast streams, including the Santa Ana River.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Rhinichthys osculus ssp. 8 Santa Ana speckled dace	—	— SSC	Occurs in small springs, streams, large rivers, and deep lakes, including headwaters of the Santa Ana and San Gabriel Rivers.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two historical records within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.
Insects				
Bombus crotchii Crotch bumble bee	—	CE	Occurs in grassland and scrubland habitats. Nests in abandoned rodent burrows.	**Low.** Marginal habitat for this species is present on and adjacent to the project site. There is one recent (from 2020) and one historical record within 5 miles of the project site, and three recent and two historical records between 5 and 10 miles from the project site.
Danaus plexippus Monarch Butterfly	—	—	Occurs in temperate climates, such as eastern and western North America and undergoes long–distance migration. Lays eggs on obligate milkweed host plant (primarily Asclepias spp.)	**Low:** The host plant for this species (milkweed) is absent from the project site, therefore it would only occur there as a transient.
Euchloe hyantis andrewsi Andrew's marble butterfly	—	—	Occurs in yellow pine forest. Hostplants are *Streptanthus bernardinus* and *Arabis holboellii var pinetorum*.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Eugnosta busckana Busck's gallmoth	—	—	Unknown habitat requirements, but probably inhabits a variety of grassland and scrub habitats.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are no known records within 5 miles of the project site. This species is believed to be locally extirpated.
Euphydryas editha quino Quino checkerspot butterfly	FE	—	Occurs in grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi–desert scrub habitats. Larval host plants are native species of plantain.	**None.** Project site is outside of the known range of the species, and there is no suitable habitat on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Neolarra alba white cuckoo bee	—	—	Unknown habitat requirements, but probably inhabits a variety of grassland and scrub habitats. Parasitizes nests of other bees.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]
	USFWS[1]	CDFW[2]		
Rhaphiomidas terminatus abdominalis Delhi Sands flower–loving fly	FE	—	Occurs on fine sandy soils of the Delhi series (primarily Delhi fine sand), often on wholly or partly sand dunes stabilized by sparse native vegetation.	**None.** There is no suitable habitat present within the project site due to lack of Delhi series soils and its associated vegetation communities. There are fourteen recent and six historical records within 5 miles of the project site.
Mammals				
Antrozous pallidus Pallid bat	—	— SSC	Occurs in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Species is very sensitive to disturbance of roosting sites.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Chaetodipus fallax fallax Northwestern San Diego pocket mouse	—	— SSC	Occurs in sandy, herbaceous areas, usually in association with rocks or coarse gravel, in coastal sage and Riversidean alluvial fan sage scrub, chaparral, and grasslands.	**Low.** Marginal habitat for this species is present on and adjacent to the project site. There are five recent and three historical records within 5 miles of the project site, and three recent and five historical records between 5 and 10 miles from the project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	FE	CE SSC	Occurs on sandy loam substrates on first terraces and floodplains of washes in Riversidean alluvial fan sage scrub habitat.	**Moderate.** Marginally suitable habitat for this species is present on–site and potential kangaroo rat burrows and tracks were observed on the project site. There are ten recent and two historical records within 5 miles of the project site and mostly in Riversidean alluvial fan sage scrub habitat. One record from 2004 was in a recently disked agricultural field. There are six recent and two historical records between 5 and 10 miles from the project site.
Dipodomys stephensi Stephens' kangaroo rat	FE	ST	Occurs primarily in annual and perennial grasslands, but also occurs in coastal sage scrub with sparse canopy cover. Can burrow into firm soil.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and ten historical records between 5 and 10 miles from the project site.
Eumops perotis californicus Western mastiff bat	—	— SSC	Occurs in many open, semi–arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two historical records within 5 miles of the project site, and three historical records between 5 and 10 miles from the project site.
Lasiurus xanthinus Western yellow bat	—	— SSC	Occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in skirts of dead fronds in both native and non-native palm trees.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are three historical records within 5 miles of the project site, and four historical records between 5 and 10 miles from the project site.

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]
	USFWS[1]	CDFW[2]		
Leptonycteris yerbabuenae lesser long–nosed bat	—	— SSC	Occurs in arid regions such as desert grasslands and shrub land. Roosts in caves, mines, rock crevices, trees and shrubs, and abandoned buildings.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.
Lepus californicus bennettii San Diego black–tailed jackrabbit	—	— SSC	Occurs primarily in arid regions with short grass including open grasslands, agricultural fields, and sparse coastal scrub. Nests under bushes or shrubs that have shallow depressions.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are seven recent and one historical record between 5 and 10 miles from the project site.
Neotoma lepida intermedia San Diego desert woodrat	—	— SSC	Occurs in rock outcrops, rocky cliffs, and slopes in coastal sage and Riversidean alluvial fan sage scrub with moderate to dense canopies.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two recent and one historical records within 5 miles of the project site in Riversidean alluvial fan sage scrub habitat, and there are one recent and one historical records between 5 and 10 miles from the project site.
Nyctinomops femorosaccus Pocketed free–tailed bat	—	— SSC	Occurs in pine–juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian habitats. Roosts in caves, crevices, mines, tunnels, and man–made structures.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Onychomys torridus ramona southern grasshopper mouse	—	— SSC	Occurs in desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.
Perognathus alticola alticola white–eared pocket mouse	—	— SSC	Occurs in pine forests, mixed chaparral, and sagebrush.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are three recent and five historical records between 5 and 10 miles from the project site.
Perognathus longimembris brevinasus Los Angeles pocket mouse	—	— SSC	Occurs in open areas with fine, sandy soils in lower elevation grasslands and coastal sage and Riversidean alluvial fan sage scrub habitats.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site in Riversidean alluvial fan sage scrub habitat, and there are six recent and two historical records between 5 and 10 miles from the project site.
Taxidea taxus American badger	—	— SSC	Occurs in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires sufficient food sources (rodents), friable soils, and open, uncultivated ground. Digs large burrows.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles of the project site. This species is believed to be locally extirpated.

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]
	USFWS[1]	CDFW[2]		
Reptiles				
Anniella stebbinsi Southern California legless lizard	—	— SSC	Occurs in moist, loose soil in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans.	**Moderate.** Suitable habitat for this species may be present in ruderal habitats on and adjacent to the project site. There are six recent and two historical records within 5 miles of the project site, and eleven recent and six historical records between 5 and 10 miles from the project site. The regular and recent disking of the project site likely make the area less suitable for occurrence of this species.
Arizona elegans occidentalis California glossy snake	—	— SSC	Occurs in areas of rocky washes and loose, sandy soils and for burrowing in desert scrub grassland, coastal sage and Riversidean alluvial fan sage scrub, and chaparral habitats. Prefer open sandy areas with scattered brush, but also found in rocky areas.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are three recent records within 5 miles of the project site in Riversidean alluvial fan sage scrub habitat. There are five historical records between 5 and 10 miles from the project site.
Aspidoscelis hyperythra Orange–throated whiptail	—	— WL	Occurs primarily on coarse soils in open coastal sage and Riversidean alluvial fan sage scrub habitat.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are six recent and one historical records within 5 miles of the project site, and five recent and five historical records between 5 and 10 miles from the project site.
Aspidoscelis tigris stejnegeri San Diegan tiger whiptail	—	— SSC	Occurs in dry, open areas with sparse foliage in coastal sage and Riversidean alluvial fan sage scrub, chaparral, woodland, and riparian habitats.	**Moderate**. Species was observed on a parcel adjacent to the project site during a biological survey by FCS in 2020. There are three recent records (from 2014, 2015, and 2016) within 5 miles of the project site. One observation was in an area that supported remnant Riversidean fan sage scrub and annual grassland habitat near a storm drainage. There are six recent and one historical records between 5 and 10 miles from the project site.
Charina umbratical Southern rubber boa	—	FT	Occurs in rocks and logs or other debris in oak–conifer and mixed–conifer forests at elevations between 5,000 and 8,200 ft.	**None.** Project site is outside of the known elevational range of the species, and there is no suitable habitat on or adjacent to the project site. There are four recent and eight historical records within 5 miles of the project site, and five recent and five historical records between 5 and 10 miles from the project site.
Coleonyx variegatus abbotti San Diego banded gecko	—	— SSC	Prefers rocky areas in coastal sage and chaparral.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]
	USFWS[1]	CDFW[2]		
Crotalus ruber Red–diamond rattlesnake	—	— SSC	Occurs in arid, rocky areas in creosote scrub, coastal sage and Riversidean alluvial fan sage scrub, chaparral, oak and pine woodlands, grasslands, on cultivated areas.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two recent records within 5 miles of the project site, and one recent and two historical records between 5 and 10 miles from the project site.
Emys marmorata western pond turtle	—	— SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There is one recent record between 5 and 10 miles from the project site.
Phrynosoma blainvillii Coast horned lizard	—	— SSC	Occurs in open areas with sandy soil and low vegetation in grasslands, coniferous forests, woodlands, and chaparral.	**Low.** There is marginal habitat for this species on and adjacent to the project site. There are four historical records within 5 miles of the project site, and six historical records between 5 and 10 miles from the project site.
Salvadora hexalepis virgultea coast patch–nosed snake	—	— SSC	Occurs in brushy or shrubby vegetation. Dependent on small mammal burrows.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two recent records between 5 and 10 miles from the project site.
Thamnophis hammondii Two–striped gartersnake	—	— SSC	Occurs in rocky areas near water sources such as pools and streams in oak woodland, willow, coastal sage and Riversidean alluvial fan sage scrub, scrub oak, sparse pine, chaparral, and brushland habitats.	**None.** Suitable habitat for this species is not present on or adjacent to the project site. There are two recent records within 5 miles of the project site. These observations were in an area supporting Riversidean alluvial fan scrub and chaparral habitats near a large, rocky wash. There are three recent and three historical records between 5 and 10 miles from the project site.

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

Code Designations

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

Notes:
[3] **Habitat Description**: Habitat description adapted from CNDDBor other specified source
[4] **Potential to Occur and Rationale**: Location of recorded species occurrences determined by geospatial information from BIOS 5 or other specified source.

Sources:

California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed August 17, 2021.

California Department of Fish and Wildlife (CDFW). 2021. CNDDB RareFind 5 California Natural Diversity Database Query for Special–Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed August 17, 2021.

U.S. Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation. Website: https://ecos.fws.gov/ipac/. Accessed August 17, 2021.

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Attachment B
Revised Cultural Resources Report

FIRSTCARBONSOLUTIONS™

Phase I Cultural Resources Assessment
Song and Emm Properties Project
City of Redlands, San Bernardino County, California

USGS *Redlands* 7.5-minute Topographic Quadrangle Map
Township 1 South, Range 3 West, Section 16
Assessor's Parcel Number (APN): 016-706-101 and 016-706-103

Prepared for:
MLC Holdings, Inc.
5 Peters Canyon Road, Suite 310
Irvine, California 92606

Contact: Johana Crooker, Director of Entitlements

Prepared by:
FirstCarbon Solutions
967 Kendall Drive, #A-537
San Bernardino, CA 92407
714.508.4110

Report Authored by Stefanie Griffin, MA
Fieldwork Conducted by: Kweku A. Williams, MA, RPA, and Natalie Adame

Date: August 16, 2022

Revised Date: June 20, 2023

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MANAGEMENT SUMMARY

At the request of MLC Holdings, Inc., FirstCarbon Solutions (FCS) conducted a Phase I Cultural Resource Assessment (Phase I CRA) for the Song and Emm Properties Project located in Redlands, California. The purpose of this assessment was to identify the presence or absence of potentially significant cultural resources within the project site, and, if impacted by the proposed development, propose recommendations for mitigation. Completion of this investigation fulfills the requirements of the California Environmental Quality Act (CEQA) under Section 15064.5. The City of Redlands has discretionary authority over the proposed project and is the CEQA Lead Agency. This report follows the California Office of Historic Preservation (OHP) procedures for cultural resource surveys and the OHP Archaeological Resource Management Report (ARMR) format for archaeological reports.

On March 5, 2019, a records search was conducted at the South Central Coastal Information Center (SCCIC) located at the California State University, Fullerton, for the project site and a 0.50-mile radius beyond the project boundaries. To identify additional historic properties or resources, the current inventories of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historical Landmarks (CHL) list, the California Points of Historical Interest (CPHI) list, and the California Built Environment Resource Directory (BERD) for San Bernardino County were also consulted. The results of the SCCIC records search indicate that there are 22 cultural resources (2 prehistoric resources and 20 historic resources) located within a 0.5-mile radius of the project boundaries, and no recorded cultural resources are located within the project site. In addition, there are 31 area-specific survey reports on file with the SCCIC, none of which address the project site, indicating that the project site has not been previously surveyed for cultural resources.

On August 12, 2021, a records search request was sent to the Native American Heritage Commission (NAHC) in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the project site. On September 15, 2021, a response from the NAHC was received indicating that their Sacred Lands File search came back positive for Tribal Cultural Resources (TCRs) within the project site. The NAHC included a list of 10 tribal representatives available for consultation who may have additional knowledge of the project area. To ensure that all Native American knowledge and concerns over potential TCRs that may be affected by implementation of the proposed project are addressed, a letter containing project information and requesting additional information was sent to each tribal representative on September 16, 2021. A response was received on September 17, 2021 from the Quechan Tribe of the Fort Yuma Reservation providing no comments, but deferring to more local tribes and supporting their decisions regarding the proposed project. On September 28, 2021, a response was received from the San Manuel Band of Mission Indians indicating that the proposed project site is not located near any known SLF Serrano Villages or archaeological sites. On October 29, 2022, a reply was received from Agua Caliente Band of Cahuilla Indians indicating that the proposed project site is not located within the boundaries of the Agua Caliente Band of Cahuilla Indians, however, the tribe requested a copy of the EIC records search results. No additional responses were received.

On May 12, 2022, a second set of letters were sent to the 10 tribal representatives, with the updated project description that includes the Emm Property. On June 22, 2022 a response was received from the Yuhaaviatam of San Manuel Nation stating that the project site is not located near any known cultural resources. No additional responses have been received to date.

On August 21, 2021, FCS Archaeologist, Kweku Williams, MA, RPA conducted a pedestrian survey for unrecorded cultural resources at the project site. The survey covered the subject property where possible, beginning in the southern portion of the project site and moving north, using north–south transects spaced at 15-meter intervals. The project site is within an overgrown, semi-desert area with local vegetation scattered throughout the proposed project. Soil visibility was moderate across the site, ranging from 30 to 50 percent. Obstruction of the soil was due to the high volume of modern debris and tall grass. Observed soils were largely composed of dark gray-brown sand with inclusion of gravel-like rocks and quartz. On April 15, 2022, FCS Archaeologist Natalie Adame conducted a pedestrian survey for the adjacent Emm Property. The survey began on the southwest corner of the project site and moved east, using north–west transects spaced at 15-meter intervals whenever possible. The project site was undeveloped and consisted of relatively flat grassy area, with soil visibility of native soils ranging from 10 percent to 5 percent in areas where bioturbation activities had taken place. Soil composition was made up of dark yellowish brown silty sand (10YR 4/4). Because of the proximity to West Pioneer Avenue and Citrus Valley High School, there was scattered modern debris along the edges of the property. To the extent possible, all areas of the project site were inspected for culturally-modified soils or other indicators of potential historic or prehistoric resources. No prehistoric or historic resources or raw materials commonly used in the manufacture of tools (e.g., obsidian, Franciscan chert, etc.) were found within the project site.

Based on the results of the positive Sacred Lands File search from the NAHC, the SCCIC records searches, archival research, and pedestrian survey, FCS considers the potential for the proposed project to have an adverse effect on historic and/or prehistoric cultural resources to be moderate. While there are no recorded resources within the project site, 20 historic resources and two prehistoric resources have been recorded within the 0.5-mile search radius. In addition, the site has not been previously surveyed for archaeological resources and its topography increases the possibility that subsurface archaeological resources may be encountered during project construction.

For this reason, FCS recommends that a qualified Archaeologist who meets the Secretary of Interior's Professional Qualification Standards for Archaeology perform an inspection of the site following grubbing, ground clearing, and prior to any grading or project-related ground disturbance. In the event exposed soils indicate cultural materials may be present, this may be followed by regular or periodic "spot check" archaeological monitoring as determined by the Archaeologist, but full-time archaeological monitoring is not recommended at this time. Additional procedures for the inadvertent discovery of human remains and cultural resources are provided in the report.

SECTION 1: INTRODUCTION

1.1 - Project Location

The project site encompasses approximately 14.6 acres located within the City of Redlands, San Bernardino County, California (Exhibit 1). The project site is located on the *Redlands*, *California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map (Exhibit 2). The project site is located at 1160 West Pioneer Avenue and consists of two Assessor's Parcel Numbers (APNs): 016-706-101 and 016-706-103. The project site is currently vacant and is bounded by West Pioneer Avenue to the south, Citrus Valley High School to the east, an orchard field in the northeastern border, State Route (SR) 210 to the west, and West Domestic Avenue to the north (Exhibit 3).

1.2 - Project Description

The project applicant is proposing to construct a new residential development on approximately 14.6 acres at 1160 West Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motor court homes. The maximum depth of ground disturbance is estimated to be up to 11 feet.

1.3 - Assessment Team

FCS Archaeological Supervisor, Stefanie Griffin, MA, authored this report. FCS Osteologist/Staff Archaeologist, Kweku A. Williams, MA, RPA, and Archaeological Field Manager, Natalie Adame, conducted the pedestrian survey. Ms. Griffin, Mr. Williams, and Ms. Adame exceed the professional standards set for their respective roles by the Secretary of the Interior. Professional qualifications for Ms. Griffin, Mr. Williams, and Ms. Adame can be found in Appendix A.

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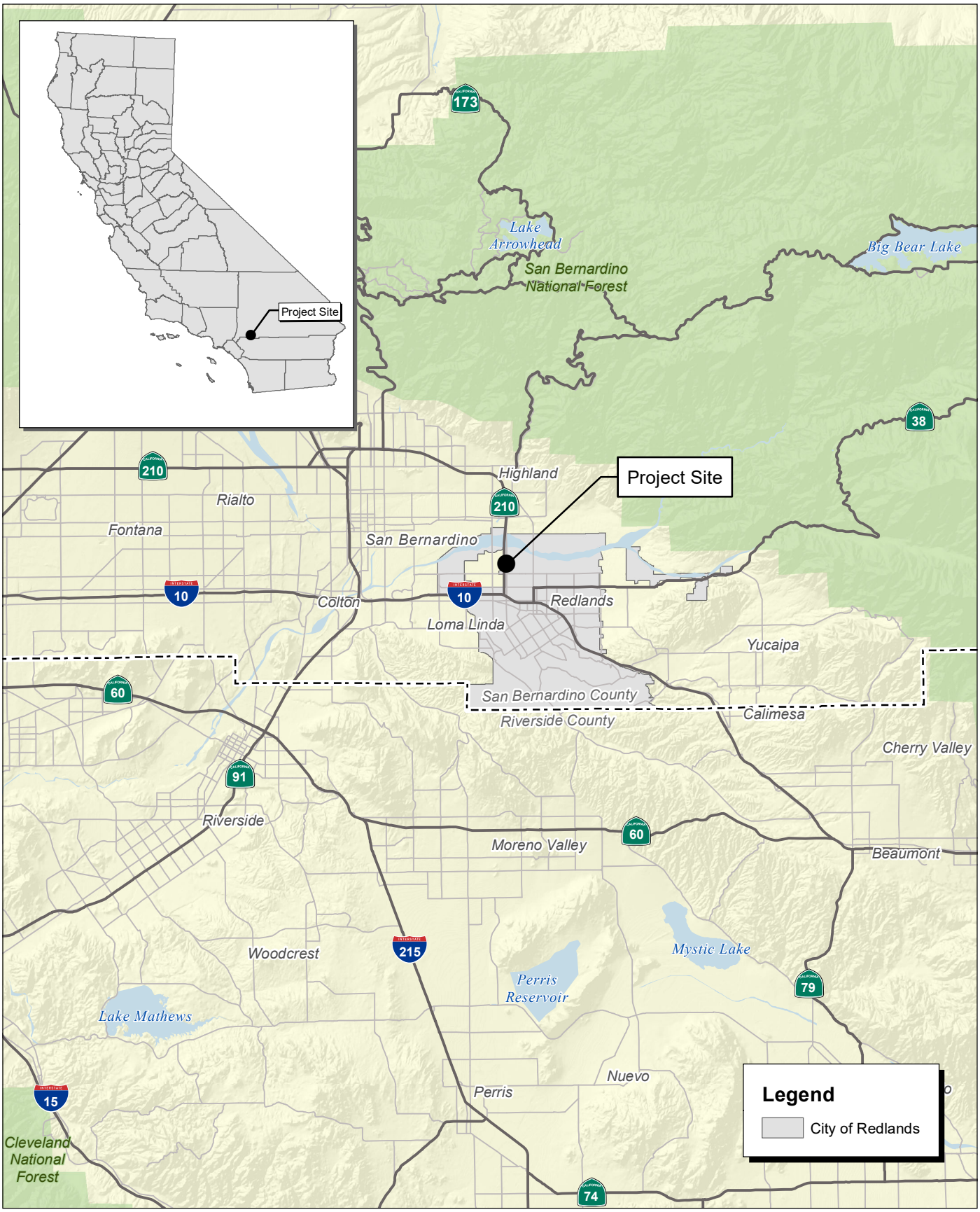

Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

FIRSTCARBON SOLUTIONS™

5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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MLC HOLDINGS, INC.
SONG AND EMM PROPERTIES PROJECT
PHASE 1 CULTURAL RESOURCES ASSESSMENT

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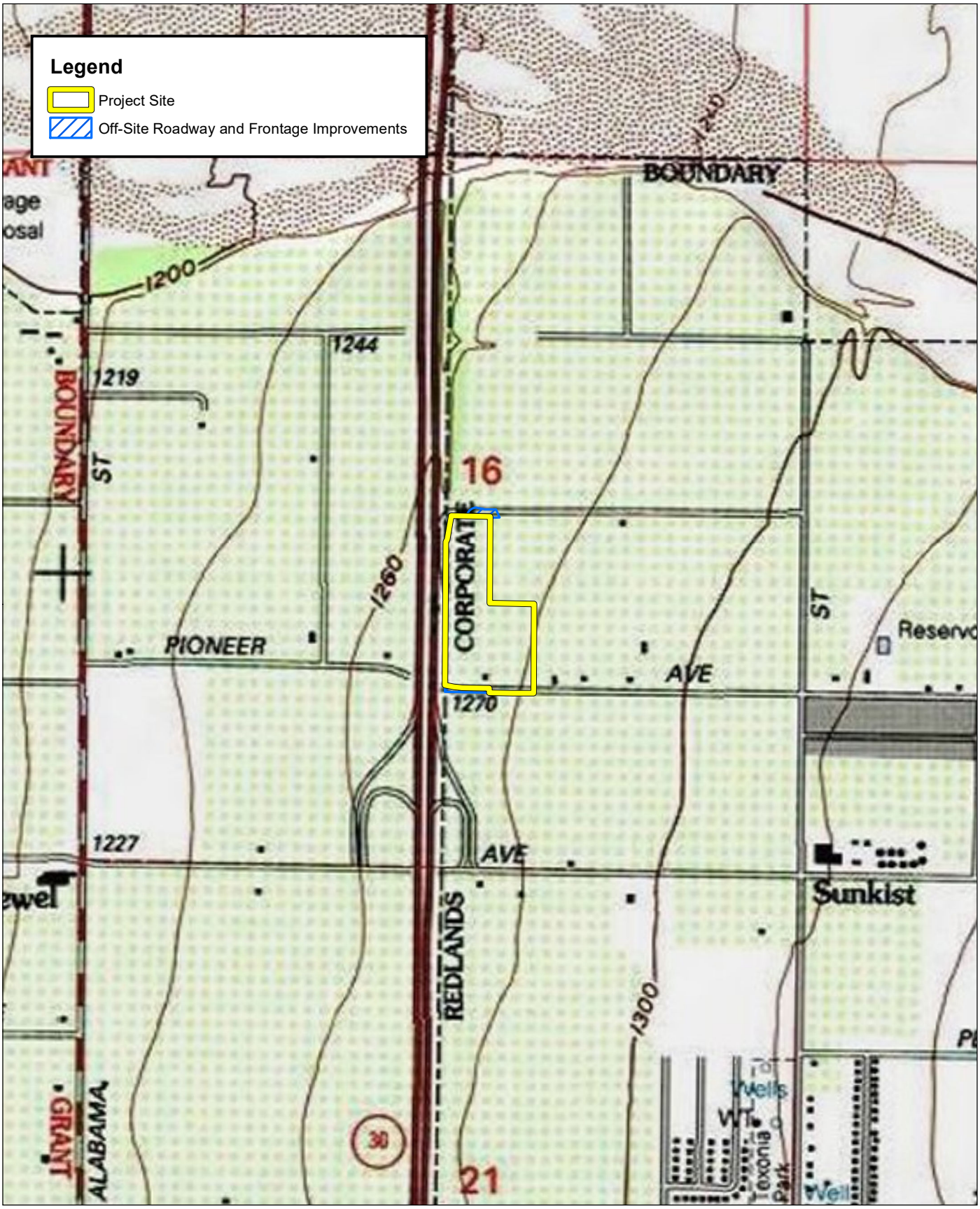

Source: USGS Redlands 7.5' Quadrangle / T01S,R03W,sec16.

FIRSTCARBON SOLUTIONS™

1,000 500 0 1,000 Feet

Exhibit 2: Local Vicinity Map
Topographic Base

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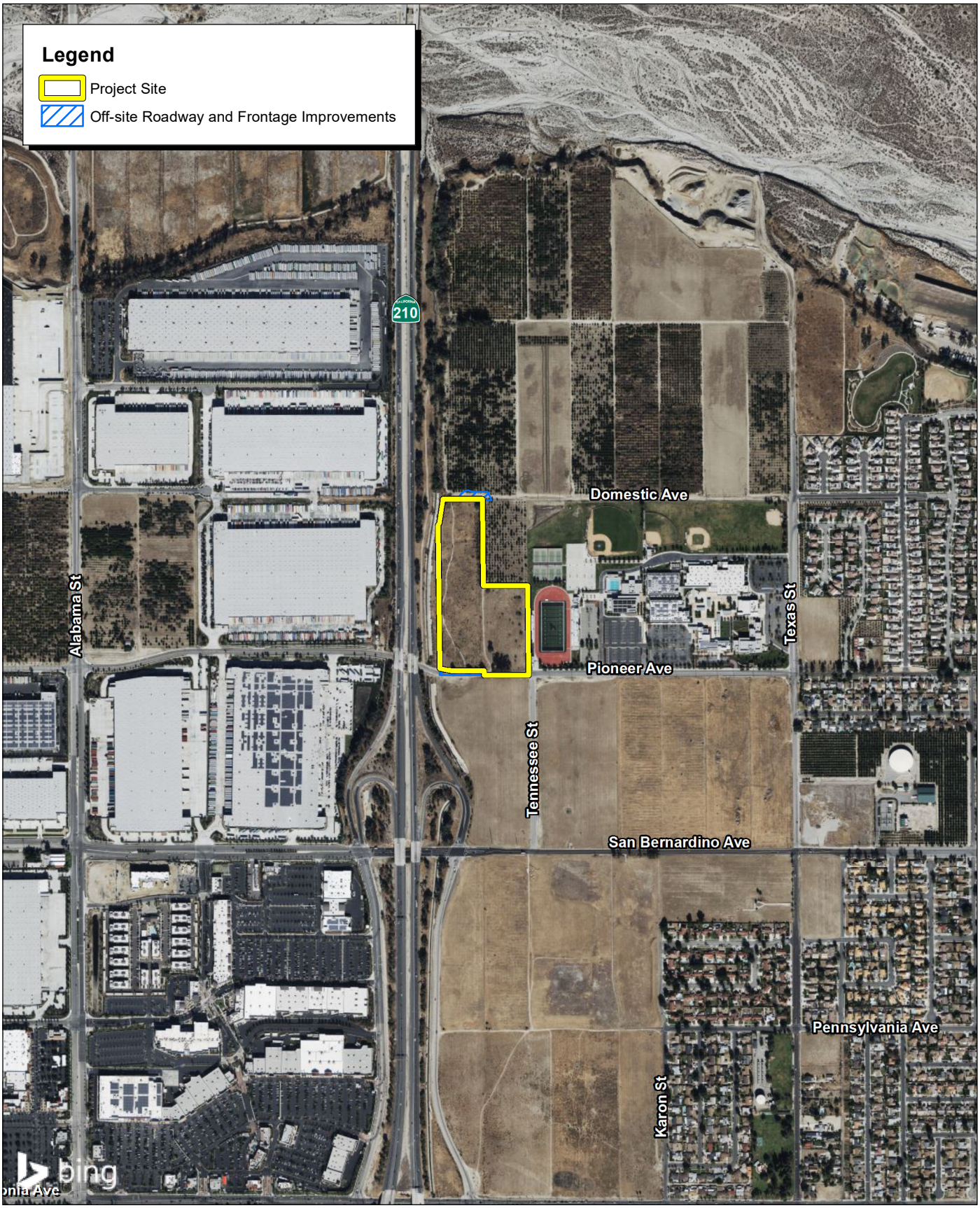

Source: Bing Aerial Imagery.

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1,000 500 0 1,000 Feet

Exhibit 3: Local Vicinity Map Aerial Base

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SECTION 2: CULTURAL SETTING

Following is a brief overview of the prehistory, ethnography, and historic background, providing context in which to understand the background and relevance of sites found in the general project area. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview.

Further details can be found in ethnographic studies, mission records, and major published sources, including Beardsley (1948), Bennyhoff (1950), Fredrickson (1973), Kroeber (1925), Chartkoff and Chartkoff (1984), and Moratto (1984).

2.1 - Prehistoric Background

Fagan (2003), Moratto (1984), and Chartkoff and Chartkoff (1984) provide recent overviews of California archaeology and historical reviews of inland Southern California, among other locales. An early and widely used regional chronology for coastal Southern California is Wallace's four-part Horizon format (1955), which was later updated and revised by Warren (1968) and more recently by Chartkoff and Chartkoff (1984), and King (1990 and 2000). The sequence provides a framework that relates societal change to change in material culture; the advantages and weaknesses of Southern California chronological sequences are reviewed by Warren (in Moratto 1984), Chartkoff and Chartkoff (1984), and Heizer (ed. 1978).

2.1.1 - Paleoamericans

In North America, radiocarbon dates from existing samples of archaeological materials demonstrate human presence as early as 15,000 years Before Present (BP) (Waters et al. 2018). The lithics from the earliest (14,000 to 15,000 BP) documented sites in North America include cores, flakes and flake tools (e.g., 5 blades, 14 bladelets, 12 bifaces, one discoidal flake core, 23 edge-modified tools that includes scrapers and gravers from the Debra L. Friedkin site, Texas) with an absence of projectile points (Waters et al. 2011, 2018). The first known projectile points in North America are from 13,000 years BP, with lanceolate fluted points (Clovis Complex) in sites from central and eastern North America and stemmed projectile points from sites in areas of western North America that were not glaciated (Jenkins et al. 2012; Beck and Jones 2010). Glennan (1972) provides an early study of the hypothesis of Pre-Clovis in Southern California. The oldest California radiocarbon date as of 2007 from archaeological materials confirms a human presence in the northeastern part of the State (from site CA-SIS-218) as early as 13,500 years BP (Jones and Klar 2007). The radiocarbon date corresponds to the period of fluted points and fluted points have been found throughout California (Rondeau et al. 2007; Rondeau 2009) although projectile points and other chronologically and culturally informative materials are absent from the SIS-218 sample.

Pleistocene flora and fauna are regularly uncovered from sediments at the La Brea Tar Pits, deep construction-related excavations in coastal Orange County, and the Santa Ana watershed. Such studies reinforce the idea that much of Southern California exhibited a climate similar to that of

Monterey or the San Francisco Bay Area during this Period (Chartkoff and Chartkoff 1984), with slightly drier conditions away from the coast.

2.1.2 - Millingstone Complex or Early Period

During the early post glacial period after 8,500 BP the Southern California climate became warmer and drier (Fagan 2003). Groundstone artifacts that include manos and metates correspond to the Early Period. The Early Period in Southern California begins as early or earlier than 8,000 BP and ends by about 2,800 BP (King 1990). The Early Period corresponds to the earliest known sites in Southern California with year-round habitation and cemeteries. Manos and metates consist of a variety of types. Mano and metates of the Early Period in Southern California, correspond to types from studies in the U.S. southwest that efficiently grind small, oily annual and biennial wild seeds (Adams 1999; Ciolek-Torello 1995; Gilman 1988; Lancaster 1984; Whittlesey 1995). Most annual and biennial wild seed plant types in Southern California are best adapted for warm and dry environments (e.g., Hemizonia fasciculata, which is a summer seed source). Annual and biennial seed crops are highly reliable, nutritious, and productive. Annual and biennial seed producers are also, diverse and afford reliable seed production throughout the year. Compared to later periods, utilitarian artifacts are most frequently found with Early Period burials.

Manos and metates are “kitchen tools” and concentrate within residential areas of Early Period habitation sites in Southern California (King and Merrill 2002; Merrill 2015). Other kinds of lithics that correspond to the Early Period include many kinds of core tools (e.g., hammers, choppers, and scraper planes), knives, bifaces, scrapers (many types), gravers, burins, dart points, and compound bone fishhooks. Sedentism apparently increased in areas with abundant resources that were available for longer periods. Arid inland regions and offshore desert islands (e.g., San Nicolas Island) provided less opportunity for long-term residence without trade and possibly for more mobile subsistence. The Early Period ends about 2,800 BP (King 1990).

2.1.3 - Middle Period

The Middle Period lasted from about 2,800 BP to 750 BP (King 1990). Excavated assemblages retain many attributes of the Early Period but with more diverse artifact types. Middle Period sites can contain large-stemmed or notched small projectile points suggestive of bow and arrow use, especially near the end of the Period, and the use of portable grinding tools continued. Intensive use of mortar and pestles signaled processing of acorns as the primary vegetative staple as opposed to a mixed diet of seeds and acorns. Because of a general lack of data, neither the settlement and subsistence systems nor the cultural evolution of this Period are well understood, but it is very likely that the nomadic ways continued. It has been proposed that sedentism increased with the exploitation of storable food resources, such as acorns, but coastal sites from the Period exhibit higher fishing activity than in previous periods. The first permanently occupied villages make their appearance in this Period (Chartkoff and Chartkoff 1984).

2.1.4 - Late Prehistoric

Extending from 750 BP to Spanish Contact in 1769, the Late Prehistoric includes changes in trade networks and political and secular economic subsystems. There was also a differentiation of types of

political economies. Exploitation of marine resources continued to intensify. Assemblages characteristically contain projectile points, and toward the end of the Period the size of the points decreased and notched and stemmed bases appeared, which implies the use of the bow and arrow. Use of personal ornaments such as shell beads were widely distributed east of the coast, suggesting well-organized and codified trade networks. Additional assemblages in this Period included steatite bowls, asphaltum, grave goods, and elaborate shell ornaments. The use of bedrock milling stations was widespread during this horizon. Increased hunting efficiency and widespread exploitation of acorns provided reliable and storable food resources. Village size increased during this time, and some of these villages may have held 1,500 or more residents (Chartkoff and Chartkoff 1984). Analyses of skeletons showed that the first signs of malnutrition appeared in this Period, signaling greater competition for food resources (Fagan 2003).

The earliest part of this Period may have seen an incursion of Cupan-Takic speakers from the Great Basin (the "Shoshonean wedge" of Kroeber 1925) may have replaced the Hokan speakers in the area. At the time of Spanish conquest, Cupan-Takic speakers were distributed throughout Orange County, western Riverside County, and the Los Angeles Basin (Gabrieliño, Juaneño, and Cahuilla peoples). Serran-Takic speakers are now represented by the Serranos in the San Bernardino Mountains. Recent work (O'Neil 2002) suggests that the "Shoshonean wedge" is misnamed—the original Los Angeles inhabitants replaced by the incoming Takic-speakers may have actually been Yuman speakers (similar to those in the California Delta region of the Colorado River) and not Hokan Salinan-Seri (Chumash) speakers as was suggested by Kroeber.

At the time of Spanish conquest, local indigenous groups were composed of constantly moving and shifting clans and cultures. Early ethnographers applied the concept of territorial boundaries to local indigenous groups purely as a conceptualization device, and the data was based on fragmented information provided to them from second-hand sources. At least three Native American groups, the Cahuilla, Serrano, and Gabrieliño are known to have occupied or utilized resources within the vicinity of the project site at different points in history. A brief overview of these three tribal groups follows.

2.1.5 - Cahuilla

The project site is located in the region known to have been occupied by the Cahuilla Indians. Cahuilla territory was bounded on the north by the San Bernardino Mountains, on the east by the Orocopia Mountains, on the west by the Santa Ana River, the San Jacinto Plain, and the eastern slope of the Palomar Mountains, and on the south by Borrego Springs and the Chocolate Mountains (Bean 1978). The diversity of the territory provided the Cahuilla with a variety of foods. It has been estimated that the Cahuilla exploited more than 500 native and non-native plants (Bean and Saubel 1972). Acorns, mesquite, screw beans, piñon nuts, and various types of cacti were used. A variety of seeds, wild fruits and berries, tubers, roots, and greens were also a part of the Cahuilla diet. A marginal agricultural existence provided corn, beans, squashes, and melons. Rabbits and small animals were also hunted to supplement the diet. During high stands of Ancient Lake Cahuilla, fish, migratory birds, and marshland vegetation were also taken for sustenance and utilitarian purposes (Bean 1978).

Structures within permanent villages ranged from small brush shelters to dome-shaped or rectangular dwellings. Villages were situated near water sources, in the canyons near springs, or on alluvial fans at man-made walk-in wells (Bean 1972). Mortuary practices entailed cremation of the dead. Upon a person's death, the body was bound or put inside a net and then taken to a place where the body would be cremated. Secondary interments also occurred. A mourning ceremony took place about a year after a person's death. During this ceremony, an image of the deceased was burned along with other goods (Lando and Modesto 1977; Strong 1929). Precontact Cahuilla population has been estimated as low as 2,500 to as high as 10,000. At the time of first contact with Europeans, around 1774, the Cahuilla numbered approximately 6,000. Although they were the first to come into contact with the Cahuilla, the Spanish had little to do with those of the desert region. Some of the Cahuilla who lived in the plains and valleys west of the desert and mountains, however, were missionized through the *asistencia* located near present day San Bernardino. Cahuilla political, economic, and religious autonomy was maintained until 1877 when the United States government established Indian reservations in the region. Protestant missionaries came into the area to convert and civilize the Native American population. During this era, traditional cultural practices, such as cremation of the dead, were prohibited. Today, the Cahuilla reside on eight separate reservations in Southern California, located from Banning in the north to Warner Springs in the south and from Hemet in the west to Thermal in the east (Bean 1978).

2.1.6 - Serrano

Ethnographic accounts indicate that the Serrano were the dominant group of Native Americans in the region that includes the project site. The Serrano occupied an area in and around the San Bernardino Mountains between approximately 1,500 and 11,000 feet above mean sea level. Their territory extended west into the Cajon Pass, east as far as Twentynine Palms, north to Victorville, and south to the Yucaipa Valley. The Serrano were mainly hunters and gatherers who occasionally fished. Game that was hunted included mountain sheep, deer, antelope, rabbits, small rodents, and various birds, particularly quail. Vegetable staples consisted of acorns, piñon nuts, bulbs and tubers, shoots and roots, berries, mesquite, barrel cacti, and Joshua tree (Bean and Smith 1978).

A variety of materials were used for hunting, gathering, and processing food, as well as for shelter, clothing, and luxury items. Shells, wood, bone, stone, plant materials, and animal skins and feathers were used for making baskets, pottery, blankets, mats, nets, bags and pouches, cordage, awls, bows, arrows, drills, stone pipes, musical instruments, and clothing (Bean and Smith 1978). Settlement locations were determined by water availability, and most Serrano's lived in small villages near water sources. Houses and ramadas were round and constructed of poles covered with bark and tule mats (Kroeber 1925). Most Serrano villages also had a ceremonial house used as a religious center. Other structures within the village might include granaries and sweathouses (Bean and Smith 1978).

The Serrano were loosely organized along patrilineal lines and associated themselves with either the Tukum (wildcat) or the Wahilyam (coyote) moiety. Organization of individual bands of Serrano was considered by Kroeber (1925) to be similar to political groups. Tribes, as opposed to bands, were larger in numbers, and were distinguished from each other by having distinct dialects. Unlike bands, tribes often had names that were more than merely a designation for the place where they lived (Kroeber 1925). Partly due to their mountainous inland territory, contact between Serrano and

European Americans was minimal prior to the early 1800s. In 1819, a Capilla (chapel) was established near present day Redlands and was used to help relocate many Serrano to Mission San Gabriel. However, small groups of Serrano remained in the area northeast of the San Gorgonio Pass and were able to preserve some of their native culture. Today, most Serrano live either on the Morongo or San Manuel reservations (Bean and Smith 1978).

2.2 - Regional Historic Background

2.2.1 - Spanish and Mexican Exploration and Settlement

The Spanish Period (1769-1821)

The first Europeans to pass through the region were Spanish military commander Don Pedro Fages and Father Francisco Garces. Fages first passed through the area in 1771, in an attempt to recover several soldiers that had abandoned their garrison in San Diego. Fages is credited with discovering El Cajon Pass and traveled through the Mojave Desert (Lech 2012). Father Francisco Garces first entered present day San Bernardino in 1773 accompanying the Spanish explorer Juan Batista de Anza in expedition to find a safer route via land from Mexico to Alta-California by way of the Colorado River. Father Garces joined de Anza on his first expedition from Sonora to San Gabriel, however, they split during the second trip with Father Garces deciding to stay behind and explore what would eventually become San Bernardino County (Beattie 1923). Father Garces helped further establish the trail that was used by de Anza, which in time proved to be pivotal for transportation of goods from Sonora, Mexico to Mission San Gabriel. The trail grew and several small missions and small towns were erected, one of which was Politana, named after Hipolito, the Native American who was put in charge of the town. The trail remained continuously in use until 1781, when a massacre of 50 people in Yuma, including Father Garces, halted the use of the trail for a few years (Brown and Boyd 1922; Beattie 1923).

As the influence of Mission San Gabriel grew, so did the land that it controlled. At its height, Mission San Gabriel controlled roughly 1,500,000 acres of land, extending from the ocean to the San Bernardino Mountains. In 1810, a party of missionaries, soldiers and Native Americans from Mission San Gabriel entered the region and begun referring to it as San Bernardino (Brown and Boyd 1922). The mission settlement quickly grew with the addition of adobe buildings, various mission activities and San Bernardino Rancho was officially incorporated into the mission system on May 20, 1819 (Brown and Boyd 1922; Beattie 1923; Lech 2012). The town of Politana was quickly incorporated into the Rancheria. However, a series of earthquakes in 1812 destroyed Politana, with only remnants of the old buildings remaining. In 1822, the area was eventually rebuilt with help from the San Gabriel Mission fathers, and the Guachama Rancheria began to prosper and grow.

The Mexican Period (1821-1848)

In 1821, Mexico overthrew Spanish rule and the monopoly that the missions had in the area began to decline. By 1833, the Mexican government passed The Secularization Act, and the missions reorganized as parish churches and lost their vast land holdings (Beattie and Beattie 1974). Following The Secularization Act, the Mexican government initially planned on redistributing the land to the Native Americans, however, they were instead redistributed to prominent citizens. The first land grant in the area was the Jurupa Land Grant of 1838 given to Juan Bandini (Barrows 1899). In 1842,

Antonio Maria Lugo, owner of Rancho San Antonio and Rancho Santa Ana, helped his sons, Vicente Lugo and Maria Lugo, and nephew, Diego Sepulveda, acquire the San Bernardino Land Grant, which was on the former Mission San Gabriel chapel property (Sheffield 2004). The large ranchos became important financial and social centers with the focus going toward cattle and agriculture. The prosperity in the region attracted Americans from the east to the region seeking to make their own fortune. The influx of American settlers contributed to raised tension across the south and southwest United States leading to the Mexican-American War (1846-1848), resulting in Mexico ceding its northern territories to the United States after the Treaty of Guadalupe Hidalgo.

After the Mexican-American War and the cessation of California to the United States, American pioneers, businessmen and members of The Church of Latter-Day Saints eventually settled in the area purchasing land from the Lugo families and the Bandini family. The Lugo family fortune fell into disarray and they sold their land to George and Ellen Cooley, the Hunt Family, and other Mormon pioneers caravanning from Salt Lake City, Utah to California, settling in Rancho San Bernardino before purchasing it. Juan Bandini sold a portion of his land to his son-in-law, who sold a portion of his land to Benjamin Wilson (Sheffield 2004). The land went through several owners before settling with Louis Rubidoux.

2.2.2 - San Bernardino County

San Bernardino County was named after the feast day of San Bernardino of Sienna. The County of San Bernardino was established in April 1953 after dividing from the County of Los Angeles, quickly followed by the creation of three townships including San Bernardino, which would become the county seat the following year. During the Mexican-American War, the Mormon settlers in the area offered their services to the United States, which included the company of Captain Jefferson Hunt, who would be called the father of San Bernardino County and help create the first American settlement in present day San Bernardino before being recalled back to Salt Lake City, Utah (Brown and Boyd 1922; Beattie 1923). The following decade, there was a flourishing agricultural industry, which helped increase trade and commerce in the area. San Bernardino County established the San Bernardino Fire company, the first artesian well, and housed the first commercially-run winery in Cucamonga. The growing population saw the incorporation of a road tax being imposed on every citizen 21-50 and welfare programs being introduced to aid citizens. By the late 1880s, San Bernardino had entered an economic boom ushered by the introduction of Southern Pacific Railroad in 1875, which had a line running from Los Angeles to Colton. The introduction of the railroad caused an influx of settlers with aims at acquiring land, which at the time was rapidly changing ownership and being sold at increased prices, creating a buzz for investment (Brown and Boyd 1922; Beattie 1923; San Bernardino County 2020).

World War II saw the introduction of the San Bernardino Army Air Field (formerly known as the Municipal Airport) and Kaiser Steel operation, both of which opened in 1942, bringing thousands of jobs to the region. The base was later renamed the Norton Air Force Base in honor of Captain Leland Norton (AFCEC 2020). However, by the early 1990s, the closure and/or movement of several industries led to the loss of thousands of jobs and decline in economic growth. The County of San Bernardino is the largest in the State of California, with the fourth largest population. Encompassing over 20,000 square miles of land and 24 cities, the County is currently going through a political and economic reform aimed at fiscal sustainability and further support for housing growth (Pisano 2013).

2.2.3 - City of Redlands

The City of Redlands was founded in 1881 by two Connecticut Yankees named Frank E. Brown and Edward Judson. It was named after the reddish adobe soil that's prevalent throughout the city. These men were intrigued by the 1873 book, *California for Health, Pleasure, and Residence* by Charles Nordhoff, which has a chapter that focuses on the San Bernardino Valley. Brown and Judson arrived in Lugonia, which is now north Redlands, with plans to establish a colony that comprised of emigrants from the East and Midwest. The emigrants planted groves of Washington navel oranges that prospered in the southern California climate. The City was known as the "Washington Navel Orange Growing Capital of the World" making the citrus industry the thriving force of its economy (City of Redlands 2022). From 1885 to 1886, early settlers of the Chicago Colony from the east, named the streets La Salle, Wabash, Dearborn, Lincoln, and State for their hometown. By 1888, the town was incorporated and included the town of Lugonia. In 1889, the famous twin Smiley brothers arrived making Redlands the ideal tourist destination. The Smiley brothers' Canon Crest Park, known as Smiley Heights, brought in thousands of tourists starting in 1890 through 1930. Redlands was known as "The City of Millionaires" and became a destination hotspot in the 1900s (City of Redlands 2022). The Smiley's opened up their 200 acres estate to tourists to enjoy magnificent views, eat at local restaurants, and stay at hotels. The vision of Judson and Brown (as part of Brown's civil engineering skills) came to light when the Big Bear Dam was built and guaranteed a water supply at the Big Bear reservoir for Redlands (Burgess and Gonzales 2004). Additionally, Edward Judson took personal interest in making sure that trees were provided to the early settlers of the area. At the turn of the 20th century, Redlands began to grow exponentially from hundreds to almost 5,000 residents (Burgess and Gonzales 2004). In 1901 President McKinley visited Redlands as part of his "California Welcome" (Burgess and Gonzales 2004). Also in 1903, President Theodore Roosevelt visited California and first stopped in Redlands.

Over the years things have changed with the economy and the great homes of Redlands, however it still provides a community situated in a big town with a small-town feeling. The city still comprises of beautiful historic buildings and locally owned shops and boutiques, and State Street continues to be lined with trees. There are several famous buildings, such as the Albert K. Smiley Public Library, that demonstrates a strong tradition of philanthropy within Redlands. Albert K. Smiley used borrowed money to provide the Moorish style library that was built in 1898, and park to the City. Additionally, the Redlands Bowl was built in 1930 and continues to be the oldest free outdoor concert series in California (). Parks were created and private homes became museums and were given to the public to enjoy. There are also turn of the century bungalows and landmark homes throughout the Smiley Park neighborhood. Redlands is currently home to 73,288 residents and continues to be a great tourist destination (United States Census Bureau 2021).

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SECTION 3: RESULTS

3.1 - Records Search

3.1.1 - South Central Coastal Information Center

On March 5, 2019, a records search for the project site and a 0.5-mile radius beyond the project boundaries was conducted at the SCCIC located at California State University, Fullerton. To identify historic properties or resources, the current inventories of the NRHP, CRHR, CHL list, CPHI list, and the BERD for San Bernardino County were reviewed to determine the existence of previously-documented local historical resources.

The results of the SCCIC records search indicate that there are 22 cultural resources (2 prehistoric resources and 20 historic resources) located within a 0.5-mile radius of the project boundaries, and no recorded cultural resources are located within the project site (Table 1). In addition, there are 31 area-specific survey reports on file with the SCCIC, none of which address the project site, indicating that the project site has not been previously surveyed for cultural resources (Table 2). The SCCIC records search results can be found in Appendix B.

Table 1: Cultural Resources within 0.50-mile of the Project Site

Resource No.	Resource Description	Date Recorded
P-36-005990	5; AH04 Privies/dumps/trash scatters	1987
P-36-005991	6; AH02 Foundations/structure pads	1987
P-36-005992	7; AH04 Privies/dumps/trash scatters	1987
P-36-006084	B-12; AH04 Privies/dumps/trash scatters	1987
P-36-006095	C-10; AH04 Privies/dumps/trash scatters	1987
P-36-007052	Arth Ranch; AH02 Foundations/structure pads	1991
P-36-007765	CP-1; AH06 Water conveyance system	1993
P-36-007766	CP-2; AH06 Water conveyance system	1993
P-36-007767	CP-4; AH06 Water conveyance system	1993
P-36-007768	CP-6; AH02 Foundations/structure pads, AH05 Wells/cisterns, AH06 Water conveyance system, AH11 Walls/Fences, AH15 Standing Structures, AH16 Other	1993
P-36-008135	CP-1; CP-1; AH06 Water conveyance system	1995
P-36-008137	CP-3; AH03 Landscaping/orchard, AH15 Standing Structures	1995
P-36-012468	CRM Tech 1872-1H; AH06 Water conveyance system	2006
P-36-012531	RUSD New School #3; HP02 Single-family property	2006
P-36-012532	RUSD New School #3; HP02 Single-family property	2006
P-36-012852	RCC-1-001; AH03 Landscaping/orchard	2006

Resource No.	Resource Description	Date Recorded
P-36-013514	1660 W. San Bernardino Ave; HP02 Single-family building	2004
P-36-013622	West San Bernardino Road Curb; AH16 Other	2007
P-36-013783	Redlands CC-Site 001; AH06 Water conveyance system	2007
P-36-032488	AE-3895-01H; AH06 Water conveyance system	2018
P-36-032489	AE-3895-02H; AH06 Water conveyance system	2018
P-36-060203	SBCM-5422; AP16 Other	1983
Source: South Central Coastal Information Center (SCCIC) Records Search. March 5, 2019.		

Table 2: Previous Investigations within 0.5-mile of the Project Site

Report No.	Report Title/Project Focus	Author	Date
SB-00574	Cultural Resources Survey: Route 30 Between Interstate Route 10 and Arden Avenue, San Bernardino County, California.	Stephen R. Hammond and Lois M. Webb	1977
SB-01055	Archaeological Survey Report: Route 30 Between Third Street and Route 10 at Tennessee Street.	Stephen R. Hammond	1980
SB-01105	Archaeological Survey Report: Route 30 Near the City of Redlands.	Stephen R. Hammond	1981
SB-01783	Seven Oaks Dam Project: Water Systems.	David Hornbeck and Howard Botts	1988
SB-01808	Cultural Resources Survey, Upper Santa Ana River, California.	Paul R. Hampson, Jerrel Sorensen, Susa, K. Goldberg, Mark T. Swanson, and Jeanne E. Arnold	1988
SB-01879	A Cultural Resources Investigation for the proposed Redlands Well and Alternative Pipeline, Redlands and San Bernardino County, California.	Jeanette A. McKenna	1989
SB-02062	Archival Research for Cultural Resources: Old Webster Quarry, San Bernardino County.	John M. Foster	1990
SB-02466	Cultural Resources Assessment of Tentative Tract 15304, City of Redlands, San Bernardino County, California.	Michael K. Lerch	1991
SB-02792	Cultural Resources Survey for the Cities Pavilion Project, Redlands, CA.	Roger D. Mason and Jeanette A. McKenna	1993
SB-03064	An Archaeological Assessment of the 124+/- Acre Concept Plan 5 Citrus Plaza Project, Redlands, CA.	Laurie White and Robert S. White	1995
SB-03140	Archaeological and Historical Property Survey for the Reconstruction and Widening of All-Weather Crossing at Orange Street and the Santa Ana River, Redlands, San Bernardino County, CA.	Bruce Love	1995

Report No.	Report Title/Project Focus	Author	Date
SB-03041	Alabama Street All-Weather Crossing.	Bruce Love	1995
SB-03742	An Archaeological Assessment of the Proposed Verizon Buckeye Unmanned Cellular Telecommunication Site to be Located at 27630 W. Pioneer Ave, Redlands, CA.	Fred Budinger	2001
SB-03750	Westside Landfill Expansion Project.	Bruce Love	2000
SB-04044	Identification and Evaluation of Historic Properties: Orange Street Well Field and Pipeline Project, City of Redlands, San Bernardino County, CA.	Josh Smallwood	2002
SB-04047	Phase I Cultural Resources Survey Results for Cingular Telecommunications Facility SB-230021 27630 N. Pioneer Ave, Redlands, San Bernardino County, CA.	Michael Dice	2003
SB-04104	An Architectural Review of Standing Structures Located Within the Proposed Redlands Unified School District's Proposed New School Site, Redlands, San Bernardino County, CA.	Jeanette A. McKenna	2004
SB-04592	Historical/Archaeological Resources Survey Report: ABT-Haskell Company Composting Plan Site near the City of Redlands, San Bernardino County, CA.	Bai "Tom" Tang, Michael Hogan, Casey Tibbett and John J. Eddy	2005
SB-04594	HWY 30/CA-8817A.	Loma Billat	2005
SB-04597	Cultural Resources Assessment: Tract 16359 City of Redlands, San Bernardino County, California.	Riordan Goodwin	2004
SB-04629	Cultural Resources Assessment of Tentative Tract 16390 Pioneer, City of Redlands, San Bernardino, California.	Michael K. Lerch	2003
SB-04811	Supplemental Research and Documentation of 1042 Pioneer Ave. and 1074 Pioneer Ave., Redlands, San Bernardino County, CA.	Jeanette A. McKenna	2006
SB-04831	Cultural Resource Assessment: Upper Santa Ana River Wash Land Management and Habitat Conservation Plan, San Bernardino County, CA.	David Brunzell and Curt Duke	2005
SB-05166	Historical/Archaeological Resources Survey Report Redlands Common Project Assessor's parcel No. 0167-091-02, -04, and -08, City of Redlands, San Bernardino County, CA.	Bai Tang and Hogan Michael	2006
SB-05167	Historical/Archaeological Resources Survey: Trojan Groves, Assessor's Parcel No. 0167-091-09 through -12. City of Redlands, San Bernardino County, CA.	Hogan Michael	2006
SB-05788	Phase I Cultural Resource Assessment and Paleontological Records Review, Redlands Commerce Center Project, City of Redlands, San Bernardino County, CA.	Jennifer M. Sanka	2006
SB-05857	Phase I Cultural Resource Assessment and Paleontological Records Review, Holy Name of Jesus Catholic Church Project, City of Redlands, San Bernardino County, CA.	Jennifer M. Sanka	2008

Report No.	Report Title/Project Focus	Author	Date
SB-07663	A Phase I Cultural Resource Investigation for the Newland Homes 30.94 Acre Property in the City of Redlands, San Bernardino County, CA.	Jeanette A. McKenna	2014
SB-07822	Cultural Resource Records Search and Site Visit for T-Mobile West, LLC. Candidate IE24763A 15500 Orange St. Redlands, San Bernardino County, CA.	Carrie Willis and Sarah A. Williams	2014
SB-08097	Archaeological Survey Report State Route 210 Mixed Flow Lane Addition from Highland Avenue to San Bernardino Avenue, Cities of Highland, San Bernardino, Redlands and Portions of San Bernardino County, CA.	Shelly Logn	2014
SB-08254	Orange Street and Pioneer Avenue Traffic Signal Project in Redlands, San Bernardino County.	Roger D. Mason	2016
Source: South Central Coastal Information Center (SCCIC) Records Search. March 5, 2019.			

3.1.2 - Historical Aerials

A review of 16 historical aerial photographs depicting the project site from 1938 until 2018 indicate that from the earliest aerial in 1938 and sometime before 1980, the project site and the general land areas were undeveloped and used for agricultural purposes (Historic Aerials 2020). Sometime between 1980 to 1984 SR-210 was constructed. The images from 1985 to 2018 depict the gradual residential and commercial development surrounding the project site. However, the project site remained vacant from 1938 to the present.

3.1.3 - Native American Heritage Commission

On August 12, 2021, a records search request was sent to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the project site. On September 15, 2021, a response from the NAHC was received indicating that their Sacred Lands File search came back positive for TCRs within the project area. The NAHC included a list of 10 tribal representatives available for consultation who may have additional knowledge of the project area. To ensure that all Native American knowledge and concerns over potential TCRs that may be affected by implementation of the proposed project are addressed, a letter containing project information and requesting additional information was sent to each tribal representative on September 16, 2021. A response was received on September 17, 2021, from the Quechan Tribe of the Fort Yuma Reservation providing no comments, but deferring to more local tribes and supporting their decisions regarding the proposed project. On September 28, 2021, a response was received from the San Manuel Band of Mission Indians indicating that the proposed project site is not located near any known SLFs, Serrano Villages or archaeological sites. On October 29, 2022, a reply was received from Agua Caliente Band of Cahuilla Indians indicating that the proposed project site is not located within the boundaries of the Agua Caliente Band of Cahuilla Indians, however, the tribe requested a copy of the EIC records search results. No additional responses have been received.

On May 12, 2022, a second set of letters were sent to the 10 tribal representatives, with the updated project description that includes Emm Property. On June 22, 2022 a response was received from the

Yuhaaviatam of San Manuel Nation stating that the project site is not located near any known cultural resources. No additional responses have been received to date. Copies of the NAHC correspondence can be found in Appendix C.

3.2 - Pedestrian Survey

Song Property Project: On August 21, 2021, FCS Archaeologist Kweku Williams, MA, RPA conducted a pedestrian survey for unrecorded cultural resources at the project site. The survey covered the subject property where possible, beginning in the southern portion of the project site and moving north, using north–south transects spaced at 15-meter intervals. The project site is within an overgrown, semi-desert area with local vegetation scattered throughout the proposed project. Soil visibility was moderate across the site, ranging from 30 to 50 percent. Obstruction of the soil was due to the high volume of modern debris and tall grass. Observed soils were largely composed of dark gray-brown sand with inclusion of gravel-like rocks and quartz.

Survey conditions were documented using digital photographs and field notes. During the survey, Mr. Williams examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, tool-making debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics). All areas of the project site were closely inspected for culturally-modified soils or other indicators of potential historic or prehistoric resources. No historic or prehistoric cultural resources or raw materials commonly used in the manufacture of tools (e.g., obsidian, Franciscan chert) were observed. The surface was littered with modern debris and garbage.

Emm Property Project: On April 15, 2022, FCS Archaeologist Natalie Adame conducted a pedestrian survey for the adjacent Emm Property. The survey began on the southwest corner of the project site and moved east, using north–west transects spaced at 15-meter intervals whenever possible. The project site was undeveloped and consisted of relatively flat grassy area, with soil visibility of native soils ranging from 10 percent to 5 percent in areas where bioturbation activities had taken place. Soil composition was made up of dark yellowish brown silty sand (10YR 4/4). Because of the proximity to West Pioneer Avenue and Citrus Valley High School, there was scattered modern debris along the edges of the property. To the extent possible, all areas of the project site were inspected for culturally-modified soils or other indicators of potential historic or prehistoric resources. No prehistoric or historic resources or raw materials commonly used in the manufacture of tools (e.g., obsidian, Franciscan chert, etc.) were found within the project site.

Survey conditions were documented using digital photographs and field notes. During the survey, Ms. Adame examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, tool-making debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics. No cultural resources were encountered. Pedestrian survey photos can be found in Appendix D.

3.2.1 - Buried Site Potential

In addition to the pedestrian survey, the potential for yet-identified cultural resources in the vicinity was reviewed against geologic and topographic geographic information system data for the general area and information from other nearby projects. The proposed project was evaluated against a set of criteria identified by a geoarchaeological overview of the Central Valley that was prepared for the California Department of Transportation (Caltrans) Districts 6 and 9 (Meyer et al. 2010). This study mapped the "archaeological sensitivity," or potential to support the presence of buried prehistoric archaeological deposits, throughout the Central Valley based on geology and environmental parameters including distance to water and landform slope. The methodology used in the study is applicable to other parts of California and concluded that sites consisting of flat, Holocene-era deposits in close proximity to water resources had a moderate to high probability of containing subsurface archaeological deposits when compared to earlier Pleistocene deposits situated on slopes or further away from drainages, lakes, and rivers.

The project site is situated on undeveloped land. According to the geological map of Matti et al. (2003), the project site is entirely situated upon Holocene axial-valley deposits. Applying the criteria set forth above, all Holocene-era deposits have the potential to contain archaeological deposits, which increases with the ease of the slope and proximity to a water resource (Santa Ana River). This, coupled with the presence of known prehistoric resources near the project site, as well as positive SLF results indicates moderate to high potential for unanticipated buried cultural resources to be impacted by project construction.

SECTION 4: SUMMARY AND RECOMMENDATIONS

4.1 - Summary

In accordance with CEQA regulations, FCS assessed the effects of development on the proposed project site. Results from the SCCIC indicate that 22 cultural resources (two prehistoric resources and 20 historic resources) are located within the 0.5-mile search radius; none are located within the project site. There are 31 area-specific survey reports on file with the SCCIC, none of which address the project site, indicating that the project site has not been previously surveyed for cultural resources. The results of the pedestrian field survey failed to identify additional unrecorded cultural resources within the project site.

The NAHC Sacred Lands File search regarding potential TCRs that may be adversely affected by the proposed project contained positive results. Subsequent correspondence with Native American representatives resulted in three responses from the Quechan Tribe of the Fort Yuma Reservation, San Manuel Band of Mission Indians, and Agua Caliente Band of Cahuilla Indians. No additional responses have been received to date.

4.2 - Recommendations

4.2.1 - Cultural Resources Recommendations

Based on the results of the positive Sacred Lands File search from the NAHC, the SCCIC records searches, archival research, and pedestrian survey, FCS considers the potential for the proposed project to have an adverse effect on historic and/or prehistoric cultural resources to be moderate. While there are no recorded resources within the project site, 20 historic resources and two prehistoric resources have been recorded within the 0.5-mile search radius. In addition, the site has not been previously surveyed for archaeological resources and its topography increases the possibility that subsurface archaeological resources may be encountered during project construction.

For this reason, FCS recommends that a qualified Archaeologist who meets the Secretary of Interior's Professional Qualification Standards for Archaeology perform an inspection of the site following grubbing, ground clearing, and prior to any grading or project-related ground disturbance. In the event exposed soils indicate cultural materials may be present, this may be followed by regular or periodic "spot check" archaeological monitoring as determined by the Archaeologist, but full-time archaeological monitoring is not recommended at this time. Additional procedures for the inadvertent discovery of human remains and cultural resources are provided below.

4.3 - Inadvertent Discovery Procedures

4.3.1 - Accidental Discovery of Human Remains

There is always the possibility that ground-disturbing activities during construction may uncover previously unknown buried human remains. Should this occur, Section 7050.5 of the California Health and Safety Code applies, and the following procedures shall be followed.

In the event of an accidental discovery or recognition of any human remains, Public Resources Code Section 5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Section 5097.98, or
2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:
    - The NAHC is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 48 hours after being notified by the NAHC;
    - The descendant identified fails to make a recommendation; or
    - The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

    Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

    - When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project site, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the Native American Heritage Commission.

4.3.2 - Accidental Discovery of Cultural Resources

It is always possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources. In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the Archaeological Monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.

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Appendix A:
Professional Qualifications

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FIRSTCARBON SOLUTIONS™

STEFANIE E. GRIFFIN, MA—STAFF ARCHAEOLOGIST

OVERVIEW

- More than 13 years of experience

Education

- Master of Arts, Interdisciplinary Studies in Prehistoric Archaeology, California State University, Stanislaus, CA
- Bachelor of Arts, Anthropology, Concentration in Prehistoric Archaeology, California State University, Stanislaus, CA

Programs

- ESRI Arc View and Arc Map

Professional Affiliations

- President, National Board of Directors, Upsilon Kappa Delta Multicultural Sorority, Inc., 2009–2015

Stefanie E. Griffin, MA, has more than 13 years of experience in anthropology and archaeology, which she gained from laboratory and field experience. She has worked with private companies and public agencies throughout California and this strengthened her knowledge of CEQA and NEPA policies. She has excellent writing, research, and organizational skills which have aided her when assigning primary and trinomial numbers for archaeological projects for counties in Central California and the development and application of cataloging systems.

RELATED EXPERIENCE AND CLIENT SUMMARY

Ritz-Carlton Napa Valley Resort Hotel Napa Data Recovery of CA-NAP-928, Napa, CA

FCS is currently assisting the US Army Corps of Engineers (USACE) with the data recovery of CA-NAP-928. FCS's Dana DePietro, PhD, RPA, as Principal Investigator, is implementing the Memorandum of Agreement (MOA) and Historic Properties Treatment Plan (HPTP) for the Ritz-Carlton Napa Valley Resort Project, which was determined to have an adverse effect on the prehistoric site CA-NAP-928. The project proponent is a private developer whose application for the hotel site (which included a wetland) prompted Section 106 review by the USACE, San Francisco District. The project would result in the complete displacement of CA-NAP-928, which was determined eligible for listing in the National Register of Historic Places under criterion D for its data potential. To address this adverse effect, the USACE and the California State Historic Preservation Office executed a MOA calling for the implementation of the HPTP. Treatment includes data recovery of the large, complex, multi-period site, involving the analysis of macrobotanical remains, lithics, fire-affected rock, obsidian hydration analysis, C-14 dating, and the treatment and recovery of faunal and human osteological remains. FCS is also working closely with Scott Gabaldon, the Chairperson of the Mishewal Wappo Tribe of Alexander Valley, who has been designated Most Likely Descendant by the Native American Heritage Commission. Mr. Gabaldon has assigned one Native American monitor to be present at the site during all ground-disturbing activities. Ms. Griffin serves as Laboratory Director and Coordinator, developing and applying a cataloging system for all

features, artifacts, and ecofacts associated with field and laboratory processing. She also facilitates data sets for the initial write-ups for phases two to five of excavation and budgeting.

Basin "EN" Construction Project Cultural Resources for the Fresno Metropolitan Flood Control District, City of Fresno, CA

The Fresno Metropolitan Flood Control District is proposing to acquire and construct a stormwater basin adjacent to Garfield and Gettysburg Avenues in Fresno, California. The project site is 16.80 acres and involves phased excavation to 25 feet below ground surface for the purposes of capturing and recharging stormwater. FCS is providing biological and cultural resource services to evaluate the potential biological effects of the project, and whether any cultural resources are present at the site for the purposes of complying with CEQA. Ms. Griffin will assist the District by providing assessments for cultural resources.

7190 Trenton/Healdsburg Road Project Biological and Cultural Resources Assessments for Green Qi, Sonoma County, CA

Ms. Griffin supported cultural resource assessment efforts for the 7190 Trenton/Healdsburg Road Project. The proposed project includes the renovation and expansion of an existing barn and cultivation of approximately 1 acre. The exact locations of these facilities have not yet been determined. As such, a comprehensive study was conducted.

Elk Grove Mixed-Use Development Air Quality and Cultural Studies for The Planning Associates Group, City of Sacramento, CA

Ms. Griffin provided cultural resource assessment services for a 2.57-acre site consisting of undeveloped land located in Sacramento, California. The site is bounded by a commercial development to the north, multifamily residential development to the south, and West Stockton Boulevard to the east. The project applicant is proposing to develop a four-story, 92-unit building with 5,200 square feet of commercial space, an 800-square-foot leasing office, and a 3,560-square-foot clubhouse.

Field Technician III, Stockton East Water District Project, InContext, City of Stockton, CA

Ms. Griffin performed Phase I initial shovel testing for municipal infrastructure development.

Field Technician, Borello Excavation Project, LSA Associates, Inc., City of Morgan Hill, CA

Ms. Griffin assisted with the rapid recovery excavation of human remains in compliance with Section 106.

Field Technician/Monitor, Southern California Edison 16-1002 Hazardous Tree Removal Program and Drought-Related Hazardous Tree Program, Environmental Intelligence, LLC, Sequoia National Forest and Sierra National Forest, CA

Ms. Griffin was first credential selection for the archaeological division of the company to lead the tree removal program in Sequoia and Sierra National Forests.

STEFANIE E. GRIFFIN, MA—STAFF ARCHAEOLOGIST

Field Technician, #2159 Sunpower SCL-68, Far Western Anthropological Research Group, Inc., City of San Jose, CA

Ms. Griffin assisted with the excavation project for a previously recorded prehistoric site.

Field Technician, Crowder Canyon Data Recovery, Cogstone Resource Management, Inc. and Applied EarthWorks, Inc., Phelan, CA

Ms. Griffin performed excavation and data recovery of previously recorded prehistoric sites that were to be demolished for the California Department of Transportation expansion highway project.

Field Technician A, BUT 1123 Feather River West Levee Project, Far Western Anthropological Research Group, Inc., Biggs, CA

Ms. Griffin performed excavation, data recovery, laboratory analysis, and artifact processing for the USACE and Enterprise Tribal Group.

Field Technician, Forebay Dam Project 21250.01, ASM Affiliates, Inc., Pollock Pines, CA

Ms. Griffin tested and evaluated a 20th century work camp site in El Dorado County, located within the area of potential effects of the El Dorado Forebay Dam Modification Project.

Field Technician A, Feather River West Levee Project, Far Western Anthropological Research Group, Inc., Gridley, CA

Ms. Griffin reviewed residual materials, sent from the field to the laboratory, to identify all cultural artifacts; inventoried field unit artifacts in preparation for entry into the access database; performed records management; and organized and prepared artifacts to be transported and analyzed.

Field Technician B, #1944 Moke 3700-Acre Survey, Far Western Anthropological Research Group, Inc., Pioneer, CA

For Bear River Lake Resorts, Inc.'s project, Ms. Griffin conducted an archaeological survey for the US Forest Service.

Field Technician, Middle Creek Stewardship Project 23190, ASM Affiliates, Inc., Susanville, CA

Ms. Griffin assisted with Class II and Class III pedestrian surveys of 6,491 acres for the Bureau of Land Management project.

Field Technician, #1868 Mendocino Headlands Project, Far Western Anthropological Research Group, Inc., Mendocino, CA

Ms. Griffin performed exploratory excavation of shovel test units of prehistoric and historic sites.

Field Technician, #1873 Pacific Gas & Electric L107 Fremont Test Project, Far Western Anthropological Research Group, Inc., Fremont, CA

Ms. Griffin assisted in the excavation of a prehistoric site.

STEFANIE E. GRIFFIN, MA—STAFF ARCHAEOLOGIST

Field Technician A, Feather River West Levee Project, Far Western Anthropological Research Group, Inc., Live Oak, CA

Ms. Griffin participated in monitoring backhoe excavation for construction purposes, unit excavation of prehistoric and historic artifacts, review of residual materials sent from the field to the laboratory to identify all cultural artifacts, preparation of inventory of field unit artifacts for entry into the access database, records management, and organization and preparation of artifacts to be transported for analysis.

Field Technician, Sand Pass Project, Enviroscientists, Inc., Winnemucca, NV

Ms. Griffin performed a 650-acre survey of previously recorded historic sites outside Winnemucca, Nevada, particularly on a private land in Silver State Valley.

Field Technician, NAS Base Fallon Project, ASM Affiliates, Inc., Fallon, NV

Ms. Griffin performed testing and data recovery on training ranges in 37 sites, which ranged from the Paleoindian to Late Archaic eras and included historic materials.

Field Technician, Summit Exploration Survey, ASM Affiliates, Inc., Wells, NV

Ms. Griffin participated in a notice-level clearance survey of five drill pads and associated access roads of a Class III inventory of 750 acres.

Jordan Archaeological Project of La Sierra University, Riverside, Jordan

Ms. Griffin participated in the excavation field school's program, which involves one of three archaeological sites currently being excavated by the Madaba Plains Project in Jordan.

Proyecto Arqueológico Regional El Paraiso, Honduras

Ms. Griffin participated in this Honduras archaeological project, which entailed excavations at several Late Classic Period (425–825 AD) sites. She also conducted raw mineral surveys of El Paraiso Valley.

Anthropological Studies Center, Sonoma State University, City of Rohnert Park, CA

As Laboratory Assistant II, Ms. Griffin processed artifacts through cleaning, sorting and inventory. She also performed historic artifact reconstruction and collection management.

Central California Information Center, California Historical Resources Information System, California State University, Stanislaus, City of Turlock, CA

As Student Intern and Student Assistant, Ms. Griffin participated in the operations of the Central California Information Center by overseeing seven counties in Central Valley. This role entailed data processing of reports, records, and hard-copy and electronic database entries. She also directed Geographic Information System data input, such as mapping and scanning of documents, and performed quality control. Ms. Griffin conducted archaeological investigations, specifically field surveys, excavations, and laboratory analysis, for California Department of Forestry and Fire Protection (CAL FIRE) projects.

STEFANIE E. GRIFFIN, MA—STAFF ARCHAEOLOGIST

California Department of Transportation District 10, City of Stockton, CA

As Student Intern for the Environmental Planner-Archaeologist, Ms. Griffin assisted in the completion of projects and, to ensure efficiency of day-to-day tasks, filed and maintained the inventory of tracking systems of project materials. She assisted the Archaeologist with writing letters to Native American tribe consultants/monitors and participated in archaeological field surveys.

Previous Administrative Experience

Central California Information Center, City of Turlock, CA

Ms. Griffin served as Assistant Administrator where she managed the processing of archaeological reports for cultural resource management firms and corresponded with the California State Historic Preservation Office to comply with Section 106 of the Historical Preservation Act (HPA). In her previous role as Assistant Lab Administrator, she processed archaeological material for CAL FIRE to comply with Section 106 of the HPA.

California Department of Transportation District 10

Ms. Griffin was an Office Assistant to the Environmental Planner for Archaeology where she wrote correspondences to the Tribal Historical Preservation Office.

Publications

E Griffin, Stefanie (2013) “Building the Maya World: Raw Materials, Trade Routes, and Procurement Strategies in the El Paraiso Valley, Copan, Honduras”, California State University Stanislaus Press.

FIRSTCARBON SOLUTIONS™

KWEKU WILLIAMS, MA, RPA—ARCHAEOLOGICAL MONITOR

OVERVIEW

- More than 12 years of experience

Education

- Master of Arts, Archaeology and Physical Anthropology, Northern Illinois University, DeKalb, IL, 2014
- Bachelor of Arts, Anthropology and World History, Cum Laude, State University of New York, Albany, NY, 2010

License

- Registered Professional Archaeologist, License No. 17953, 2019

Affiliations

- Phi Beta Delta Honor Society for International Scholars, 2012 to present
- Lambda Alpha National Anthropology Honor Society, 2009 to present

Awards and Fellowships

- Superior Exhibit Award for *Trowels and Fair Trade: Revealing the Underground Railroad and Contemporary Slavery* exhibit, Anthropology Museum, Northern Illinois University, Illinois Association of Museums, IL, 2013
- Rhoten A. Smith Fellowship, Northern Illinois University, DeKalb, IL, 2012–2014
- Anthropology Foundation Fund Award, Northern Illinois University, DeKalb, IL, 2012

Kweku Williams, MA, RPA, is a Registered Professional Archaeologist (License No. 17953) with more than 12 years of experience specializing in archaeology and physical anthropology. He possesses knowledge on excavation practices, artifact analysis, and osteology. Mr. Williams has worked on the field in sites around the US and parts of Europe, as well as in the academe where he served as Adjunct Professor in Anthropology at Berkeley City College, Berkeley, California, and Las Positas College, Livermore, California.

RELATED EXPERIENCE AND CLIENT SUMMARY

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Tulocay Cemetery Project for Holman Teague Roche Anglin, LLP Archaeological Monitoring, City of Napa, CA

FCS provided archaeological monitoring for excavations during boundary determination testing at Tulocay Cemetery. Mr. Williams served as Archaeological Monitor.

KWEKU WILLIAMS, MA, RPA—ARCHAEOLOGICAL MONITOR

Ritz-Carlton Napa Valley Resort Hotel Project Data Recovery of CA-NAP-928, City of Napa, CA

FCS is currently assisting the US Army Corps of Engineers (USACE) with the data recovery of CA-NAP-928. FCS is implementing the Memorandum of Agreement (MOA) and Historic Properties Treatment Plan (HPTP) for the Ritz-Carlton Napa Valley Resort Project, which was determined to have an adverse effect on the prehistoric site CA-NAP-928. The project proponent is a private developer whose application for the hotel site (which included a wetland) prompted Section 106 review by the USACE, San Francisco District. The project would result in the complete displacement of CA-NAP-928, which was determined eligible for listing in the National Register of Historic Places under criterion D for its data potential. To address this adverse effect, the USACE and the California State Historic Preservation Officer executed an MOA calling for the implementation of the HPTP. Treatment includes data recovery of the large, complex, multi-period site, involving the analysis of macrobotanical remains, lithics, fire-affected rock, obsidian hydration analysis, C-14 dating, and the treatment and recovery of faunal and human osteological remains. FCS is also working closely with Scott Gabaldon, the Chairperson of the Mishewal Wappo Tribe of Alexander Valley, who has assigned one Native American monitor to be present at the site during all ground-disturbing activities. Mr. Williams is providing archaeological testing and monitoring services for the project.

Previous Field Experience

Applied EarthWorks, Inc. and Cogstone Resource Management, Inc., Crowder Canyon, San Bernardino County, CA

Mr. Williams worked with Applied EarthWorks, Inc. and Cogstone Resource Management as a Field Technician on the Project State Route Realignment—Crowder Canyon Data Recovery Project for California Department of Transportation (Caltrans).

Schoharie Valley Field School, State University of New York, Albany, NY

Mr. Williams received training in archaeological techniques in surveying, excavation, and artifact analysis and preservation from Dr. Christina Rieth.

Cultural Resources Survey Program, New York State Museum, New York, NY

Under the supervision of Dr. Christina Rieth, Mr. Williams served as Archaeological Field Technician and conducted archaeological surveys and excavation for the New York State Museum.

Far Western Anthropological Research Group, Multiple Locations

As Field Technician, Mr. Williams' work included excavation and osteological recovery in compliance with the Native American Graves Protection and Repatriation Act with the Enterprise people; excavation testing for infrastructure development in Camp Pendleton for the Department of Defense; excavation and teaching demonstration in archaeological practices at Camp Tawonga, California; excavation and boundary site testing for a known archaeological site in Aliso Creek for the USACE; test excavation at Mariposa Leach Field for the US Forest Service (USFS); artifact processing for the Feather River West Levy project of the USACE and the Enterprise Tribal Group; the Moke 3700-Acre Survey in Pioneer, California for the USFS; the Onyx Ranch Survey in Mojave, California, for the Bureau of Land Management; Goleta Data Recovery for the Caltrans; archaeological field surveys, monitoring, and

excavation/burial recovery for the Feather River West Levee Project in Live Oak, California; and archaeological field surveys and excavation in Mariposa Grove at the Yosemite National Park.

Ka'Kabish Field School, Orange Walk, Belize

Through Trent University, Canada, Mr. Williams worked with Dr. Helen Haines as Crew Chief and Field Manager at the Ka'Kabish Field School in the province of Orange Walk, Belize.

Archaeological Field School in Salemi, Sicily, Italy

Through Northern Illinois University's Archaeological Field School, Mr. Williams collected data for his Master's thesis and received further training in archaeological techniques in surveying, excavation, and artifact analysis and preservation from Dr. Michael Kolb.

Hydro-archaeology Project, Universidad de Granada, Andalusia, Spain

Mr. Williams assisted Dr. José Maria Cervantes in mapping waterways in Andalusia, Spain.

Academic Positions

Berkeley City College, Berkeley, CA

Mr. Williams served as Adjunct Professor in Anthropology, teaching Introduction to Physical Anthropology, Introduction to Cultural Anthropology, and Introduction to Archaeology.

Las Positas College, Livermore, CA

Mr. Williams served as Adjunct Professor in Anthropology teaching Introduction to Physical Anthropology, Introduction to Cultural Anthropology, Introduction to Forensic Anthropology, and Introduction to Archaeology.

Archaeology Camp, College of Liberal Arts and Science, Northern Illinois University, DeKalb, IL

Mr. Williams served as Co-coordinator and Counselor for the Archaeology Camp of the College of Liberal Arts and Science in Northern Illinois University, DeKalb.

Anthropology Museum, Northern Illinois University, DeKalb, IL

Mr. Williams served as Graduate Assistant in Northern Illinois University, DeKalb's Anthropology Museum, where he coordinated the exhibit development team, provided tours and lectures on the content of exhibits, and fostered appreciation for education and cultural diversity. He also assisted in the development and installation of the *Fast Food Nation: 10,000 B.C.* and *Trowels and Fair Trade: Revealing the Underground Railroad and Contemporary Slavery* exhibits.

Department of Anthropology, Northern Illinois University, DeKalb, IL

As Teaching Assistant, Mr. Williams taught Introduction to Physical Anthropology, where he discussed The Life History and Social Behavior of the Mountain Gorilla, and Exploratory Archaeology, where he discussed The Rise of the City States of Mesopotamia, The Bronze Age in the Western Mediterranean, and Classic Period of the Maya Lowlands.

KWEKU WILLIAMS, MA, RPA—ARCHAEOLOGICAL MONITOR

Ka'Kabish Field School, Orange Walk, Belize

Through Trent University, Canada, Mr. Williams served as Field School Instructor where he provided students with the essentials for archaeological studies, such as laying out units, mapping (plan view and profile), calculating elevations and stadia metric distances, the essentials of logistical management of unit forms, proper notetaking in field journals, and the collection and labeling of artifact bags.

Academic Events and Speaking Engagements

- Learning Community Revolutionary Scholars First Year Experience, Berkeley City College, Berkeley, CA, Fall 2017
- Panelist on the Islamophobia Open Talk, Muslim Student Association and Peace and Social Justice Student Association, Las Positas College, Livermore, CA, Fall 2016
- Panelist on the African-American Science, Technology, Engineering, and Math Panel, Black Student Union, Las Positas College, Livermore, CA, Spring 2016
- Midwestern Mesoamerican Archaeological Conference, Northern Illinois University, DeKalb, IL, Spring 2014

Community Service

Mr. Williams participated in Northern Illinois University Cares Day where he participated in the beautification of DeKalb historical landmarks and public parks.

Publications

Williams, K.A. (2014). *Space and Specialization: Understanding the Medieval Economic Behavior through Ceramics in Salemi, Sicily* (master's thesis). Northern Illinois University, Illinois, United States.

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NATALIE ADAME—ARCHAEOLOGICAL MONITOR

OVERVIEW

- More than 2 years of experience

Education

- Bachelor of Arts, Biological Anthropology, Minor in Geology, California State University, East Bay, Hayward, CA, 2016
- Associate of Arts, Geology, Mt. San Antonio College, Walnut, CA, 2011

Skill

- Esri Aeronautical Reconnaissance Coverage Geographic Information System (ArcGIS)

Natalie Adame has more than 2 years of experience in archaeology, which she gained from extensive fieldwork and museum experience. Ms. Adame has established excellent research skills exemplified by her ability to prepare comprehensive reports and presentations. Her experience includes performing land use analyses and preparing Initial Studies and EIRs for various development projects. As an Archaeological Monitor/Field Technician, Ms. Adame implements Worker Environmental Awareness Programs (WEAP) 'tailgate' training sessions and coordinates with construction staff and Native American Monitors, construction monitoring, and the salvage and recordation of archaeological resources.

RELATED EXPERIENCE AND CLIENT SUMMARY

Biological, Archaeological, and Paleontological Monitoring and Reporting Services, Los Angeles Regional Interoperable Communications System, Los Angeles County, CA

FCS is providing monitoring and reporting services during the construction of more than 150 land mobile radio (LMR) facilities at sites located primarily in Los Angeles County. The LMR sites contain the infrastructure and equipment necessary to provide voice communications coverage throughout the County for emergency responders. These locations are widely dispersed across the County in both urban (intensively developed) and rural (less developed) settings and include coastal locations, sites in downtown Los Angeles, remote mountain peaks across the County, and the northern high desert. FCS is conducting the biological, archaeological, and paleontological pre-construction and construction monitoring and reporting services in accordance with the Construction Management Requirements outlined in the NEPA Environmental Assessment that FCS prepared for the project. Ms. Adame is a Field Archaeological Monitor on the project.

Barton Road Logistics Facility Project EIR, Technical Studies, and Peer Review, City of Colton, CA

FCS is providing CEQA documentation and peer review services for the Barton Road Logistics Facility Project in the City of Colton, in San Bernardino County. The proposed project includes the demolition of four industrial buildings, an office building, and parking lot. The proposed project would construct two state-of-the-art speculative concrete tilt-up industrial warehouse logistics facilities with a total square footage of 960,040 square feet. The project will develop Best-in-Class industrial facilities in the City of Colton that are designed to meet contemporary industry standards, can easily accommodate a wide

variety of warehouse and distribution uses, and are economically competitive with similar warehouse facilities in the local Inland Empire marketplace. FCS is preparing an EIR with supporting stand-alone Air Quality and Greenhouse Gas (GHG) Emissions Analysis with Health Risk Assessment, Biological Resources Assessment, Phase I Cultural Resources Assessment (CRA), Noise Impact Analysis, and Traffic Impact Analysis. Our team will also peer review the Geotechnical Report. The Phase I Cultural Resources Assessment will provide an evaluation and recommendations regarding potential construction related impacts to cultural resources. Ms. Adame is a Field Archaeological Monitor on the project.

Library/Learning Resource Center Building Project Biological and Cultural Construction Monitoring Services for the Solano Community College District, Fairfield, CA

FCS prepared the IS/MND and provided the subsequent biological and cultural construction monitoring services for the construction of a new 59,252-gross-square-foot, 2-story Library/Learning Resources Center building on the Fairfield Campus of the Solano Community College Campus. The building would be constructed on an open quad in the center of campus, replacing an open lawn. FCS conducted AB 52 consultation in coordination with the District and tribal representatives from the Yocha Dehe Wintun Nation to address concerns about tribal cultural resources in the immediate vicinity of the site. In additional to preparing a full PI-CRA, FCS drafted mitigation measures in coordination with the Tribe and District to effectively allow the project to proceed while protecting the Tribal Cultural resources in question. The District approved the project in May 2016, with the approval of the tribe and all parties involved. FCS will provide coordination with Tribal representatives from the Yocha Dehe Wintun Nation, as well as a "tailgate" sensitivity training session for construction personnel. Ms. Adame is a Field Archaeological Monitor on the project.

Prior Work Experience

Archaeologist, Material Culture Consulting, City of Pomona, CA

As an archaeologist, Ms. Adame performed excavations, recorded prehistoric and historic artifacts, and catalogued data using ArcGIS. She conducted Phase I, II, and III Environmental Site Assessments (ESAs) and drafted EIRs. Ms. Adame also prepared Department of Parks and Recreation (DPR) forms, searched records, and monitored projects in the State and county.

Field Archaeologist, ICF International, City of Los Angeles, CA

As a field archaeologist, Ms. Adame conducted environment surveys, performed excavations, and catalogued prehistoric and historic artifacts using ArcGIS. She prepared Federal Environment Management environmental reviews, DPR forms, and ESAs. Ms. Adame also worked with different transportation agencies, including the Orange County Transportation Authority, OC 405 Partners, LA Metro, and the California Department of Transportation.

Field Archaeologist, Dudek , City of Pasadena, CA

As a field archaeologist, Ms. Adame performed architectural and cultural historical assessments and conducted surveys for various projects to evaluate conflicts during construction period. Her responsibilities also include evaluating historic resource significance, cataloguing exhibit pieces, and gathering daily records of environmental compliances.

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NATALIE ADAME—ARCHAEOLOGICAL MONITOR

Grants and Proposal Writer – Applied Anthropology Coursework, California State University, East Bay, City of Hayward, CA

As a Grants and Proposal Writer, Ms. Adame analyzed organizational cultures, conducted needs assessment, and prepared social impact reports. Part of her task was to identify the appropriate research disciplines necessary for specific jobs.

Student Museum Docent, California State University, East Bay, City of Hayward, CA

Ms. Adame served as a docent at the university's C.E. Smith Museum of Anthropology. Her responsibilities include preparing materials for exhibits, researching and writing about artifacts, and mounting display materials in the museum.

Appendix B:
South Central Coastal Information Center Records Search Results

Appendix B contains sensitive information pertaining to cultural resources and has been withheld from public distribution pursuant to Public Resources Code, Sections 5097.9 and 5097.993.

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Appendix C:
Native American Heritage Commission and Tribal Correspondence

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Local Government Tribal Consultation List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

■ **CEQA Tribal Consultation List (AB 52)** – ***Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2***

☐ **General Plan (SB 18)** - ***Per Government Code § 65352.3.***

Local Action Type:

☐ **General Plan** ☐ **General Plan Element** ☐ **General Plan Amendment**

☐ **Specific Plan** ☐ **Specific Plan Amendment** ☐ **Pre-planning Outreach Activity**

Required Information

Project Title: Redlands Song Property Project

Local Government/Lead Agency: City of Redlands

Contact Person: Stefanie Griffin

Street Address: 967 Kendall Drive # A-537

City: San Bernardino **Zip:** 92407

Phone: 209-608-0028 **Fax:**

Email: sgriffin@fcs-intl.com; mdolan@fcs-intl.com

Specific Area Subject to Proposed Action

County: San Bernardino **City/Community:** City of Redlands

Project Description:

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. The project site is located in the East Valley Corridor Specific Plan area and is zoned Science Research Park (EV/SRP).

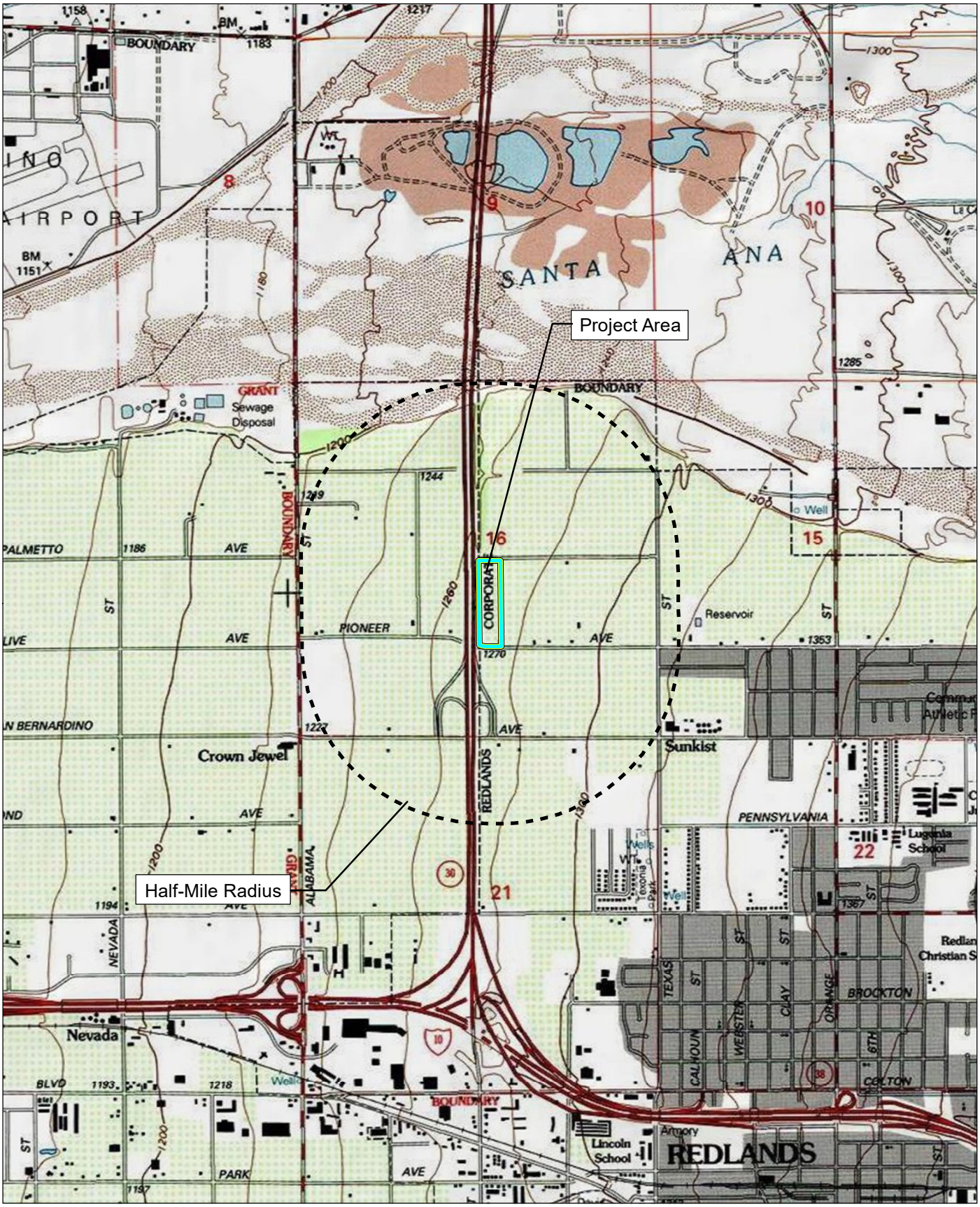
Additional Request

■ **Sacred Lands File Search** - ***Required Information:***

USGS Quadrangle Name(s): Redlands

Land Grant: San Bernardino.

Township: 01S **Range:** 03W **Section(s):** 16, 21



Source: USGS Redlands 7.5' Quadrangle / T01S,R03W,sec16 & 21; Land Grant: San Bernardino.

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Feet

Record Search Map

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CITY OF REDLANDS
REDLANDS SONG PROPERTY PROJECT

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

September 15, 2021

Stefanie Griffin
FirstCarbon Solutions

Via Email to: sgriffin@fcs-intl.com & mdolan@fcs-intl.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Redlands Song Property Project, San Bernardino County

Dear Ms. Griffin:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

    - Any report that may contain site forms, site significance, and suggested mitigation measures.

      All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was positive. Please contact the San Manuel Band of Mission Indians on the attached list for more information.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Tribal Consultation List
San Bernardino County
9/15/2021

Agua Caliente Band of Cahuilla Indians
Jeff Grubbe, Chairperson
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919

Agua Caliente Band of Cahuilla Indians
Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@aguacaliente.net

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Road — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 755 - 5110
Fax: (951) 755-5177
abrierty@morongo-nsn.gov

Morongo Band of Mission Indians
Ann Brierty, THPO
12700 Pumarra Road — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 755 - 5259
Fax: (951) 572-6004
abrierty@morongo-nsn.gov

Quechan Tribe of the Fort Yuma Reservation
Jill McCormick, Historic Preservation Officer
P.O. Box 1899 — Quechan
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

San Manuel Band of Mission Indians
Jessica Mauck, Director of Cultural Resources
26569 Community Center Drive — Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
Jessica.Mauck@sanmanuel-nsn.gov

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair
P.O. Box 391820 — Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
lsaul@santarosa-nsn.gov

Serrano Nation of Mission Indians
Wayne Walker, Co-Chairperson
P. O. Box 343 — Serrano
Patton, CA, 92369
Phone: (253) 370 - 0167
serranonation1@gmail.com

Serrano Nation of Mission Indians
Mark Cochrane, Co-Chairperson
P. O. Box 343 — Serrano
Patton, CA, 92369
Phone: (909) 528 - 9032
serranonation1@gmail.com

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson
P. O. Box 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 654 - 5544
Fax: (951) 654-4198
ivivanco@soboba-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Redlands Song Property Project, San Bernardino County.

September 16, 2021

Morongo Band of Mission Indians
Ann Brierty, THPO
12700 Pumarra Road
Banning, CA, 92220

Subject: Proposed Redlands Song Property Project

Dear Ann Brierty:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Redlands Song Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. Attached is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are are 31 reports recorded within a half mile radius of the project area. Additionally, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Designated lead agencies under the California Environmental Quality Act (CEQA) and National Environmental Policy Act

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(NEPA) are handling project notification and consultation requirements. Please feel free to contact me at 209.608.0028 or via email at sgriffin@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

September 16, 2021

Serrano Nation of Mission Indians
Mark Cochrane, Co-Chairperson
P. O. Box 343
Patton, CA, 92369

Subject: Proposed Redlands Song Property Project

Dear Co-Chairperson Cochrane:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Redlands Song Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. Attached is a Records Search map with a 0.5-mile buffer around the site for your reference.

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

September 16, 2021

Agua Caliente Band of Cahuilla Indians
Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive
Palm Springs, CA, 92264

Subject: Proposed Redlands Song Property Project

Dear Director Garcia-Plotkin:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Redlands Song Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. Attached is a Records Search map with a 0.5-mile buffer around the site for your reference.

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

September 16, 2021

Agua Caliente Band of Cahuilla Indians
Jeff Grubbe, Chairperson
5401 Dinah Shore Drive
Palm Springs, CA, 92264

Subject: Proposed Redlands Song Property Project

Dear Chairperson Grubbe:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Redlands Song Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. Attached is a Records Search map with a 0.5-mile buffer around the site for your reference.

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

September 16, 2021

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Road
Banning, CA, 92220

Subject: Proposed Redlands Song Property Project

Dear Chairperson Martin:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Redlands Song Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. Attached is a Records Search map with a 0.5-mile buffer around the site for your reference.

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

September 16, 2021

San Manuel Band of Mission Indians
Jessica Mauck, Director of Cultural Resources
26569 Community Center Drive
Highland, CA, 92346

Subject: Proposed Redlands Song Property Project

Dear Jessica Mauck:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Redlands Song Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. Attached is a Records Search map with a 0.5-mile buffer around the site for your reference.

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

September 16, 2021

Quechan Tribe of the Fort Yuma Reservation
Jill McCormick, Historic Preservation Officer
P.O. Box 1899
Yuma, AZ, 85366

Subject: **Proposed Redlands Song Property Project**

Dear Jill McCormick:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Redlands Song Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. Attached is a Records Search map with a 0.5-mile buffer around the site for your reference.

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

September 16, 2021

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair
P.O. Box 391820
Anza, CA, 92539

Subject: Proposed Redlands Song Property Project

Dear Tribal Chair Redner:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Redlands Song Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. Attached is a Records Search map with a 0.5-mile buffer around the site for your reference.

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

September 16, 2021

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson
P. O. Box 487
San Jacinto, CA, 92581

Subject: **Proposed Redlands Song Property Project**

Dear Chairperson Vivanco:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Redlands Song Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. Attached is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are are 31 reports recorded within a half mile radius of the project area. Additionally, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Designated lead agencies under the California Environmental Quality Act (CEQA) and National Environmental Policy Act

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Walnut Creek, CA 94597

Central Valley
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Fresno, CA 93720

Inland Empire
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#A-537
San Bernardino, CA 92407

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PHILIPPINES

CHINA

MALAYSIA

SINGAPORE

(NEPA) are handling project notification and consultation requirements. Please feel free to contact me at 209.608.0028 or via email at sgriffin@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

September 16, 2021

Serrano Nation of Mission Indians
Wayne Walker, Co-Chairperson
P. O. Box 343
Patton, CA, 92369

Subject: Proposed Redlands Song Property Project

Dear Co-Chairperson Walker:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Redlands Song Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The proposed development would construct up to 75 residential dwelling units on 9.61 acres. The project site is located at 1160 W. Pioneer Avenue in the City of Redlands, on the north side of Pioneer Avenue, the south side of W. Domestic Avenue, west of Interstate 210 (I-210) Freeway, and immediately east of Citrus Valley High School. Attached is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are are 31 reports recorded within a half mile radius of the project area. Additionally, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Designated lead agencies under the California Environmental Quality Act (CEQA) and National Environmental Policy Act

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(NEPA) are handling project notification and consultation requirements. Please feel free to contact me at 209.608.0028 or via email at sgriffin@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

From:	Quechan Historic Preservation Officer
To:	Maddie Dolan
Cc:	Stefanie Griffin
Subject:	RE: 4940.0030 Tribal Consultation Request for the Proposed Redlands Song Property Project
Date:	Friday, September 17, 2021 8:49:28 AM

This email is to inform you that we have no comments on this project. We defer to the more local Tribes and support their decisions on the projects.

From: Maddie Dolan [mailto:mdolan@fcs-intl.com]
Sent: Thursday, September 16, 2021 6:37 PM
To: Quechan Historic Preservation Officer
Cc: Cultural Resources
Subject: 4940.0030 Tribal Consultation Request for the Proposed Redlands Song Property Project

Hello,

Attached is a request for information pertaining to a cultural resources assessment of the proposed Redlands Song Property Project in the City of Redlands. Please feel free to contact Stefanie Griffin at sgriffin@fcs-intl.com if you would like to provide input. Thank you for your assistance.

Best,

Madelyn Dolan (she | her | hers)
Environmental Services, Analyst
Mobile +1 925 451 7133

FirstCarbon Solutions (FCS)
An ADEC Innovation
LinkedIn | Facebook | Twitter

From: Ryan Nordness
To: Maddie Dolan; Stefanie Griffin
Cc: Cultural Resources
Subject: RE: 4940.0030 Tribal Consultation Request for the Proposed Redlands Song Property Project
Date: Tuesday, September 28, 2021 10:44:35 AM

Hello Maddie,
Thank you for reaching out to the San Manuel Band of Mission Indians concerning the proposed project area. SMBMI appreciates the opportunity to review the project documentation received by the Cultural Resources Management Department on September 21st. The proposed project is not located near any known SLFs, Serrano villages, or archaeological sites. Thank you again for your correspondence, if you have any additional questions or comments please reach out to me at your earliest convenience.
Respectfully,
Ryan Nordness

From: Maddie Dolan <mdolan@fcs-intl.com>
Sent: Tuesday, September 21, 2021 1:34 PM
To: Ryan Nordness <Ryan.Nordness@sanmanuel-nsn.gov>; Stefanie Griffin <sgriffin@fcs-intl.com>
Cc: Cultural Resources <culturalres@fcs-intl.com>
Subject: RE: 4940.0030 Tribal Consultation Request for the Proposed Redlands Song Property Project

Thank you! Let me know if this attachment works for you.

Best,
Madelyn Dolan (she | her | hers)
Environmental Services, Analyst
Mobile +1 925 451 7133

FirstCarbon Solutions (FCS)
An ADEC Innovation
LinkedIn | Facebook | Twitter

From: Ryan Nordness <Ryan.Nordness@sanmanuel-nsn.gov>
Sent: Tuesday, September 21, 2021 1:32 PM
To: Maddie Dolan <mdolan@fcs-intl.com>; Stefanie Griffin <sgriffin@fcs-intl.com>
Cc: Cultural Resources <culturalres@fcs-intl.com>
Subject: RE: 4940.0030 Tribal Consultation Request for the Proposed Redlands Song Property Project

Hey Maddie,
I am the cultural resource analyst for the San Manuel Band of Mission Indians.

From: Maddie Dolan <mdolan@fcs-intl.com>
Sent: Tuesday, September 21, 2021 12:58 PM

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION

03-027-2021-006

October 29, 2021

[VIA EMAIL TO:sgriffin@fcs-intl.com]
First Carbon Solutions
Ms. Stefanie Griffin
650 E. Hospitality Lane, Suite 125
San Bernardino, California 92408

Re: Redlands Song Property Project

Dear Ms. Stefanie Griffin,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the Redlands Song Property project. The project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area. For this reason, the ACBCI THPO requests the following:

*A cultural resources inventory of the project area by a qualified archaeologist prior to any development activities in this area.

*A copy of the records search with associated survey reports and site records from the information center.

*Copies of any cultural resource documentation (report and site records) generated in connection with this project.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760)699-6956. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Lacy Padilla
Archaeologist
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

September 15, 2021

Stefanie Griffin
FirstCarbon Solutions

Via Email to: sgriffin@fcs-intl.com & mdolan@fcs-intl.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Redlands Song Property Project, San Bernardino County

Dear Ms. Griffin:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

    - Any report that may contain site forms, site significance, and suggested mitigation measures.

      All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was positive. Please contact the San Manuel Band of Mission Indians on the attached list for more information.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Tribal Consultation List
San Bernardino County
9/15/2021

Agua Caliente Band of Cahuilla Indians
Jeff Grubbe, Chairperson
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919

Agua Caliente Band of Cahuilla Indians
Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@aguacaliente.net

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Road — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 755 - 5110
Fax: (951) 755-5177
abrierty@morongo-nsn.gov

Morongo Band of Mission Indians
Ann Brierty, THPO
12700 Pumarra Road — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 755 - 5259
Fax: (951) 572-6004
abrierty@morongo-nsn.gov

Quechan Tribe of the Fort Yuma Reservation
Jill McCormick, Historic Preservation Officer
P.O. Box 1899 — Quechan
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

San Manuel Band of Mission Indians
Jessica Mauck, Director of Cultural Resources
26569 Community Center Drive — Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
Jessica.Mauck@sanmanuel-nsn.gov

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair
P.O. Box 391820 — Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
lsaul@santarosa-nsn.gov

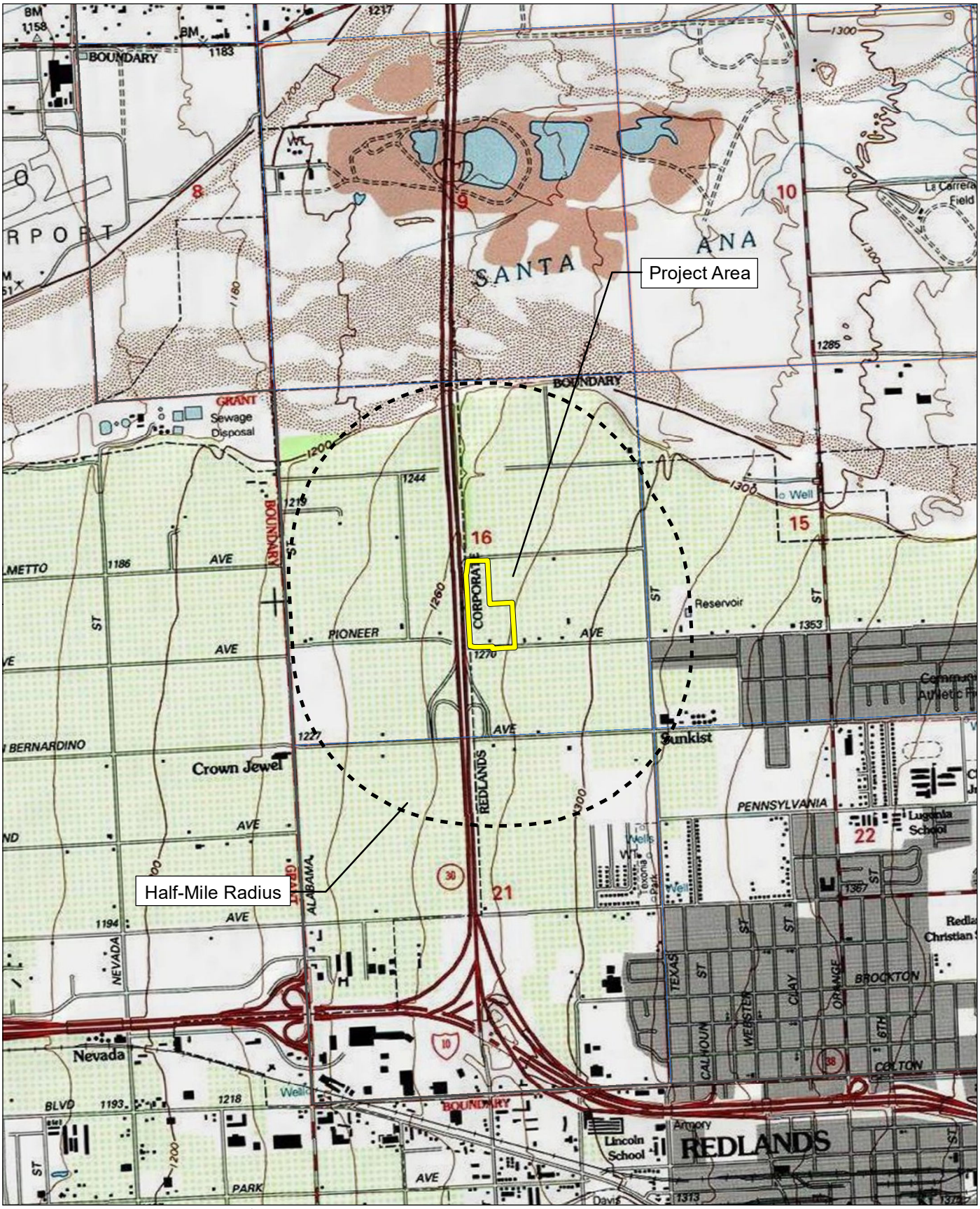
Serrano Nation of Mission Indians
Wayne Walker, Co-Chairperson
P. O. Box 343 — Serrano
Patton, CA, 92369
Phone: (253) 370 - 0167
serranonation1@gmail.com

Serrano Nation of Mission Indians
Mark Cochrane, Co-Chairperson
P. O. Box 343 — Serrano
Patton, CA, 92369
Phone: (909) 528 - 9032
serranonation1@gmail.com

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson
P. O. Box 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 654 - 5544
Fax: (951) 654-4198
ivivanco@soboba-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Redlands Song Property Project, San Bernardino County.



Source: USGS Redlands 7.5' Quadrangle / T1S,R3W,sec16

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Record Search Map

4940.0030 • 04/2022 | 49400030_record_search.mxd

CITY OF REDLANDS
EMM PROPERTY (SONG PROPERTY REDLANDS)

May 12, 2022

Morongo Band of Mission Indians
Ann Brierty, THPO
12700 Pumarra Road
Banning, CA, 92220

Subject: Proposed Emm Property Project

Dear Ann Brierty:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Emm Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The Applicant is proposing to construct a new residential development on approximately 14.4 acres at 1160 W. Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motorcourt homes.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. There are also 31 reports recorded within a half mile radius of the project area. Additionally, The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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(NEPA) are handling project notification and consultation requirements. Please feel free to contact me at 209.608.0028 or via email at sgriffin@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

May 12, 2022

Serrano Nation of Mission Indians
Mark Cochrane, Co-Chairperson
P. O. Box 343
Patton, CA, 92369

Subject: Proposed Emm Property Project

Dear Co-Chairperson Cochrane:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Emm Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The Applicant is proposing to construct a new residential development on approximately 14.4 acres at 1160 W. Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motorcourt homes.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. There are also 31 reports recorded within a half mile radius of the project area. Additionally, The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

May 12, 2022

Agua Caliente Band of Cahuilla Indians
Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive
Palm Springs, CA, 92264

Subject: Proposed Emm Property Project

Dear Patricia Garcia-Plotkin:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Emm Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The Applicant is proposing to construct a new residential development on approximately 14.4 acres at 1160 W. Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motorcourt homes.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. There are also 31 reports recorded within a half mile radius of the project area. Additionally, The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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(NEPA) are handling project notification and consultation requirements. Please feel free to contact me at 209.608.0028 or via email at sgriffin@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

May 12, 2022

Agua Caliente Band of Cahuilla Indians
Jeff Grubbe, Chairperson
5401 Dinah Shore Drive
Palm Springs, CA, 92264

Subject: Proposed Emm Property Project

Dear Chairperson Grubbe:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Emm Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The Applicant is proposing to construct a new residential development on approximately 14.4 acres at 1160 W. Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motorcourt homes.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. There are also 31 reports recorded within a half mile radius of the project area. Additionally, The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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(NEPA) are handling project notification and consultation requirements. Please feel free to contact me at 209.608.0028 or via email at sgriffin@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

May 12, 2022

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Road
Banning, CA, 92220

Subject: Proposed Emm Property Project

Dear Chairperson Martin:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Emm Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The Applicant is proposing to construct a new residential development on approximately 14.4 acres at 1160 W. Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motorcourt homes.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. There are also 31 reports recorded within a half mile radius of the project area. Additionally, The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Designated lead agencies under the California Environmental Quality Act (CEQA) and National Environmental Policy Act

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

May 12, 2022

San Manuel Band of Mission Indians
Jessica Mauck, Director of Cultural Resources
26569 Community Center Drive
Highland, CA, 92346

Subject: Proposed Emm Property Project

Dear Jessica Mauck:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Emm Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The Applicant is proposing to construct a new residential development on approximately 14.4 acres at 1160 W. Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motorcourt homes.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. There are also 31 reports recorded within a half mile radius of the project area. Additionally, The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

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Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

May 12, 2022

Quechan Tribe of the Fort Yuma Reservation
Jill McCormick, Historic Preservation Officer
P.O. Box 1899
Yuma, AZ, 85366

Subject: Proposed Emm Property Project

Dear Jill McCormick:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Emm Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The Applicant is proposing to construct a new residential development on approximately 14.4 acres at 1160 W. Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motorcourt homes.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. There are also 31 reports recorded within a half mile radius of the project area. Additionally, The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

May 12, 2022

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair
P.O. Box 391820
Anza, CA, 92539

Subject: Proposed Emm Property Project

Dear Tribal Chair Redner:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Emm Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The Applicant is proposing to construct a new residential development on approximately 14.4 acres at 1160 W. Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motorcourt homes.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. There are also 31 reports recorded within a half mile radius of the project area. Additionally, The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

May 12, 2022

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson
P. O. Box 487
San Jacinto, CA, 92581

Subject: Proposed Emm Property Project

Dear Chairperson Vivanco:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Emm Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The Applicant is proposing to construct a new residential development on approximately 14.4 acres at 1160 W. Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motorcourt homes.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. There are also 31 reports recorded within a half mile radius of the project area. Additionally, The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

May 12, 2022

Serrano Nation of Mission Indians
Wayne Walker, Co-Chairperson
P. O. Box 343
Patton, CA, 92369

Subject: Proposed Emm Property Project

Dear Co-Chairperson Walker:

FirstCarbon Solutions (FCS) is preparing a cultural resources assessment for the proposed Emm Property Project in the City of Redlands. As part of the environmental review process, we are conducting a cultural analysis.

The Applicant is proposing to construct a new residential development on approximately 14.4 acres at 1160 W. Pioneer Avenue in the City of Redlands. The proposed project includes the development of a total of approximately 117 motorcourt homes.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and California Historical Resource Information System (CHRIS) search. The results of the SLF records search was positive. The CHRIS search showed that there are no reports or resources recorded within the project site. However, there are 22 resources recorded within a half mile radius of the project site, 2 of which are prehistoric and 17 of which are historic. There are also 31 reports recorded within a half mile radius of the project area. Additionally, The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

Stefanie Estelle Griffin, MA,
Archaeologist
FirstCarbon Solutions
967 Kendall Drive # A-537
San Bernardino, CA 92407

Enc: Attachment A: Records Search Map

From: Ryan Nordness
To: Stefanie Griffin
Subject: Information Request for Proposed Emm Property Project
Date: Wednesday, June 22, 2022 3:14:40 PM

Thank you for reaching out to the Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians) concerning the proposed project area. YSMN appreciates the opportunity to review the project documentation received by the Cultural Resources Management Department on May 20th 2022. The proposed project is not located near any known cultural resources. Thank you again for your correspondence, if you have any additional questions or comments please reach out to me at your earliest convenience.
Respectfully,
Ryan Nordness

Ryan Nordness
Cultural Resource Analyst
Ryan.Nordness@sanmanuel-nsn.gov
O:(909) 864-8933 Ext 50-2022
M:(909) 838-4053
26569 Community Center Dr Highland, California 92346

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Appendix D:
Project Area Photographs

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Photograph 1: Overview photo taken from southeast corner of project area and the start of Transect 1 bearing northwest. Longitude 34.04.54 by latitude 117.1156.

Photograph 2: Overview bearing southeast at 160 degrees end of Transect 1

Photograph 3: Overview photo of northern boundary West Domestic Avenue end of Transect 1 bearing northwest at 310 degrees. Longitude 34.05.04 by latitude 117.1156

Photograph 4: Start of Transect 2 bearing southeast at 152 degrees. Longitude 34.05.04 by latitude 117.1155

Photograph 5: End of Transect 2 bearing southwest 152 degrees, facing West Pioneer Avenue. Longitude 34.05.04 by latitude 117.1155

Photograph 6: Overview start of Transect 3. Longitude 34.04.51 by latitude 117.1152

Photograph 7: Overview end of Transect 3. Bearing northwest at 341 degrees.
Longitude 34.0845 by latitude 117.1156

Photograph 8: Overview start of Transect 4 bearing southeast 160 degrees.
Longitude 34.0845 by latitude 117.1156

Photograph 9: End of Transect 4 bearing South at 172 degrees. Longitude 34.08450 by latitude 117.1992

Photograph 10: Overview start of Transect 5 bearing northwest 340 degrees.
Longitude 34.08450 by latitude 117.1992

Photo 11: End of Transect 5 bearing northwest 330 degrees. Longitude 34.08450 by latitude 117.1992

Photo 12: End of survey overview photo of western boundary bearing South at 156 degrees. Photo taken from northwest corner of survey area. Longitude 34.84501 by latitude 117.1992

Photo 13: Start of Transect 1, from southwest corner. View North.

Photo 14: End of Transect 1 from northwest corner. View South

Photo 15: Start of Transect 3, from southeast corner. View North.

Photo 16: End of Transect 3 from northeast corner. View South.

Appendix E:
Cultural Resources Regulations and Evaluation Criteria

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CULTURAL RESOURCES REGULATIONS AND EVALUATION CRITERIA

Local, state, and federal government agencies have developed laws and regulations designed to protect significant cultural resources that may be affected by projects regulated, funded, or undertaken by the agency. Federal and state laws that govern the preservation of historic and archaeological resources of national, state, regional, and local significance include the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and the California Environmental Quality Act (CEQA). In addition, laws specific to work conducted on federal lands includes the Archaeological Resources Protection Act (ARPA), the American Antiquities Act, and the Native American Graves Protection and Repatriation Act (NAGPRA).

The following federal or CEQA criteria were used to evaluate the significance of potential impacts on cultural resources for the proposed project. An impact would be considered significant if it would affect a resource eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR), or if it is identified as a unique archaeological or Tribal Cultural Resource (TCR).

Federal-Level Evaluations

Federal agencies are required to consider the effects of their actions on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings under NHPA Section 106 (36 Code of Federal Regulations [CFR] 800). Additionally, federal agencies are responsible for initiating NHPA Section 106 review and completing the steps outlined in these regulations. They must determine if NHPA Section 106 applies to a given project and, if so, initiate review in consultation with the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO). Federal agencies are also responsible for involving the public and other interested parties. Furthermore, NHPA Section 106 requires that any federal or federally assisted undertaking, or any undertaking requiring federal licensing or permitting, consider the effect of the action on historic properties listed in or eligible for the NRHP. Under the Code of Federal Regulations (36 CFR Part 800.8), federal agencies are specifically encouraged to coordinate compliance with NHPA Section 106 and the NEPA process. The implementing regulations "Protection of Historic Properties" are found in 36 Code of Federal Regulations Part 800. Resource eligibility for listing on the NRHP is detailed in 36 Code of Federal Regulations Part 63 and the criteria for resource evaluation are found in 36 Code of Federal Regulations Part 60.4 (a-d).

The NHPA established the NRHP as the official federal list for cultural resources that are considered important for their historical significance at the local, state, or national level. To be determined eligible for listing in the NRHP, properties must meet specific criteria for historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NRHP include—significance in American history, architecture, archaeology, engineering, and culture as present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. In addition, a resource must meet one or all of these eligibility criteria:

a) Is associated with events that have made a significant contribution to the broad patterns of our history; or

b) Is associated with the lives of persons significant in our past; or

c) Embodies the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values, represent a significant and distinguishable entity whose components may lack individual distinction; or

d) That have yielded, or may be likely to yield, information important in prehistory or history.

Criterion D is usually reserved for archaeological resources. Eligible properties must meet at least one of the criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character.

Criteria Considerations

Ordinarily cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, buildings that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the NRHP. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

a) A religious property deriving primary significance from architectural or artistic distinction or historical importance.

b) A building or structure removed from its original location but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event.

c) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life.

d) A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events.

e) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived.

f) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance.

g) A property achieving significance within the past 50 years if it is of exceptional importance.

Thresholds of Significance

In consultation with the SHPO/THPO and other entities that attach religious and cultural significance to identified historic properties, the Lead Agency shall apply the criteria of adverse effect to historic

properties within the Area of Potential Effect (APE). The Lead Agency official shall consider the views of consulting parties and the public when considering adverse effects.

Federal Criteria of Adverse Effects

Under federal regulations, 36 Code of Federal Regulations Part 800.5, an adverse effect is found when an undertaking alters, directly or indirectly, any of the characteristics of a historic property that qualifies the property for inclusion in the NRHP in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration will be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for listing in the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.

According to 36 Code of Federal Regulations Part 800.5, adverse effects on historic properties include, but are not limited to, those listed below:

- Physical destruction of or damage to all or part of the property.
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, which is not consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties per 36 Code of Federal Regulations Part 68 and applicable guidelines.
- Removal of the property from its historic location.
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization.
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

If Adverse Effects are Found

If adverse effects are found, the agency official shall continue consultation as stipulated at 36 Code of Federal Regulations Part 800.6. The agency official shall consult with the SHPO/THPO and other consulting parties to develop alternatives to the undertaking that could avoid, minimize, or mitigate adverse effects to historic resources. According to 36 Code of Federal Regulations Part 800.14(d), if adverse effects cannot be avoided then standard treatments established by the ACHP may be used as a basis for Memorandum of Agreement (MOA).

According to 36 Code of Federal Regulations Part 800.11(e), the filing of an approved MOA, and appropriate documentation, concludes the NHPA Section 106 process. The MOA must be signed by all consulting parties and approved by the ACHP prior to construction activities. If no adverse effects are found and the SHPO/THPO or the ACHP do not object within 30 days of receipt, the agencies' responsibilities under NHPA Section 106 will be satisfied upon completion of report and documentation as stipulated in 36 Code of Federal Regulations Part 800.11. The information must be made available for public review upon request, excluding information covered by confidentiality provisions.

State-Level Evaluation Processes

For the purposes of CEQA, cultural resources are broadly divided into the following four categories:

- **Historic Resources**: Historic resources typically refer to buildings, structures, and locations that maintain a connection or association with significant events, individuals, or architectural trends from California's past.
- **Archaeological Resources:** Archaeology is the study of artifacts and material culture with the aim of understanding human activities and cultures in the past. Archaeological resources may be associated with prehistoric indigenous cultures as well as historic periods.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred.
- **Tribal Cultural Resources:** Tribal cultural resources include sites, features, places, or objects that are of cultural value to one or more California Native American Tribes.

More specifically, cultural resources may be understood as resources that have been formally recognized by a lead agency and/or are listed or determined eligible for listing on the CRHR (Public Resources Code [PRC] § 5024.1, Title 14 California Code of Regulations [CCR] § 4852). An archaeological site may be considered a historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California per Public Resources Code Section 5020.1(j) or if it meets the criteria for listing on the CRHR per California Code of Regulations at Title 14 California Code of Regulations Section 4850.

The most recent amendments to the CEQA Guidelines direct lead agencies to first evaluate an archaeological site to determine whether it meets the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered as stated in Public Resources Code Sections 21084.1 and 21083.2(l). If an archaeological site is considered not to be a historical resource but meets the definition of a "unique archaeological resource" as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

With reference to Public Resources Code Section 21083.2, each site found within a project area will be evaluated to determine whether it is a unique archaeological resource. A unique archaeological resource is described as an archaeological artifact, object, or site about which it can be clearly

demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

As used in this report, "non-unique archaeological resource" means an archaeological artifact, object, or site that does not meet the criteria for eligibility for listing on the CRHR, as noted in subdivision (g) of Public Resources Code Section 21083.2. A non-unique archaeological resource requires no further consideration, other than simple recording of its components and features. Isolated artifacts are typically considered non-unique archaeological resources. Historic structures that have had their superstructures demolished or removed can be considered historic archaeological sites and are evaluated following the processes used for prehistoric sites. Finally, the California State Office of Historic Preservation (OHP) recognizes an age threshold of 45 years. Cultural resources built less than 45 years ago may qualify for consideration, but only under the most extraordinary circumstances.

Title 14, California Code of Regulations, Chapter 3 Section 15064.5 is associated with determining the significance of impacts to archaeological and historical resources. Here, the term historical resource includes the following:

1. A resource listed in, or determined eligible by the State Historical Resources Commission, for listing in the CRHR (PRC § 5024.1; Title 14 CCR, § 4850 *et seq*.).
2. A resource included in a local register of historical resources, as defined in Public Resources Code Section 5020.1(k) or identified as significant in a historical resource survey meeting the Public Resources Code Section 5024.1(g) requirements, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be historically significant if the resource meets the criteria for listing on the California Register of Historical Resources (PRC § 5024.1; Title 14 CCR § 4852) including the following:
    A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
    B. Is associated with the lives of persons important in our past.

C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
D. Has yielded, or may be likely to yield, information important in prehistory or history.

Typically, archaeological sites exhibiting significant features qualify for the CRHR under Criterion D because such features have information important to the prehistory of California. A lead agency may determine that a resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1 even if it is:

- Not listed in or determined to be eligible for listing in the CRHR.
- Not included in a local register of historical resources pursuant to Public Resources Code Section 5020.1(k).
- Identified in a historical resources survey per Public Resources Code Section 5024.1(g).

Thresholds of Significance

If a project will have a significant impact on a cultural resource, several steps must be taken to determine whether the cultural resource is a "unique archaeological resource" under CEQA. If analysis and/or testing determine that the resource is a unique archaeological resource and therefore subject to mitigation prior to development, a threshold of significance should be developed. The threshold of significance is a point where the qualities of significance are defined, and the resource is determined to be unique under CEQA. A significant impact is regarded as the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource will be reduced to a point that it no longer meets the significance criteria. Should analysis indicate that project development will destroy the unique elements of a resource; CEQA regulations require that the project implement appropriate and feasible mitigation measures. The preferred form of mitigation is to preserve the resource in place, in an undisturbed state. However, as that is not always possible or feasible, appropriate mitigation measures may include, but are not limited to:

1. Planning construction to avoid the resource.
2. Deeding conservation easements.
3. Capping the site prior to construction.

If a resource is determined to be a "non-unique archaeological resource," no further consideration of the resource by the lead agency is necessary.

Local Regulations

City of Redlands General Plan 2035

Cultural Resources Policies

Principles

2-P.8 Identify, maintain, protect, and enhance Redlands' cultural, historic, social, economic, architectural, agricultural, archaeological, and scenic heritage. In so

doing, Redlands will preserve its unique character and beauty, foster community pride, conserve the character and architecture of its neighborhoods and commercial and rural areas, enable citizens and visitors to enjoy and learn about local history, and provide a framework for making appropriate physical changes.

2-P.9 Provide incentives to protect, preserve, and maintain the city's heritage.

2-P.10 Foster an understanding and appreciation of history and architecture.

2-P.11 Encourage retention of the character of existing historic structures and urban design elements that define the built environment of the city's older neighborhoods.

2-P.12 Encourage retention of historic structures in their original use or reconversion to their original use where feasible. Encourage sensitive, adaptive reuse where the original use is no longer feasible.

2-P.13 Encourage preservation of and public access to defined and established significant scenic vistas, viewpoints, and view corridors.

2-P.14 Coordinate preservation of historic resources with policies designed to preserve neighborhoods and support the affordability of housing in historical structures.

2-P.15 Balance the preservation of historic resources with the desire of property owners of historic structures to adopt energy efficient strategies.

2-P.16 Work with local paleontologists to identify significant non-renewable paleontological resources.

2-P.17 Protect archaeological and paleontological resources for their aesthetic, scientific, educational, and cultural values.

Actions

Historic and Scenic Conservation

2-A.23 Prepare a City of Redlands Historic Context Statement as part of the Certified Local Government Program.

2-A.24 Undertake and maintain a comprehensive citywide inventory and assessment of historic resources. Establish and keep current a list of potential historic resources, historic districts, citrus groves, palm rows, and historic scenic areas. The inventory must identify the values of the resources' contribution to the city's historic context. Set up a priority system for designation and proceed with designation.

2-A.25 Require any application that would alter or demolish an undesignated and unsurveyed resource over 50-years-old to be assessed on the merits of the structure, and to be approved by the Historic and Scenic Preservation Commission.

2-A.26 Provide development standards and guidelines to encourage conversion of historic structures to alternative uses without compromising the quality of the neighborhood if preservation of the original use is an economic hardship.

2-A.27 Establish guidelines and incentives for appropriate adaptive reuse of historic structures.

2-A.28 Develop strategies or guidelines to enhance the public realm and context sensitive landscapes in the historic and scenic districts.

2-A.29 Retain existing easements and rights of way for use as viewpoints, turnouts, and scenic walkways where feasible.

2-A.30 Identify historic design features characteristic of the city and its individual neighborhoods that can be used to establish themes and design guidelines.

2-A.31 Develop ordinance language and procedures to allow designation of thematic resources. Thematic resources can include historical resources such as the street grid and streetscapes established by Judson and Brown, architectural resources such as the vernacular packinghouse style, or environmental resources such as the Zanja.

2-A.32 Support a strong and effective Historic and Scenic Preservation Commission as a key element in decisions affecting historic and scenic resources.

2-A.33 Ensure that public funds for rehabilitation are not used to the detriment of private or public historic resources.

2-A.34 Uphold the designation of the following streets within the city as scenic highways, drives, and historic streets. Special development standards have been adopted by Resolution for these streets. The streets are:

- Brookside Avenue, from Lakeside Avenue to Eureka Street;
- Olive Avenue, from Lakeside Avenue to Cajon Street;
- Center Street, from Brookside Avenue to Crescent Avenue;
- Highland Avenue, from Serpentine Drive to Cajon Street;
- Sunset Drive, from Serpentine Drive to Edgemont Drive;
- Cajon Street;
- Mariposa Drive, between Halsey and Sunset Drive; and
- Dwight Street, between Pepper Street and Mariposa Drive.

In addition, consider designating the following roads as scenic drives within the community as neighborhood connectors and recreational routes for drivers and bike riders.

- Riverview Drive along the Santa Ana River Wash;

- Live Oak Canyon Road;
- San Timoteo Canyon Road;
- Sylvan Boulevard;
- Nevada Street, from the Orange Blossom Trail to Barton Road;
- Pioneer Avenue, from River Bend Drive to Judson Street; and
- Rural roads in Crafton.

2-A.35 Establish standards for the evaluation of exterior lighting for new development and redevelopment to ensure that exterior lighting (except traffic lights, navigational lights, and other similar safety lighting) is minimized, restricted to low-intensity fixtures, shielded, and concealed to the maximum feasible extent, and that high-intensity perimeter lighting and lighting for sports and other private recreational facilities is limited to reduce light pollution visible from public viewing areas.

Historic City Properties

2-A.36 Maintain and improve City-owned historic buildings and houses in an architecturally and environmentally sensitive manner.

2-A.37 Maintain and improve Redlands' streets, trees, streetlights, parkways, parks, stone curbs, ditches, walls, and citrus groves in a manner that enhances the city's beauty and historic fabric.

2-A.38 Use exemplary design quality and sensitivity to surrounding historic structures in new City construction, public works, entry ways, and City signs.

Privately-Owned Historic Resources

2-A.39 Ensure that permanent changes to the exterior or setting of a designated historic resource be done in accordance with the Secretary of the Interior standards for historic properties.

2-A.40 Seek creative solutions to the problem of preservation and maintenance of large houses.

2-A.41 Encourage appropriate adaptive reuse of historic resources in order to prevent disuse, disrepair, and demolition, taking care to protect surrounding neighborhoods from disruptive intrusions.

2-A.42 Should demolition of a designated historic resource occur, endeavor to ensure that a building of equal or greater design quality and/or use of equal or greater benefit to the community be constructed. Require that a report documenting the history of the property and archival-quality drawings and/or photographic records be prepared to document the historic resource.

2-A.43 Institute an architectural salvage program to preserve architectural artifacts from buildings that are demolished.

2-A.44 Encourage the use of tax credits, donated easements, and other fiscal incentives for preservation.

2-A.45 Encourage energy conservation alterations that are compatible with preservation.

2-A.46 Encourage preservation, maintenance, enhancement, and reuse of existing buildings in revitalization areas; retention and renovation of existing residential structures; and, if retention on-site is not feasible, relocation of existing residential structures within the city.

2-A.47 Encourage the highest maintenance of historic resources by:

- Providing information to homeowners as to how to maintain their historic property;
- Pursuing funding programs to assist people in doing needed repairs; and
- Proactively enforcing code compliance.

Historic Considerations for New Development

2-A.48 Establish design review guidelines for historic areas to ensure that new architecture will relate to and respect the historical and environmental context.

2-A.49 Encourage compatibility of new land uses and new construction adjacent to historical buildings. Encourage construction that is physically and aesthetically complementary to the historic buildings in architectural features and relationship to adjoining structures.

2-A.50 Encourage historical depictions commemorating historic sites or events in Redlands' history. Such depictions could be incorporated into new commercial or rehab development projects. Historical depictions may be monuments, plaques, archaeological viewing sites, exhibits, or illustrative art works, such as sculpture, mosaics, murals, tile-work, etc.

2-A.51 Encourage new construction that ties the new with the old in a harmonious fashion, enhancing the historic pattern.

Citizen Participation and Cooperation with Preservation Groups

2-A.52 Encourage public participation in the process for evaluating and preserving historic and scenic resources.

2-A.53 Encourage citizens to participate in public hearings on designation, Certificates of Appropriateness, and Certificates of Hardship.

2-A.54 Encourage citizens to become involved in historic preservation by training them in survey techniques and involving them in the ongoing surveys of historic resources.

2-A.55 Cooperate with public and private organizations doing preservation work and serve as liaison for such groups.

Education and Public Relations on Redlands Heritage

2-A.56 Seek to educate the general public about Redlands' heritage and to educate owners of historic properties about how to rehabilitate and maintain their property.

2-A.57 Where inappropriate alterations have been made, endeavor to explain how such alterations detract from the property, how they may be removed, and the economic and cultural benefits of proper restoration.

2-A.58 Encourage involvement of Redlands' schools, adult education classes, and the University of Redlands, as well as civic organizations and service clubs, in preservation programs and activities.

2-A.59 Continue to work with local newspapers to inform the community of the Historic and Scenic Preservation Commission and other preservation activities.

2-A.60 Print informational brochures and develop electronic media explaining the preservation process and preservation techniques to the public.

2-A.61 Issue awards and commendations as appropriate to owners of historic and scenic resources who have done particularly admirable rehabilitation and to others who have made special contributions to the preservation effort.

2-A.62 Make special efforts to reach out to the business community and to inform its members about Redlands' heritage and the opportunities it presents.

2-A.63 Promote Redlands' image, its cultural life, and its outstanding architectural, historic, and scenic resources to attract new business and tourism to the city.

2-A.64 Work with civic groups who wish to hold meetings to educate their members about preservation.

2-A.65 Support the development of organizations such as the Redlands Historical Museum, the Redlands Area Historical Society, the Redlands Conservancy, and other historical organizations to educate the public and visitors alike about Redlands' history.

Preservation of Older Neighborhoods

2-A.66 Promote neighborhood preservation and stabilization.

2-A.67 Permit densities, design, and uses that will help preserve the character and amenities of existing older neighborhoods.

2-A.68 Discourage changes in residential areas that would disturb the character or clearly have a destabilizing effect on the neighborhood.

2-A.69 Encourage shared parking or in-lieu parking in older neighborhoods.

2-A.70 Encourage preservation of historic public and private improvements, such as street curbs, street trees, specimen trees, streetlights, hitching posts, masonry walls, and early paved sidewalks.

Archaeological and Paleontological Resources

2-A.71 Using an annually updated Archaeological Resource Sensitivity Map, review proposed development projects to determine whether a site contains known prehistoric or historic cultural resources and/or to determine the potential for discovery of additional cultural resources.

2-A.72 Require that applicants for projects identified by the South Coastal Information Center as potentially affecting sensitive resource sites hire a consulting archaeologist to develop an archaeological resource mitigation plan and to monitor the project to ensure that mitigation measures are implemented.

2-A.73 Require that areas found during construction to contain significant historic or prehistoric archaeological artifacts be examined by a qualified consulting archaeologist (RPA certified) or historian for appropriate protection and preservation.

2-A.74 Proactively coordinate with the area's native tribes in the review and protection of any tribal cultural resources discovered at development sites.

2-A.75 Require, as a standard condition of approval, that project applicants provide an assessment as to whether grading for the proposed project would impact underlying soil units or geologic formations that have a moderate to high potential to yield fossiliferous materials, prior to issuance of a grading permit. If the potential for fossil discovery is moderate to high, require applicants to provide a paleontological monitor during rough grading of the project.

2-A.76 Establish a procedure for the management of paleontological materials found on-site during a development, including the following provisions:

- If materials are found on-site during grading, require that work be halted until a qualified professional evaluates the find to determine whether it represents a significant paleontological resource.

- If the resource is determined to be significant, the paleontologist shall supervise removal of the material and determine the most appropriate archival storage of the material.
- Appropriate materials shall be prepared, cataloged, and archived at the applicant's expense and shall be retained within San Bernardino County if feasible.

Tribal Cultural Resources and Tribal Consultation

Under CEQA, TCRs refer to sites, features, places, cultural landscapes, sacred places, and objects with cultural value to one or more California Native American tribes. To be considered significant under CEQA, these resources must also be included or determined eligible for inclusion in the CRHR or a local register of historical resources or be determined significant pursuant to the criteria set forth in subdivision (c) of Section 5024.1 by the lead agency (PRC § 21074).

Cultural resource assessment reports will often include the results from a Native American Heritage Commission (NAHC) Sacred Lands File search and outreach to Native American Representatives Identified as potentially having interest or information on the project area by the NAHC. The primary process for identifying and evaluating potential impacts to TCRs, however, is through government-to-government consultation between the CEQA lead agency and Native American Tribes pursuant to the following California statutes.

California Senate Bill 18

Senate Bill (SB) 18 states that prior to a local (city or county) government's adoption of any General Plan or Specific Plan, or amendment to General and Specific Plans, or a designation of open space land proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes for the purpose of preserving or mitigating impacts to Cultural Places. Consultations are for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code that may be affected by the proposed adoption or amendment to a general or specific plan. According to the Government Code Section 65352.4, "consultation" is defined as:

> *The meaningful and timely process of seeking, discussing, and carefully considering the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American Tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.*

SB 18 requires public notice to be sent to tribes listed on the NAHC's SB 18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether or not they want to consult with the local government. Notice must be sent regardless of prior consultation, and it is suggested that local governments send written notice by certified mail with return receipt requested.

California Assembly Bill 52

Assembly Bill (AB) 52 was signed into law on September 25, 2014, and provides that any public or private "project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." TCRs include "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the CRHR or included in a local register of historical resources." AB 52 formally added the category of "tribal cultural resources" to CEQA and extends the consultation and confidentiality requirements to all projects, rather than just projects subject to SB 18 as discussed above.

AB 52 requires a lead agency to notify and offer the opportunity for consultation to a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe has previously requested in writing to be informed by the lead agency of proposed projects in their geographic area. This notification must be sent prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. Tribes must respond to the notice within 45 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether or not they want to consult with the lead agency.

The bill makes the above provisions applicable to projects that have a notice of preparation, or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015. The parties must consult in good faith, and consultation is deemed concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect on a TCR (if such a significant effect exists); or (2) when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place.
- Protecting the cultural character and integrity of the resource.
- Protecting the traditional use of the resource.
- Protecting the confidentiality of the resource.
- Permanent conservation easements with culturally appropriate management criteria.